

Elaboration Phase Specification

CIS 320-02-4232

Team: TECKS

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System Requirements

Our system requirements describe the activities our system must be able to perform. These are the actions that we believe are crucial to include in our final product.

Functional Requirements:

Home Page Requirements

- ID: SR001 – The home page will allow information to be edited.
- ID: SR002 – The home page will allow messages to be created.
- ID: SR003 – The home page will allow messages to be deleted.
- ID: SR006 – The home page will allow reminders to be created.
- ID: SR007 – The home page will allow reminders to be deleted.

Catapult Page Requirements

- ID: SR008 – The Catapult page will allow CSV data to be input.
- ID: SR009 - The Catapult page will allow data to be edited by those with admin access.
- ID: SR010 - The Catapult page will allow data to be compared.

DARI Systems Page Requirements

- ID: SR011– The DARI Systems page will allow CSV data to be input.
- ID: SR012 - The DARI Systems page will allow data to be edited by those with admin access.
- ID: SR013– The DARI Systems page will allow data to be compared.

Injury Records Page Requirements

- ID: SR014 – The injury records page will allow CSV or Excel data to be input.
- ID: SR015- The injury records page will allow data to be edited by those with admin access.

Hawkins Dynamic Page Requirements

- ID: SR016 – The Hawkins Dynamic page will allow CSV data to be input.
- ID: SR017 – The Hawkins Dynamic page will allow data to be edited by those with admin access.

Perch Velocity Page Requirements

- ID: SR018 – The perch velocity page will allow TXT or CSV data to be input.
- ID: SR019 – The perch velocity page will allow data to be edited by those with admin access.

Synergy Page Requirements

- ID: SR020 – The synergy page will link to the synergy website login.

SmarterBase Page Requirements

- ID: SR021 – The SmarterBase page will link to the SmarterBase website login.

KenPom Page Requirements

- ID: SR022 – The KenPom page will allow data to be input.
- ID: SR023 – The KenPom page will allow data to be edited by those with admin access.

Bart Page Requirements

ID: SR024 – The Bart page will allow data to be input.

ID: SR025 – The Bart page will allow data to be edited by those with admin access.

JustPlay Page Requirements

ID: SR028 – The JustPlay page will allow data to be input.

ID: SR029 – The JustPlay page will allow data to be edited by those with admin access.

Practice Box Scores Page Requirements

ID: SR030 – The practice box scores page will allow data to be input.

ID: SR031 – The practice box scores page will allow data to be edited by those with admin access.

Game Box Scores Page Requirements

ID: SR032 – The game box scores page will allow data to be input.

ID: SR033 – The game box scores page will allow data to be edited by those with admin access.

Non-Functional Requirements:

Performance Requirements

ID: SR034 – The website will load quickly.

ID: SR035 – The website will run with no errors.

ID: SR036 – The website will be updated as needed.

Security Requirements

ID: SR037 – The input data will backup automatically.

ID: SR038 – The data can be edited by those with admin access.

ID: SR039 – The data can be input by those with manager access.

ID: SR040 – The website can only be viewed by those with employee access or higher.

Capacity Requirements

ID: SR041 – The website will be able to handle large amounts of data input.

Availability Requirements

ID: SR042 – The website will always be accessible.

ID: SR043 – The website will be compatible with most web browsers.

ID: SR044 – The website will be compatible with most devices.

ID: SR045 – The website will adhere to W3C web accessibility standards.

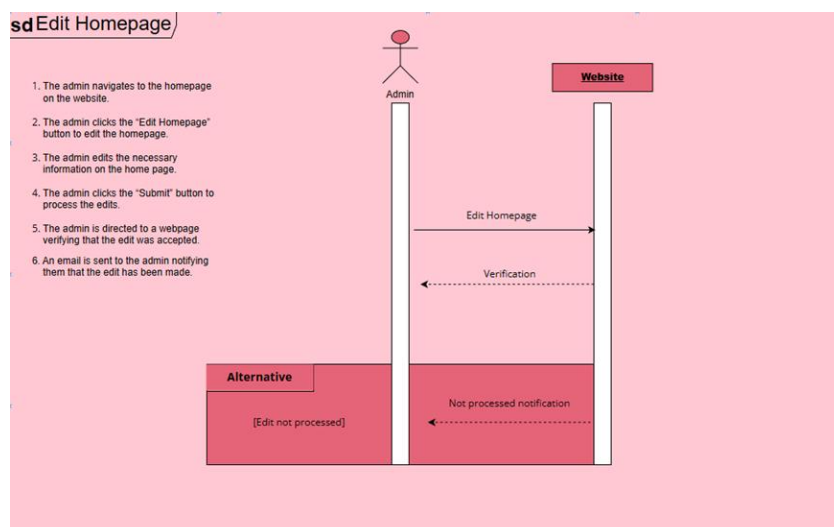
Use Case Descriptions, Use Case Diagrams, Sequence Diagrams

Use Case 1 Description

Use Case Name: Edit Homepage Information	ID: 01	Importance Level: Low
Primary Actor: Admin		Use Case Type: Detail

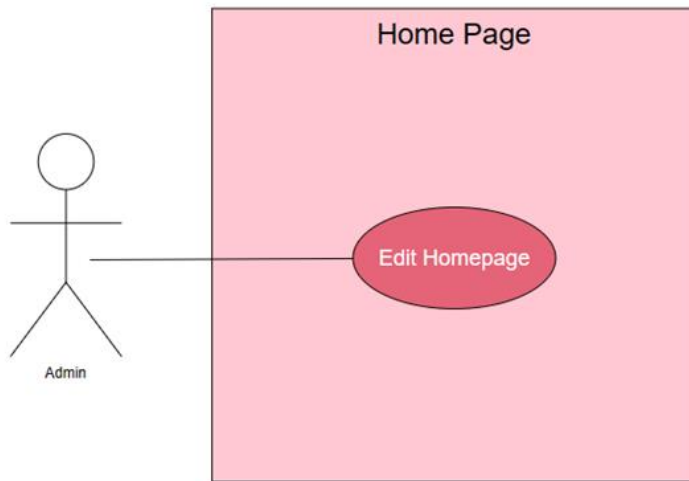
Stakeholders and Interests: Admin - wants to edit the design of the homepage Website - tool used to hold player data
Brief Description: This use case describes how the home page can be edited
Trigger: Admin navigates to the home page on the website and clicks edit page. Type: External
Relationships: Association: Admin Include: Extend: Generalization: Edit homepage
Normal Flow of Events: <ol style="list-style-type: none"> 1. The admin navigates to the homepage on the website. 2. The admin clicks the “Edit Homepage” button to edit the homepage. 3. The admin edits the necessary information on the home page. 4. The admin clicks the “Submit” button to process the edits. 5. The admin is directed to a webpage verifying that the edit was accepted. 6. An email is sent to the admin notifying them that the edit has been made.
SubFlows:
Alternate/Exceptional Flows: <ol style="list-style-type: none"> 4a. The edit was not processed. 5a. A pop-up message notifies the admin that the edit was not accepted and to try again. 6a. An email is sent to the admin notifying them that the edit was not made.

Use Case 1 Sequence Diagram



1. This use case is initiated when an administrator decides to edit information on the home page.
2. To perform this action, the administrator would access the content management system WordPress and change the information displayed to users.

Use Case 1 Diagram



Narrative: The home page will allow website administrators to edit information.

Use Case 2, 3, and 4 Description

Use Case Name: Create Comment	ID: 02	Importance Level: Low
Primary Actor: All Users		Use Case Type: Detail
Stakeholders and Interests: Admin - user may want to create a comment under a reminder post for all users to view. Website - tool used to collect player data.		
Brief Description: This use case describes how comments can be created.		

Trigger: User navigates to the homepage on the website and clicks create comment. Type: External
Relationships: Association: Any User Include: Extend: Generalization: Create Comment
Normal Flow of Events: 7. The user navigates to the homepage on the website. 8. The user clicks the “Create Comment” button to create a comment under a reminder. 9. The user adds the necessary information to the comment. 10. The user clicks the “Submit” button to create the comment. 11. The user is directed to a webpage verifying that the comment was accepted. 12. A confirmation email is sent to the user notifying them that the comment has been created.
SubFlows:
Alternate/Exceptional Flows: 5a. The comment was not created. 5b. A pop-up message notifies the user that the comment was not created and to try again. 6a. An email is sent to the user notifying them that the comment was not created.

Use Case Name: Edit Comment	ID: 03	Importance Level: Low
Primary Actor: All Users		Use Case Type: Detail
Stakeholders and Interests: Admin – admin may want to edit a comment. Website - tool used to collect player data		
Brief Description: This use case describes how comments can be edited.		
Trigger: Admin navigates to the homepage on the website and clicks edit comment. Type: External		
Relationships: Association: Admin Include: Extend: Generalization: Edit Comment		
Normal Flow of Events: 13. The user navigates to the homepage on the website. 14. The user clicks the “Edit Comment” button to edit comment information.		

15. The user edits the necessary information in the comment.
16. The user clicks the “Submit” button to process the edit.
17. The user is directed to a webpage verifying that the edit was accepted.
18. A confirmation email is sent to the user notifying them that an edit has been made.

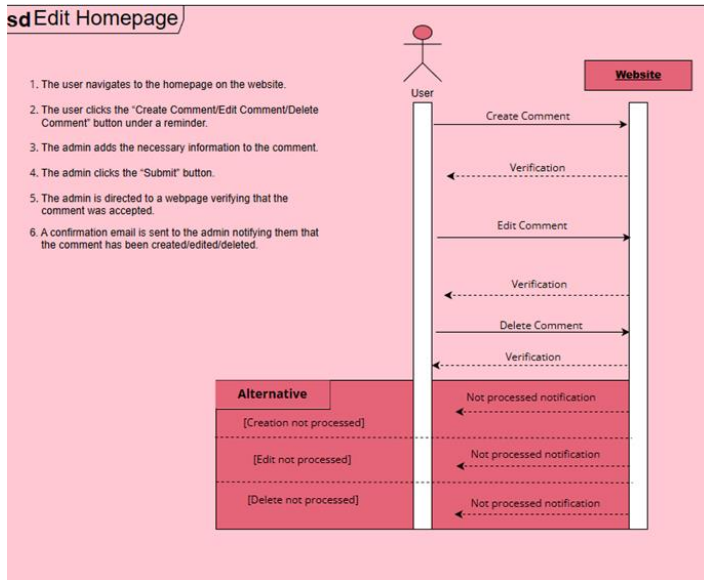
SubFlows:

Alternate/Exceptional Flows:

- 5a. The edit was not processed.
- 5b. A pop-up message notifies the user that the edit was not accepted and to try again.
- 6a. An email is sent to the user notifying them that the edit was not processed.

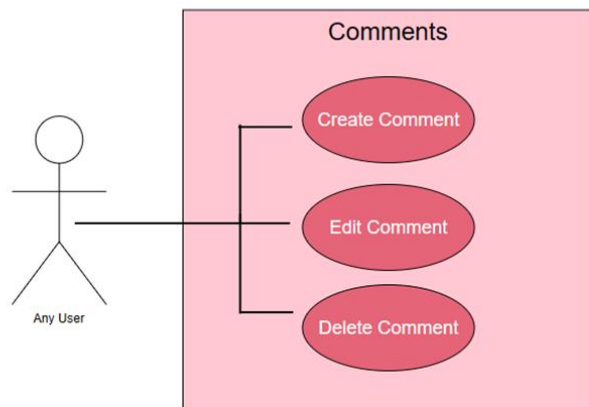
Use Case Name: Delete Comment	ID: 04	Importance Level: Low
Primary Actor: All Users		Use Case Type: Detail
Stakeholders and Interests: Any User - wants to delete a comment. Website - tool used to hold player data		
Brief Description: This use case describes how comments can be deleted.		
Trigger: User navigates to the home page on the website and clicks delete comment. Type: External		
Relationships: Association: Any User Include: Extend: Generalization: Delete Comment		
Normal Flow of Events: 19. The user navigates to the homepage on the website. 20. The user clicks the “Delete Comment” button to delete the reminder. 21. The user clicks the “Submit” button to process the deletion. 22. The user is directed to a webpage verifying that the deletion was accepted. 23. An email is sent to the user notifying them that the deletion has been made.		
SubFlows:		
Alternate/Exceptional Flows: 4a. The deletion was not processed. 5a. A pop-up message notifies the user that the deletion was not accepted and to try again. 6a. An email is sent to the user notifying them that the deletion was not made.		

Use Case 2, 3 and 4 Sequence Diagram



1. This use case is initiated when a user decides to add, edit, or delete a comment under a reminder post on the home page.
2. To perform this action, the user would access the content management system WordPress and add, edit, or delete a comment.

Use Case 2, 3, and 4 Diagram



Narrative: Website users can create, edit, or delete comments on reminder posts.

Use Case 5, 6, and 7 Description

Use Case Name: Create Reminder Post	ID: 05	Importance Level: Low
Primary Actor: Admin		Use Case Type: Detail
Stakeholders and Interests: Admin - admin may want to create a reminder post for all users to view. Website - tool used to collect player data.		
Brief Description: This use case describes how reminder posts can be created.		
Trigger: Admin navigates to the homepage on the website and clicks create reminder. Type: External		
Relationships: Association: Admin Include: Extend: Generalization: Create Reminder		
Normal Flow of Events: 24. The admin navigates to the homepage on the website. 25. The admin clicks the “Create Reminder” button to create a reminder. 26. The admin adds the necessary information to the reminder. 27. The admin clicks the “Submit” button to create the reminder. 28. The admin is directed to a webpage verifying that the reminder was accepted. 29. A confirmation email is sent to the admin notifying them that the reminder has been created.		
SubFlows:		
Alternate/Exceptional Flows: 5a. The reminder was not created. 5b. A pop-up message notifies the admin that the reminder was not created and to try again. 6a. An email is sent to the admin notifying them that the reminder was not created.		

Use Case Name: Edit Reminder Post	ID: 06	Importance Level: Low
Primary Actor: Admin		Use Case Type: Detail, Essential
Stakeholders and Interests: Admin – admin may want to edit a reminder. Website - tool used to collect player data		

Brief Description: This use case describes how reminder posts can be edited.
Trigger: Admin navigates to the homepage on the website and clicks edit reminder. Type: External
Relationships: Association: Admin Include: Extend: Generalization: Edit Reminder
Normal Flow of Events: 30. The admin navigates to the homepage on the website. 31. The admin clicks the “Edit Reminder” button to edit reminder information. 32. The admin edits the necessary information in the reminder. 33. The admin clicks the “Submit” button to process the edit. 34. The admin is directed to a webpage verifying that the edit was accepted. 35. A confirmation email is sent to the admin notifying them that an edit has been made.
SubFlows:
Alternate/Exceptional Flows: 5a. The edit was not processed. 5b. A pop-up message notifies the admin that the edit was not accepted and to try again. 6a. An email is sent to the admin notifying them that the edit was not processed.

Use Case Name: Delete Reminder	ID: 07	Importance Level: Low
Primary Actor: Admin		Use Case Type: Detail
Stakeholders and Interests: Admin - wants to delete a reminder. Website - tool used to hold player data		
Brief Description: This use case describes how reminders can be deleted.		
Trigger: Admin navigates to the home page on the website and clicks delete reminder. Type: External		
Relationships: Association: Admin Include: Extend: Generalization: Delete Reminder		

Normal Flow of Events:

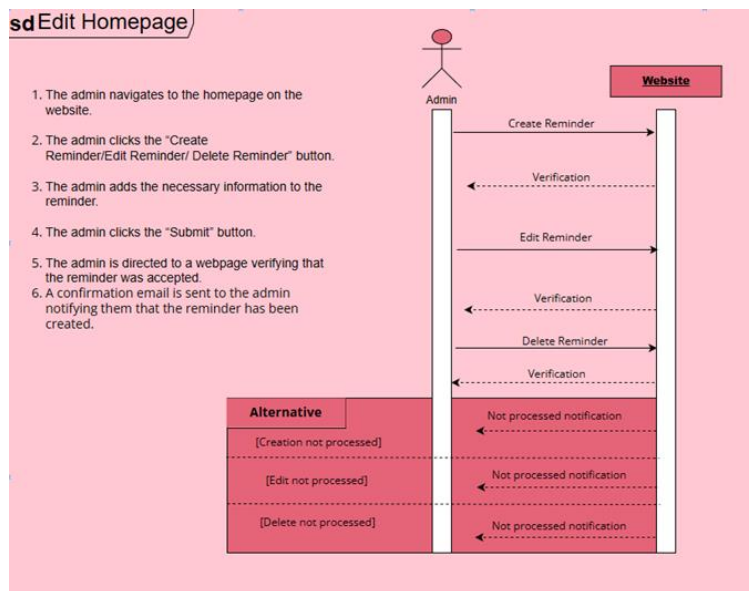
36. The admin navigates to the homepage on the website.
37. The admin clicks the “Delete Reminder” button to delete the reminder.
38. The admin clicks the “Submit” button to process the deletion.
39. The admin is directed to a webpage verifying that the deletion was accepted.
40. An email is sent to the admin notifying them that the deletion has been made.

SubFlows:

Alternate/Exceptional Flows:

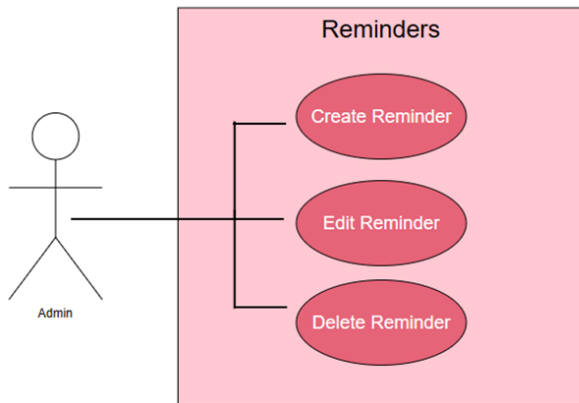
- 4a. The deletion was not processed.
- 5a. A pop-up message notifies the admin that the deletion was not accepted and to try again.
- 6a. An email is sent to the admin notifying them that the deletion was not made.

Use Case 5, 6 and 7 Sequence Diagram



1. This use case is initiated when a administrator decides to add, edit, or delete a reminder post on the home page.
2. To perform this action, the administrator would access the content management system WordPress and add, edit, or delete a reminder post.

Use Case 5, 6, and 7 Diagram



Narrative: Website administrators can create, edit, or delete reminder posts.

Use Case 8 Description

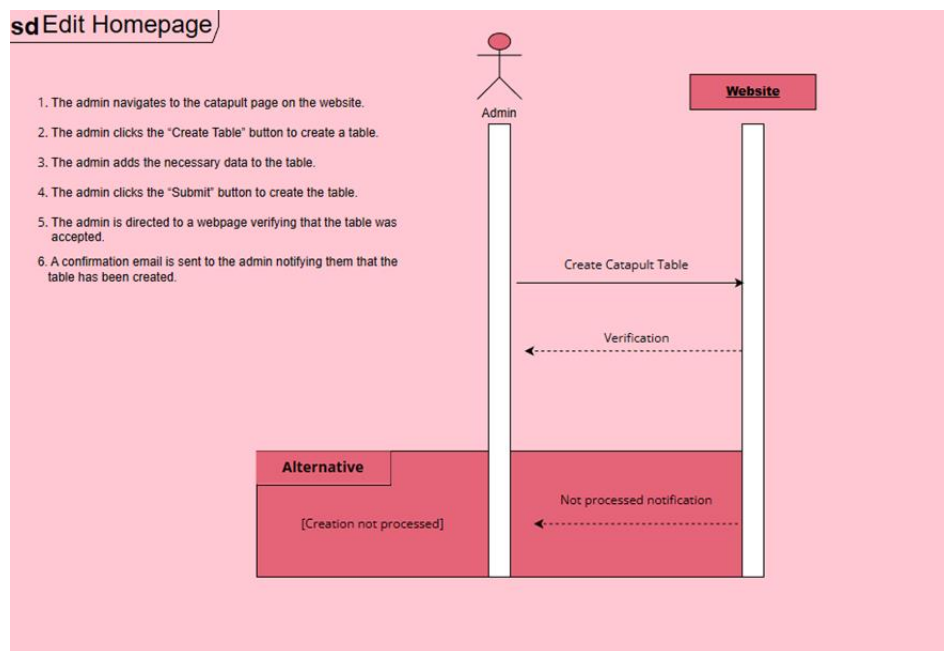
Use Case Name: Create Catapult Table	ID: 08	Importance Level: High
Primary Actor: Admin		Use Case Type: Detail, Essential
Stakeholders and Interests: Admin - admin wants to create a catapult table. Website - tool used to collect player data.		
Brief Description: This use case describes how catapult tables can be created.		
Trigger: Admin navigates to the catapult page on the website and clicks create table. Type: External		
Relationships: Association: Admin Include: Extend: Generalization: Create Catapult Table		
Normal Flow of Events: 41. The admin navigates to the catapult page on the website. 42. The admin clicks the "Create Table" button to create a table. 43. The admin adds the necessary data to the table. 44. The admin clicks the "Submit" button to create the table. 45. The admin is directed to a webpage verifying that the table was accepted. 46. A confirmation email is sent to the admin notifying them that the table has been created.		

SubFlows:

Alternate/Exceptional Flows:

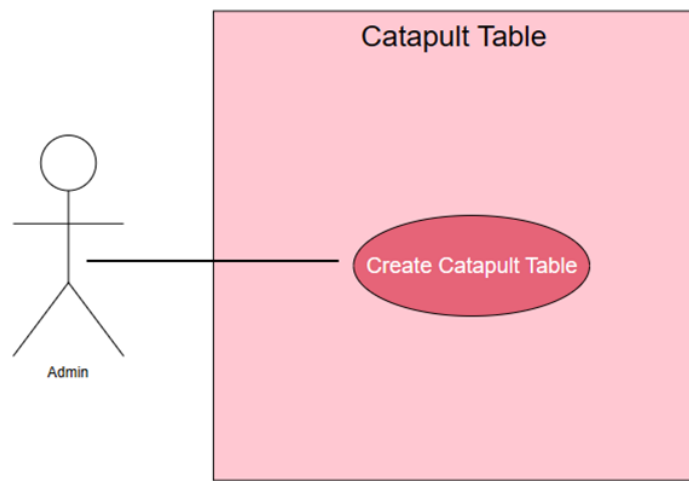
- 5a. The table was not created.
- 5b. A pop-up message notifies the admin that the table was not created and to try again.
- 6a. An email is sent to the admin notifying them that the table was not created.

Use Case 8 Sequence Diagram



1. Administrator logs into WordPress.
2. Administrator accesses the 'Catapult' page and clicks edit.
3. The administrator inputs the CSV data into the catapult table.

Use Case 8 Diagram



Narrative: The administrator is able to upload CSV data onto the catapult page.

Use Case 9, 10, 11, and 12 Description

Use Case Name: Create DARI Table	ID: 09	Importance Level: High
Primary Actor: Employee		Use Case Type: Detail, Essential
<p>Stakeholders and Interests:</p> <p>Justin Perez (director of men's basketball administration) – importing and inputting player motion data into a table, editing table data, and analyzing table data.</p> <p>Kenny Payne (head coach) – importing and inputting player motion data into a table, editing table data, analyzing table data, making decisions for the players with that table data.</p> <p>Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - importing and inputting player motion data into a table, editing table data, analyzing table data, making decisions for the players with that table data.</p> <p>Adam Petway (strength and conditioning coach) – importing and inputting player motion data into a table, editing table data, analyzing table data.</p>		
Brief Description: A table can be imported with DARI CSV data.		

<p>Trigger: User navigates to the Data Explorer tab of the WordPress Data Access Plugin and creates a table</p> <p>Type: External</p>
<p>Relationships:</p> <p>Association: Justin Perez, Kenny Payne, all assistant coaches, Adam Petway</p> <p>Include: none</p> <p>Extend: none</p> <p>Generalization: none</p>
<p>Normal Flow of Events:</p> <ol style="list-style-type: none"> 47. The user navigates to the WordPress Data Explorer with the WP Data Access Plugin installed. 48. The user clicks to upload a new CSV file. 49. The user navigates to the DARI CSV file they wish to upload. 50. User clicks to either import data or execute a script (A script that the SQL developer has created for them) 51. User navigates to the script to be executed for table creation. 52. User successfully imports the table data into the database using the script. 53. User defines which webpage the table should be linked to, in this case, the DARI page. 54. User applies this change. 55. User navigates to the DARI page and can now use the table directly from that page.
<p>Sub Flows:</p>
<p>Alternate/Exceptional Flows:</p> <ol style="list-style-type: none"> 4a. The user navigates to the Data Designer tab of the WP Data Access plugin tool. 5a. The user has a script generated for them and imports the CSV (this method is used if they do not decide to hire a WordPress developer, but we would recommend it) again.

Use Case Name: Create Injury Records Table	ID: 10	Importance Level: High
Primary Actor: Employee		Use Case Type: Detail, Essential
<p>Stakeholders and Interests:</p> <p>Justin Perez (director of men's basketball administration) – importing and inputting player injury data into a table, editing table data, and analyzing table data.</p> <p>Kenny Payne (head coach) – importing and inputting player injury data into a table, editing table data, analyzing table data, making decisions for the players with that table data.</p> <p>Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - importing and inputting player injury data into a table, editing table data, analyzing table data, making decisions for the players with that table data.</p>		

DeVante Frazier (director of sports medicine/men's basketball) – importing and inputting player injury data into a table, editing table data, analyzing table data.
Brief Description: A table can be imported with Injury Records CSV data.
Trigger: User navigates to the Data Explorer tab of the WordPress Data Access Plugin and creates a table Type: External
Relationships: Association: Justin Perez, Kenny Payne, all assistant coaches, DeVante Frazier Include: none Extend: none Generalization: none
Normal Flow of Events: 56. The user navigates to the WordPress Data Explorer with the WP Data Access Plugin installed. 57. The user clicks to upload a new CSV file. 58. The user navigates to the Injury Records CSV file they wish to upload. 59. User clicks to either import data or execute a script (A script that the SQL developer has created for them) 60. User navigates to the script to be executed for table creation. 61. User successfully imports the table data into the database using the script. 62. User defines which webpage the table should be linked to, in this case, the Injury Records page. 63. User applies this change. 64. User navigates to the Injury Records page and can now use the table directly from that page.
SubFlows:
Alternate/Exceptional Flows: 4a. The user navigates to the Data Designer tab of the WP Data Access plugin tool. 5a. The user has a script generated for them and imports the CSV (this method is used if they do not decide to hire a WordPress developer, but we would recommend it) again.

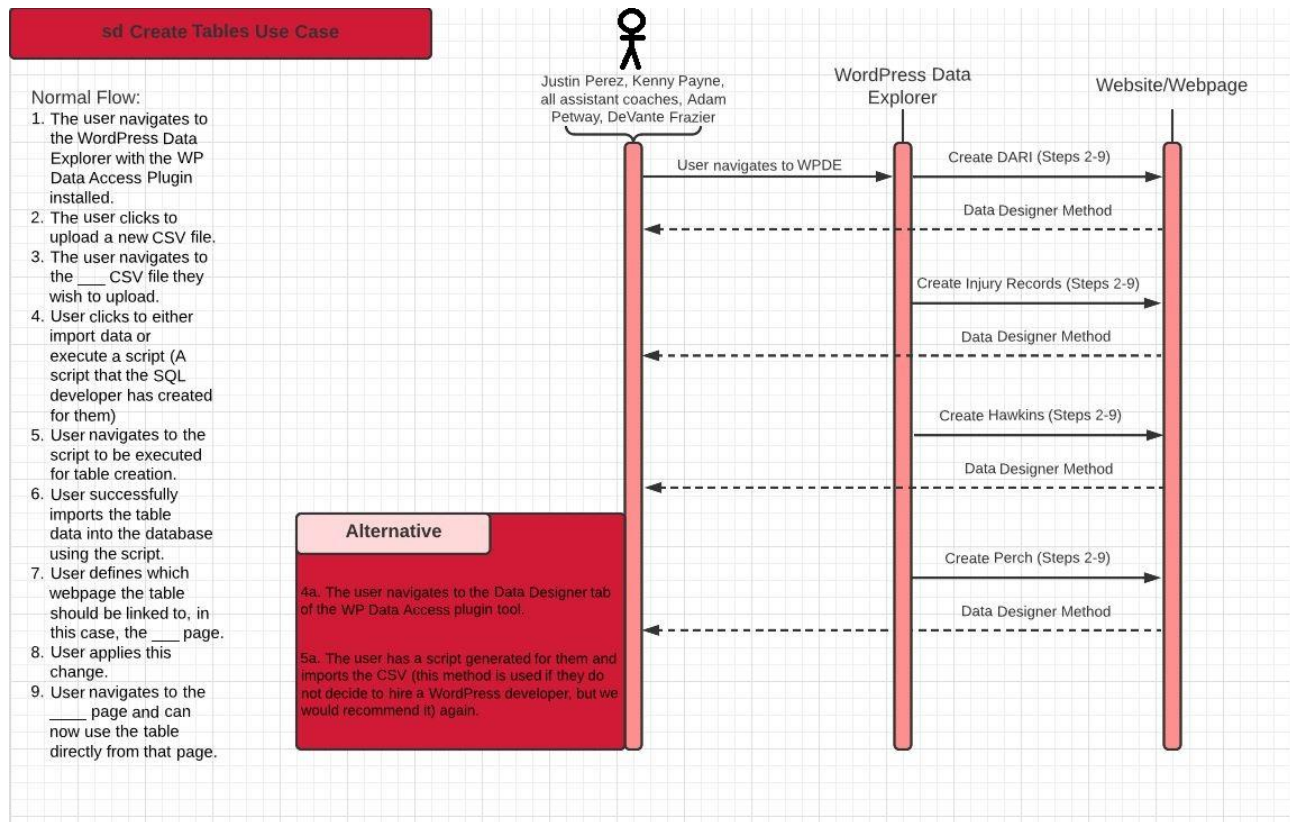
Use Case Name: Create Hawkins Dynamic Table	ID: 11	Importance Level: High
Primary Actor: Employee		Use Case Type: Detail, Essential
<p>Stakeholders and Interests:</p> <p>Justin Perez (director of men’s basketball administration) – importing and inputting player force plate data into a table, editing table data, and analyzing table data.</p> <p>Kenny Payne (head coach) – importing and inputting player force plate data into a table, editing table data, analyzing table data, making decisions for the players with that table data.</p>		

<p>Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - importing and inputting player force plate data into a table, editing table data, analyzing table data, making decisions for the players with that table data.</p> <p>Adam Petway (strength and conditioning coach) – importing and inputting player force plate data into a table, editing table data, analyzing table data.</p>	
Brief Description: A table can be imported with Hawkins Dynamic CSV data.	
<p>Trigger: User navigates to the Data Explorer tab of the WordPress Data Access Plugin and creates a table</p> <p>Type: External</p>	
<p>Relationships:</p> <p>Association: Justin Perez, Kenny Payne, all assistant coaches, Adam Petway</p> <p>Include: none</p> <p>Extend: none</p> <p>Generalization: none</p>	
<p>Normal Flow of Events:</p> <ol style="list-style-type: none"> 65. The user navigates to the WordPress Data Explorer with the WP Data Access Plugin installed. 66. The user clicks to upload a new CSV file. 67. The user navigates to the Hawkins Dynamic CSV file they wish to upload. 68. User clicks to either import data or execute a script (A script that the SQL developer has created for them) 69. User navigates to the script to be executed for table creation. 70. User successfully imports the table data into the database using the script. 71. User defines which webpage the table should be linked to, in this case, the Hawkins Dynamic page. 72. User applies this change. 73. User navigates to the Hawkins Dynamic page and can now use the table directly from that page. 	
SubFlows:	
<p>Alternate/Exceptional Flows:</p> <ol style="list-style-type: none"> 4a. The user navigates to the Data Designer tab of the WP Data Access plugin tool. 5a. The user has a script generated for them and imports the CSV (this method is used if they do not decide to hire a WordPress developer, but we would recommend it) again. 	

Use Case Name: Create Perch Velocity Table	ID: 12	Importance Level: High
Primary Actor: Employee		Use Case Type: Detail, Essential

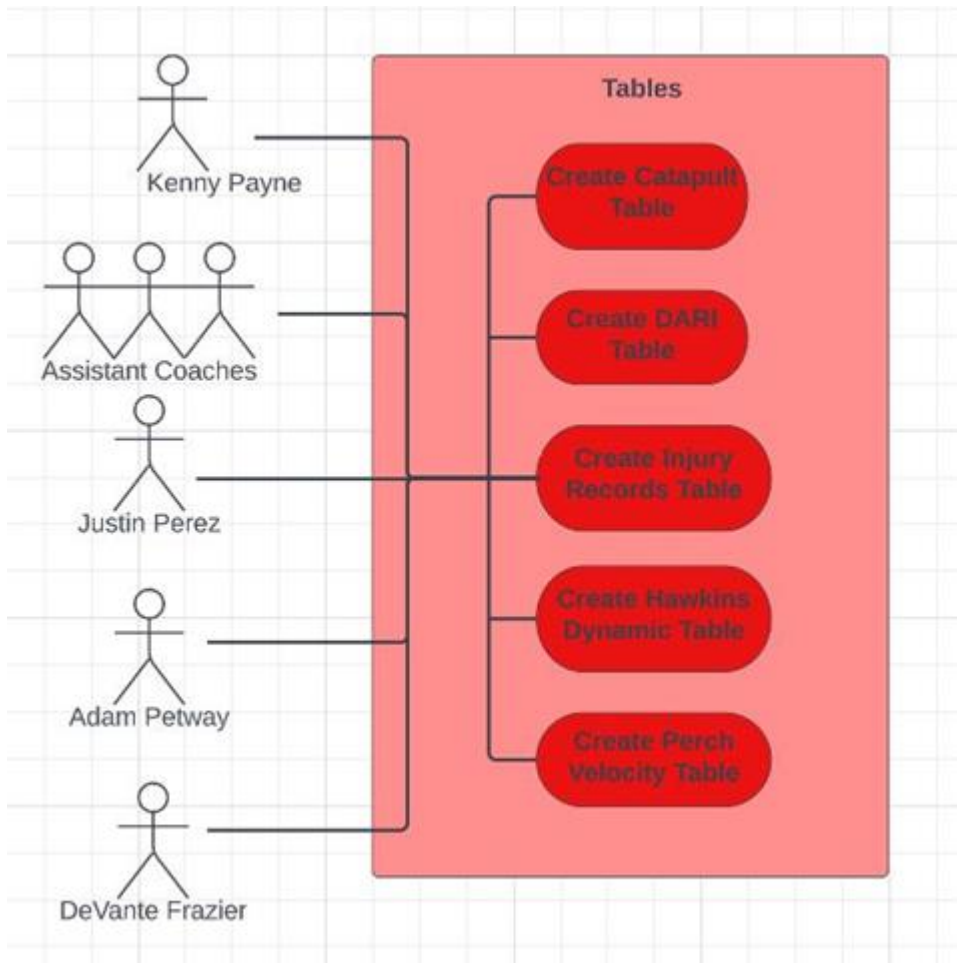
<p>Stakeholders and Interests:</p> <p>Justin Perez (director of men’s basketball administration) – importing and inputting player velocity training data into a table, editing table data, and analyzing table data.</p> <p>Kenny Payne (head coach) – importing and inputting player velocity training data into a table, editing table data, analyzing table data, making decisions for the players with that table data.</p> <p>Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - importing and inputting player velocity training data into a table, editing table data, analyzing table data, making decisions for the players with that table data.</p> <p>Adam Petway (strength and conditioning coach) – importing and inputting player velocity training data into a table, editing table data, analyzing table data.</p>
<p>Brief Description: A table can be imported with Force Velocity CSV data.</p>
<p>Trigger: User navigates to the Data Explorer tab of the WordPress Data Access Plugin and creates a table</p> <p>Type: External</p>
<p>Relationships:</p> <p>Association: Justin Perez, Kenny Payne, all assistant coaches, Adam Petway</p> <p>Include: none</p> <p>Extend: none</p> <p>Generalization: none</p>
<p>Normal Flow of Events:</p> <ol style="list-style-type: none"> 74. The user navigates to the WordPress Data Explorer with the WP Data Access Plugin installed. 75. The user clicks to upload a new CSV file. 76. The user navigates to the Perch Velocity CSV file they wish to upload. 77. User clicks to either import data or execute a script (A script that the SQL developer has created for them) 78. User navigates to the script to be executed for table creation. 79. User successfully imports the table data into the database using the script. 80. User defines which webpage the table should be linked to, in this case, the Perch Velocity page. 81. User applies this change. 82. User navigates to the Perch Velocity page and can now use the table directly from that page.
<p>SubFlows:</p>
<p>Alternate/Exceptional Flows:</p> <ol style="list-style-type: none"> 4a. The user navigates to the Data Designer tab of the WP Data Access plugin tool. 5a. The user has a script generated for them and imports the CSV (this method is used if they do not decide to hire a WordPress developer, but we would recommend it) again.

Use Case 9, 10, 11, and 12 Sequence Diagram



1. Any user or admin logs into the website
2. The user goes to the WPDE plugin
3. The use creates any number of the specified tables
4. The table appears on its related page

Use Case 9, 10, 11, and 12 Diagram



Narrative: Admins and users (Coaches and directors) can create tables for the Catapult, Dari, Injury Records, Hawkins Dynamic, and Perch Velocity webpages.

Use case 13, 14, and 15 Descriptions

Use Case Name: Create New Field	ID: 13	Importance Level: High
Primary Actor: Employee		Use Case Type: Detail, Essential
<p>Stakeholders and Interests:</p> <p>Justin Perez (director of men’s basketball administration) – can create new fields and name new fields.</p> <p>Kenny Payne (head coach) – can create new fields and name new fields.</p> <p>Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - can create new fields and name new fields.</p> <p>Adam Petway (strength and conditioning coach) – can create new fields and name new fields.</p>		

DeVante Frazier (director of sports medicine/men's basketball) – can create new fields and name new fields.
Brief Description: A user can create a new field within an existing table
Trigger: The user adds a new field with the sheet editor plugin and enters data into the field Type: External
Relationships: Association: Justin Perez, Kenny Payne, all assistant coaches, Adam Petway, DeVante Frazier Include: Extend: edit field, delete field Generalization:
Normal Flow of Events: <ol style="list-style-type: none"> 1. A user with the WordPress sheet editor plugin installed navigates to the desired CSV table. 2. The user adds a new empty field. 3. The field is created with the given title. 4. The user enters their data into the field.
Sub Flows: <ol style="list-style-type: none"> 2. The user designates a field name/title. 3-1. The field is populated with an ID as well as other identifying data.
Alternate/Exceptional Flows:

Use Case Name: Edit Field	ID: 14	Importance Level: Low
Primary Actor: Administrator		Use Case Type: Detail, Essential
Stakeholders and Interests: Justin Perez (director of men's basketball administration) – can edit fields and rename fields. Kenny Payne (head coach) – can edit fields and rename fields. Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - can edit fields and rename fields.		
Brief Description: A user can edit a field within an existing table		

Trigger: The user edits a field with the sheet editor plugin Type: External
Relationships: Association: Justin Perez, Kenny Payne, all assistant coaches Include: Extend: Generalization: create field
Normal Flow of Events: <ol style="list-style-type: none"> 1. A user with the WordPress sheet editor plugin installed navigates to the desired CSV table. 2. The user goes to edit an existing field. 3. The user removes data from the field and adds new data. 4. The field is successfully edited.
Sub Flows: <ol style="list-style-type: none"> 2. The user re-designates a field name/title. 3-1. The field is populated with an ID as well as other identifying data.
Alternate/Exceptional Flows: 2a. The user is denied permission to edit the field if they are not an admin

Use Case Name: Delete Field	ID: 15	Importance Level: Low
Primary Actor: Administrator		Use Case Type: Detail, Essential
Stakeholders and Interests: Justin Perez (director of men’s basketball administration) – can delete existing fields. Kenny Payne (head coach) – can delete existing fields. Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - can delete existing fields.		
Brief Description: A user can delete an existing field.		
Trigger: The user deletes a field with the sheet editor plugin Type: External		
Relationships: Association: Justin Perez, Kenny Payne, all assistant coaches Include: Extend: Generalization: create donation		
Normal Flow of Events: 1. A user with the WordPress sheet editor plugin installed navigates to the desired CSV table.		

2. The user goes to delete an existing field.
3. The user attempts to delete a field.
4. The field is successfully deleted.

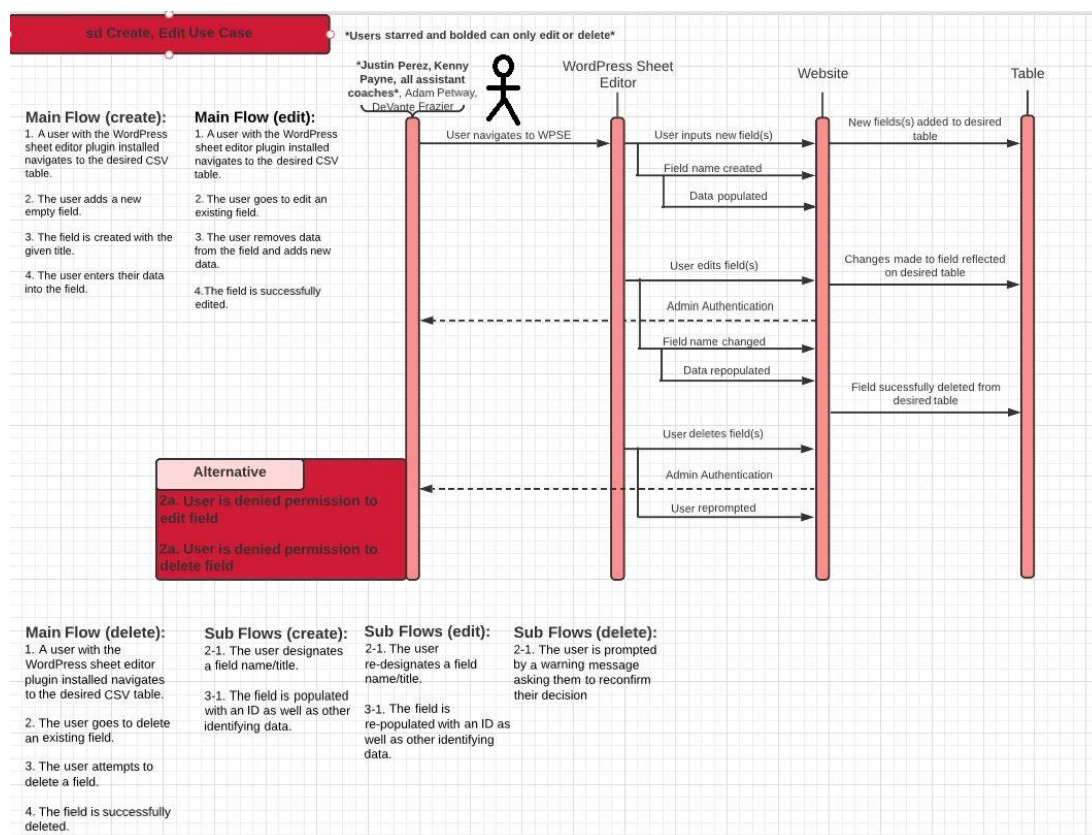
Sub Flows:

2-1. The user is prompted by a warning message asking them to reconfirm their decision

Alternate/Exceptional Flows:

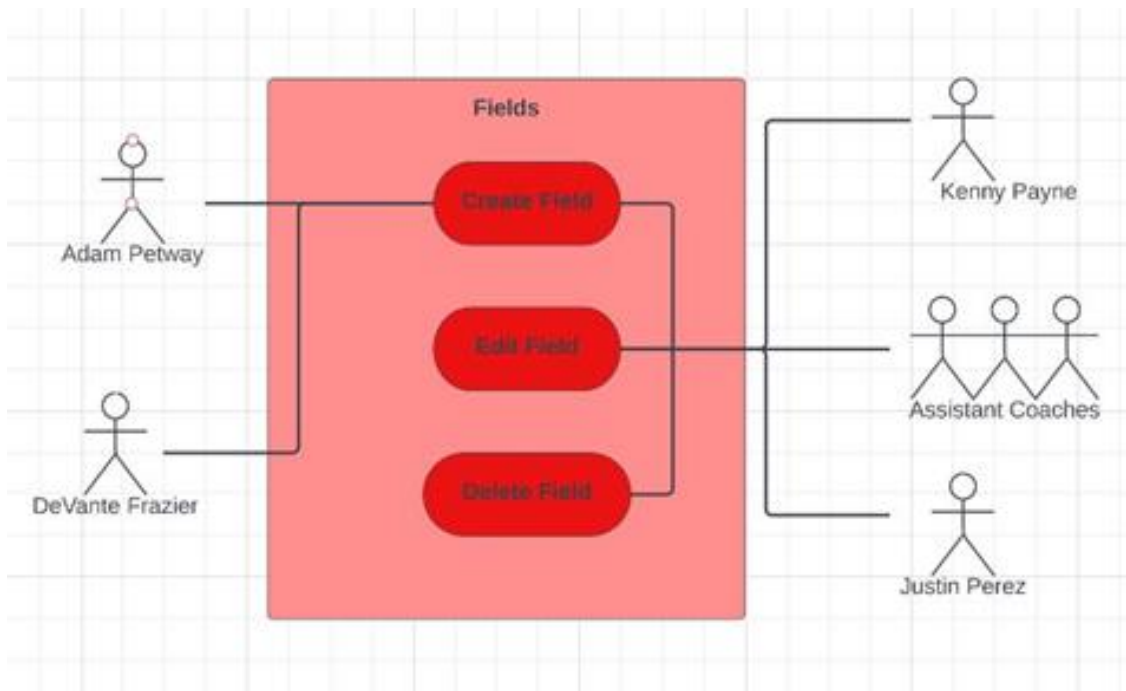
2a. The user is denied permission to delete the field if they are not an admin

Use Case 13, 14, and 15 Sequence Diagram



1. User or admin logs into the website
2. The user can create a field for any of the tables through the WordPress Sheet Editor
3. The user is forbidden from editing or deleting fields
4. The admin can create a field, edit a field, or delete a field on any of the tables
5. The changes are reflected in the table

Use Case 13, 14, and 15 Diagram



Narrative: Users (Coaches and Directors) can create fields, but only some coaches and directors who are admins can edit or delete fields.

Use Case 16, 17, and 18 Descriptions

Use Case Name: Create New Record	ID: 16	Importance Level: High
Primary Actor: Employee		Use Case Type: Detail, Essential
<p>Stakeholders and Interests:</p> <p>Justin Perez (director of men's basketball administration) – can create new fields and name new fields.</p> <p>Kenny Payne (head coach) – can create new fields and name new fields.</p> <p>Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - can create new fields and name new fields.</p> <p>Adam Petway (strength and conditioning coach) – can create new fields and name new fields.</p> <p>DeVante Frazier (director of sports medicine/men's basketball) – can create new fields and name new fields.</p>		
Brief Description: A user can define and create a new record within an existing table		
<p>Trigger: The user defines and adds a new record with the sheet editor plugin</p> <p>Type: External</p>		

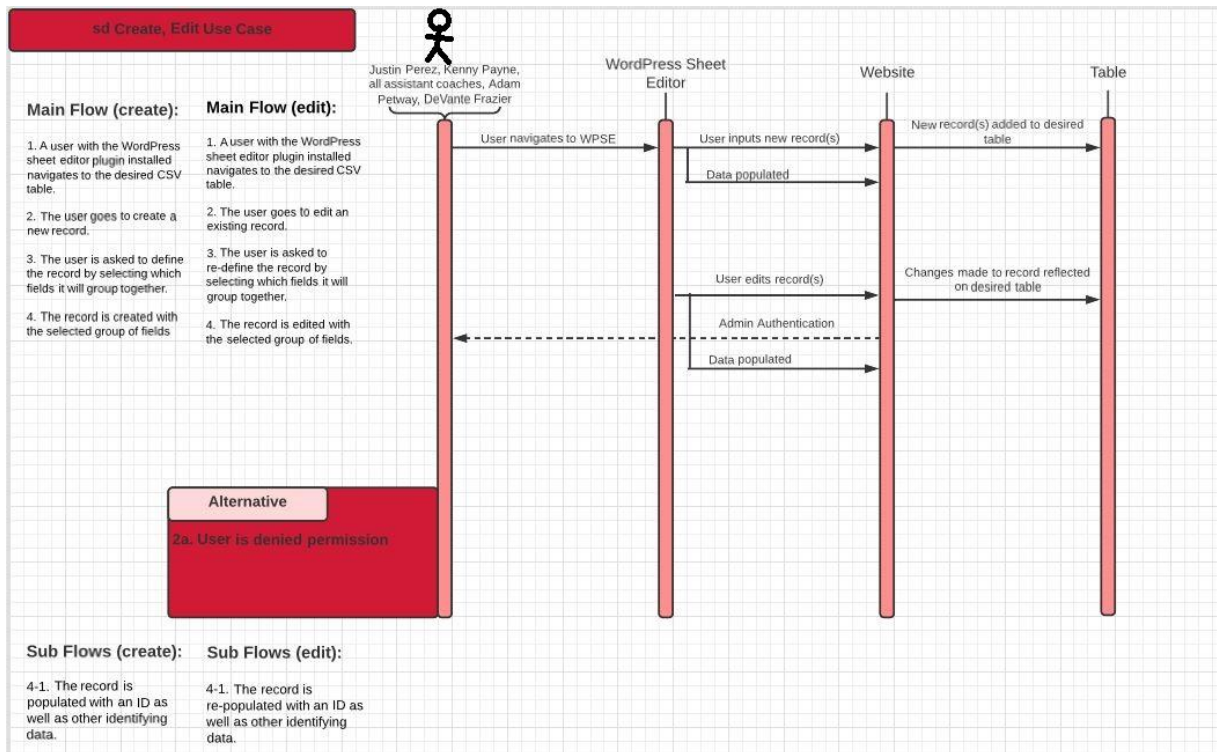
Relationships: Association: Justin Perez, Kenny Payne, all assistant coaches, Adam Petway, DeVante Frazier Include: Extend: Edit record Generalization:
Normal Flow of Events: <ol style="list-style-type: none"> 1. A user with the WordPress sheet editor plugin installed navigates to the desired CSV table. 2. The user goes to create a new record. 3. The user is asked to define the record by selecting which fields it will group together. 4. The record is created with the selected group of fields
Sub Flows: <ol style="list-style-type: none"> 4. The record is populated with an ID as well as other identifying data.
Alternate/Exceptional Flows:

Use Case Name: Edit Record	ID: 17	Importance Level: Low
Primary Actor: Administrator		Use Case Type: Detail, Essential
Stakeholders and Interests: Justin Perez (director of men’s basketball administration) – can edit records as an administrator. Kenny Payne (head coach) – can edit records as an administrator. Danny Manning, Nolan Smith, and Josh Jamieson (assistant coaches) - can edit records as an administrator.		
Brief Description: A user can edit records within an existing table		
Trigger: The user edits a record with the sheet editor plugin Type: External		
Relationships: Association: Justin Perez, Kenny Payne, all assistant coaches Include: Extend: Generalization: Create record		
Normal Flow of Events: 1. A user with the WordPress sheet editor plugin installed navigates to the desired CSV table. 2. The user goes to edit an existing record. 3. The user is asked to re-define the record by selecting which fields it will group together. 4. The record is edited with the selected group of fields.		

Sub Flows: 4. The record is re-populated with a new ID as well as other identifying data.
Alternate/Exceptional Flows: 2a. The user is denied permission to edit the record if they are not an admin

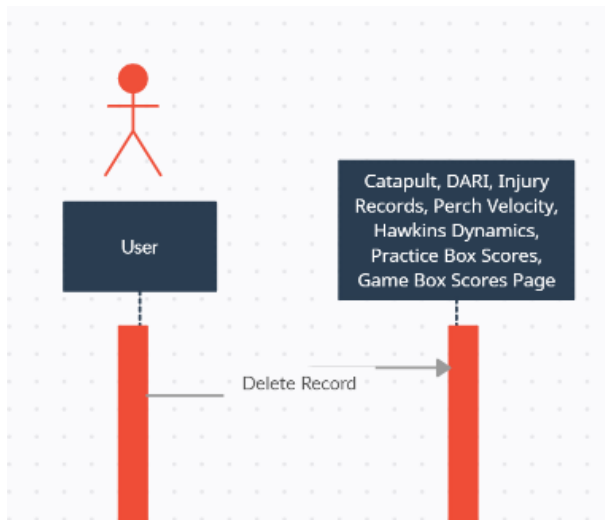
Use Case Name: Delete Record	ID: 18	Importance Level: Low
Primary Actor: Administrator		Use Case Type: Detail, Essential
Stakeholders and Interests: Administrator - wants to delete a record. Website - tool used to collect record information		
Brief Description: This use case will be able to delete a record only by an administrator.		
Trigger: Administrator navigates to the home page on the website. Type: External		
Relationships: Association: Administrator Include: Extend: Edit Record, Delete Record Generalization:		
Normal Flow of Events: 1. The administrator navigates to the home page on the website. 2. The administrator will be able to edit, delete, and add records.		
SubFlows: None		
Alternate/Exceptional Flows: None		

Use Case 16 and 17 Sequence Diagram

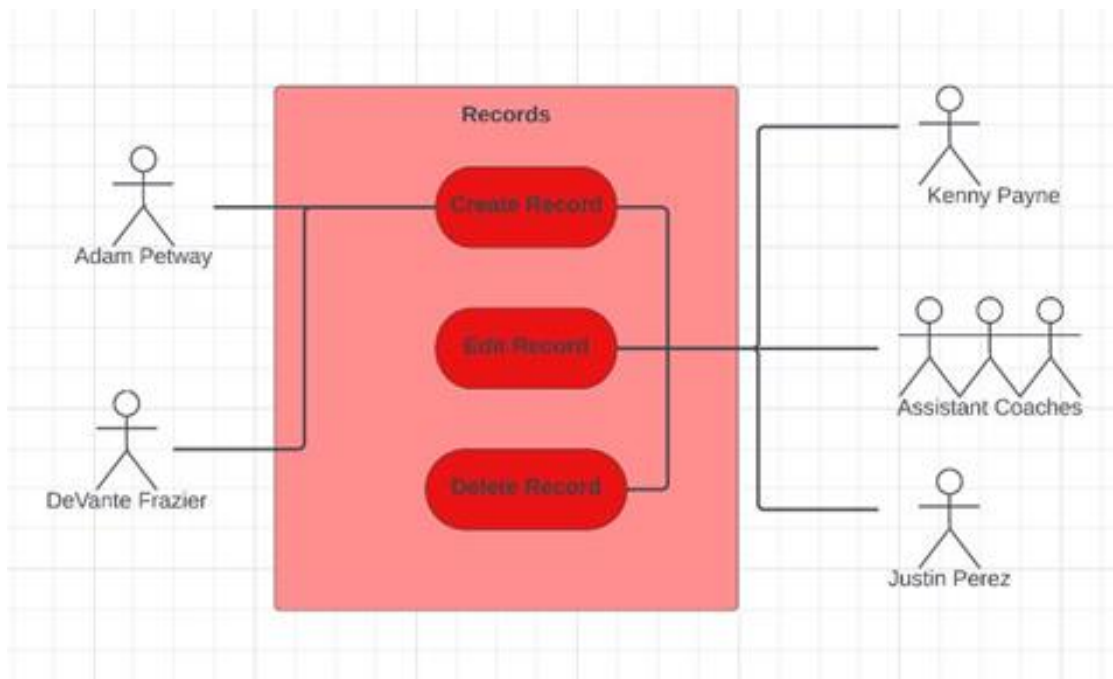


1. User or admin logs into the website
2. The user can create a record for any of the tables through the WordPress Sheet Editor
3. The user is forbidden from editing records
4. The admin can create a record or edit a record on any of the tables
5. The changes are reflected in the table

Use Case 18 Sequence Diagram



Use Case 16, 17, and 18 Diagram

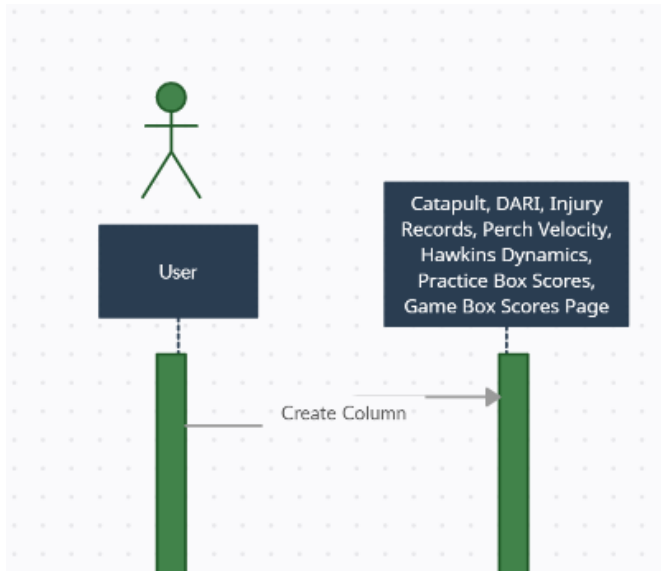


Narrative: Users (Coaches and Directors) can create fields, but only some coaches and directors who are admins can edit or delete fields.

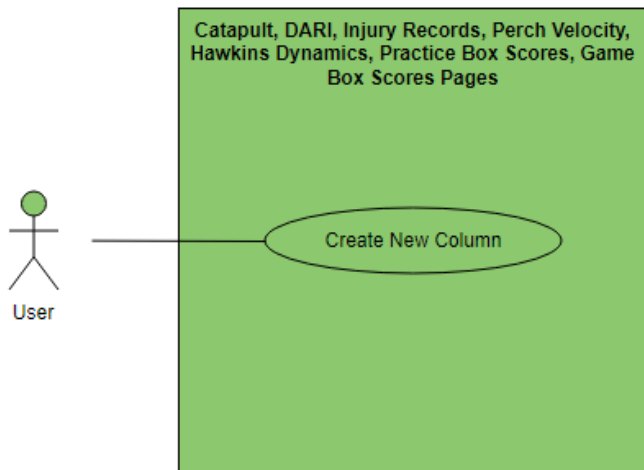
Use Case 19 Description

Use Case Name: Create New Column	ID: 19	Importance Level: Medium
Primary Actor: Head Coach		Use Case Type: Detail, Essential
Stakeholders and Interests: Head Coach - Coach may want to add their schedules. Website - tool used to collect players information		
Brief Description: This use case allows a new column to be inputted by a user within any table		
Trigger: Head coach navigates to the home page on the website. Type: External		
Relationships: Association: Head Coach Include: Extend: Generalization: Create Donation		
Normal Flow of Events: 3. The head coach navigates to the home page on the website. 4. The head coach can create new columns to add more information to the games.		
SubFlows: None		
Alternate/Exceptional Flows: 5a. The creation of the column was not processed.		

Use Case 19 Sequence Diagram



Use Case 19 Diagram



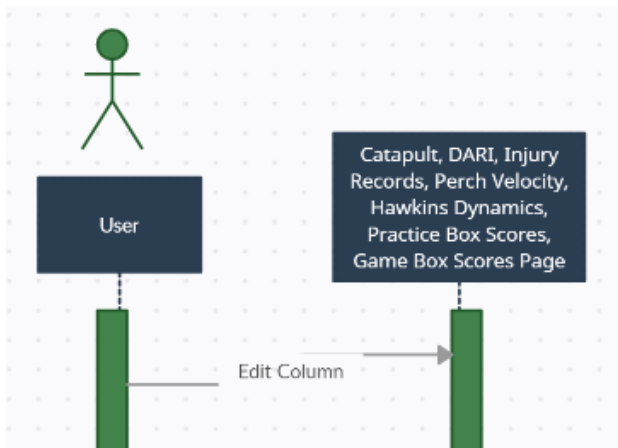
Narrative:

Use Case 20 Description

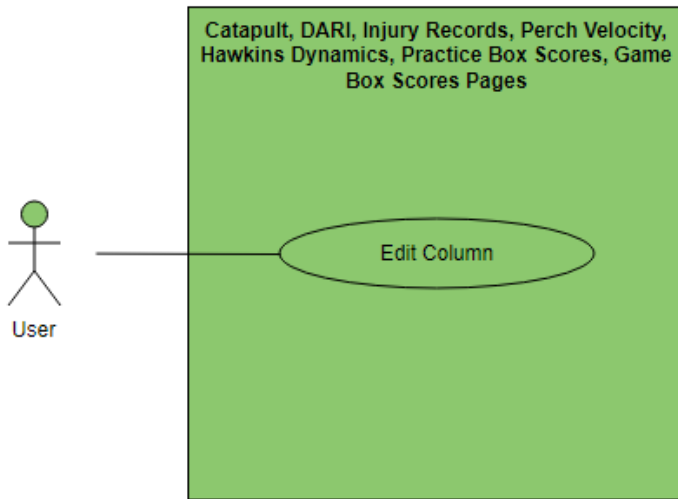
Use Case Name: Edit Column Name	ID: 20	Importance Level: Low
Primary Actor: Coach		Use Case Type: Detail, Essential

Stakeholders and Interests: Coach - coaches may want to edit their schedules. Website - tool used to collect players information
Brief Description: This use case allows a column to be edited by a user within any table
Trigger: Coach navigates to the home page on the website. Type: External
Relationships: Association: Coach Include: Extend: Generalization: Edit Column
Normal Flow of Events: <ol style="list-style-type: none"> 5. The coach navigates to the home page on the website. 6. The coach can edit the columns for the schedules for more information on the games.
SubFlows: None
Alternate/Exceptional Flows: <ol style="list-style-type: none"> 5a. The edit feature was not processed.

Use Case 20 Sequence Diagram



Use Case 20 Diagram



Narrative:

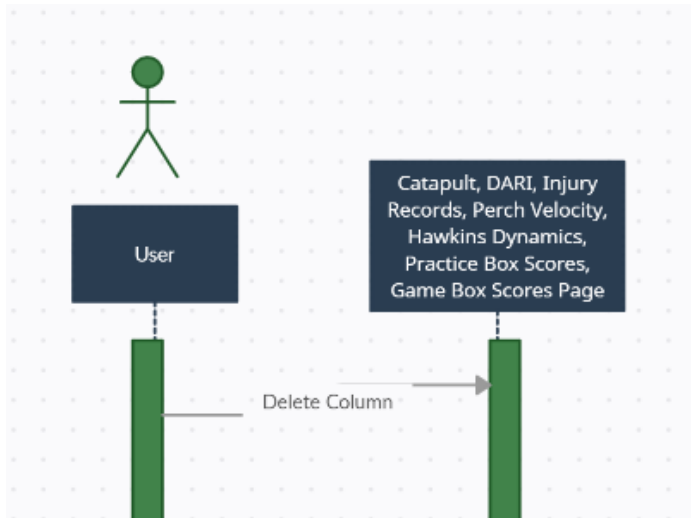
Use Case 21 Description

Use Case Name: Delete Column	ID: 21	Importance Level: High
Primary Actor: Administrator		Use Case Type: Detail, Essential
Stakeholders and Interests: Administrator - Admin may want to delete their schedules. Website - tool used to delete players information		
Brief Description: This use case allows a column can only be deleted by an administrator.		
Trigger: Admin navigates to the home page on the website. Type: External		
Relationships: Association: Administrator Include: Extend: Generalization: Delete Column		
Normal Flow of Events: 7. The admin navigates to the home page on the website. 8. The admin can delete the columns on more information for the games.		
SubFlows: None		

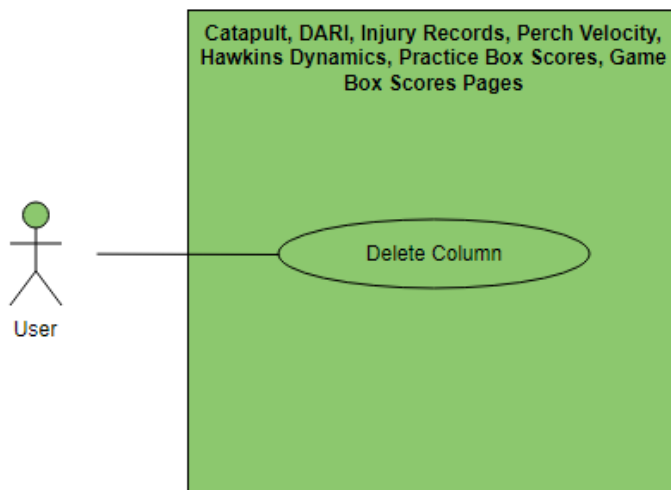
Alternate/Exceptional Flows:

5a. The delete feature was not processed.

Use Case 21 Sequence Diagram



Use Case 21 Diagram

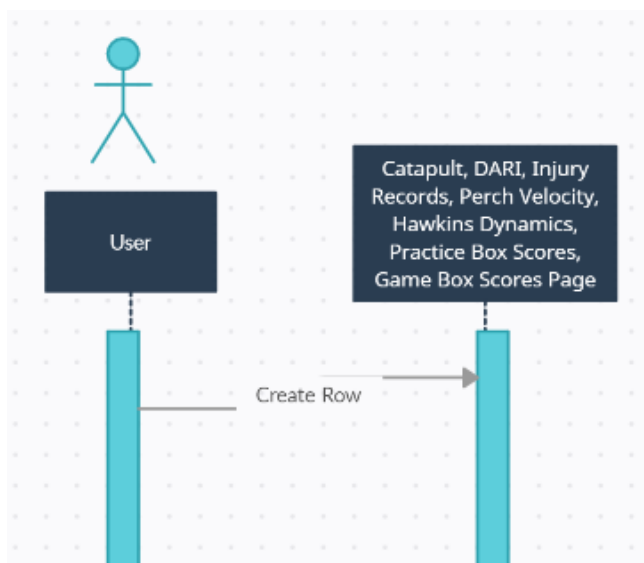


Narrative:

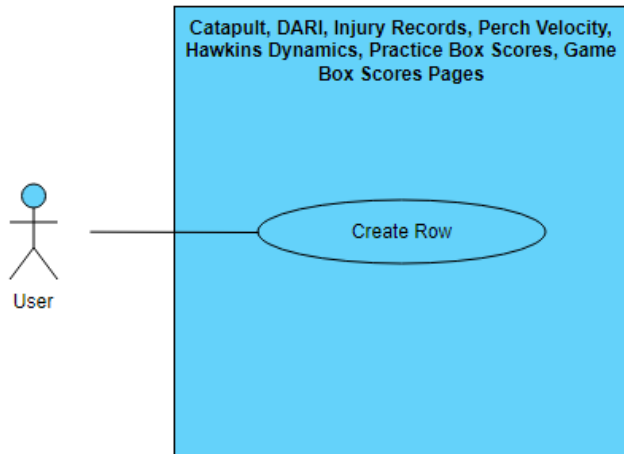
Use Case 22 Description

Use Case Name: Create New Row	ID: 22	Importance Level: Medium
Primary Actor: Head Coach		Use Case Type: Detail, Essential
Stakeholders and Interests: Head Coach - wants to create a new row for the table. Website - tool used to collect adopter information		
Brief Description: This use case allows a new row to be inputted by a user within any table		
Trigger: Head coach navigates to the home page on the website. Type: External		
Relationships: Association: Head Coach Include: Extend: Create Row Generalization:		
Normal Flow of Events: 9. The head coach navigates to the home page on the website. 10. The head coach can create the rows for schedules for more information on the games		
SubFlows:		
Alternate/Exceptional Flows: 6a. The create feature was not processed.		

Use Case 22 Sequence Diagram



Use Case 22 Diagram



Narrative:

Use Case 23 Description

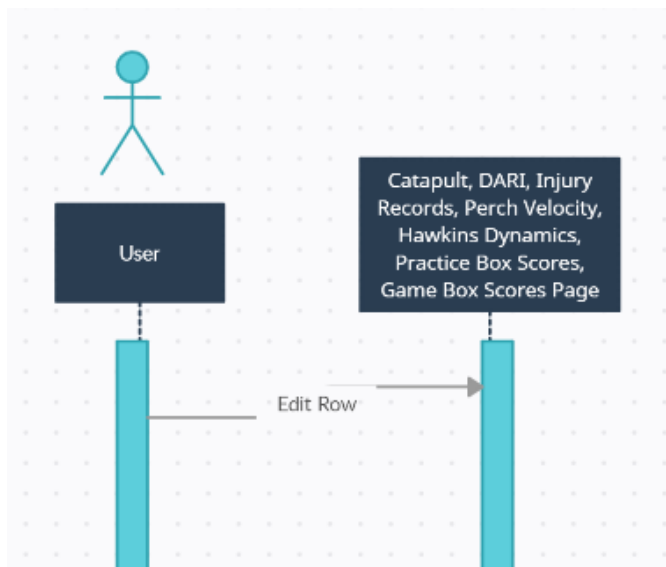
Use Case Name: Edit Row Name	ID: 23	Importance Level: Low
Primary Actor: Coach		Use Case Type: Detail, Essential
Stakeholders and Interests: Coach - coaches may want to edit the rows. Website - tool used to collect players information		
Brief Description: This use case allows a row to be edited by a user within any table		
Trigger: Coach navigates to the home page on the website. Type: External		
Relationships: Association: Coach Include: Extend: Generalization: Edit row		
Normal Flow of Events: 11. The coach navigates to the home page on the website. 12. The coach can edit the rows for the schedules for more information on the games.		

SubFlows: None

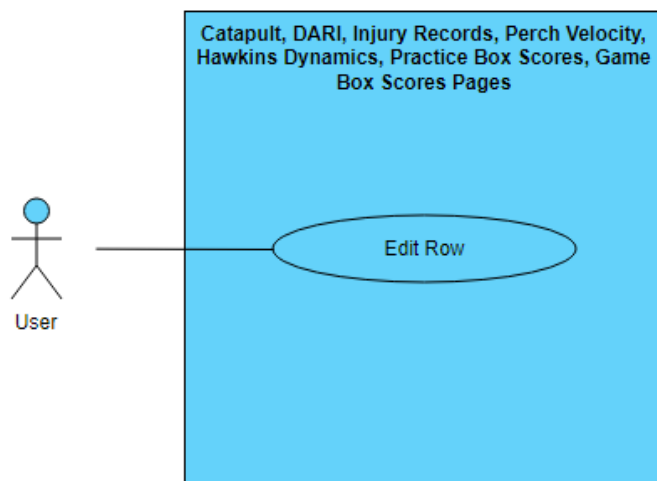
Alternate/Exceptional Flows:

5a. The edit feature was not processed.

Use Case 23 Sequence Diagram



Use Case 23 Diagram

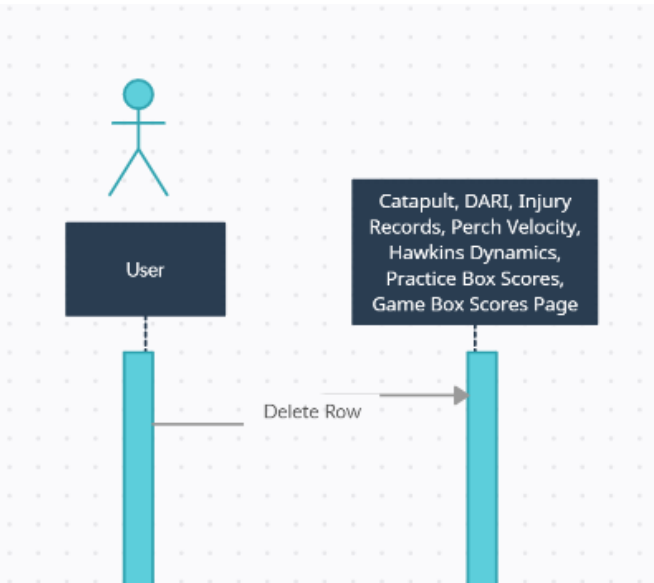


Narrative:

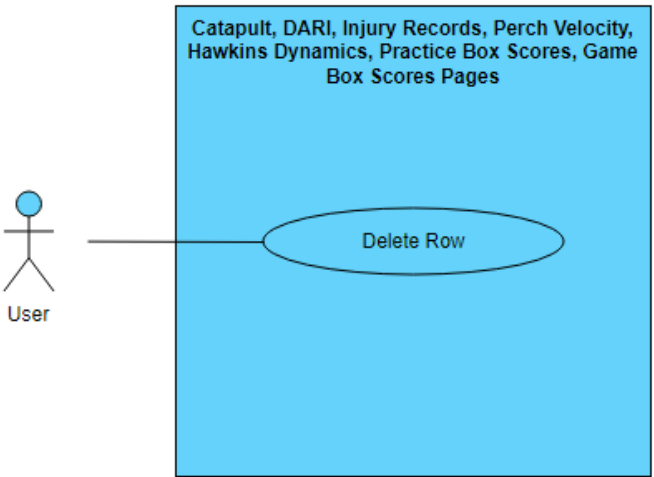
Use Case 24 Description

Use Case Name: Delete Row	ID: 24	Importance Level: High
Primary Actor: Administrator		Use Case Type: Detail, Essential
Stakeholders and Interests: Administrator - Admin may want to delete their schedules. Website - tool used to delete players information		
Brief Description: This use case allows a row can only be deleted by an administrator.		
Trigger: Admin navigates to the home page on the website. Type: External		
Relationships: Association: Administrator Include: Extend: Generalization: Delete Row		
Normal Flow of Events: 13. The admin navigates to the home page on the website. 14. The admin can delete the rows on more information for the games.		
SubFlows: None		
Alternate/Exceptional Flows: 5a. The delete feature was not processed.		

Use Case 24 Sequence Diagram



Use Case 24 Diagram



Narrative:

Use Case Descriptions 25, 26, 27, 28, and 29

Use Case Name: Create Graph	ID: 25	Importance Level: High
Primary Actor:		Use Case Type: Data Analysis

<p>Stakeholders and Interests:</p> <p>User - User may want to create and edit a graph with the information gathered.</p> <p>Website - tool used to collect information about NCAA basketball.</p> <p>Perch Velocity – Tool used to create graphs.</p>
Brief Description: This use case allows for the user to create a graph to help analyze information/data.
<p>Trigger: User enters the Perch Velocity page and wants to create a graph</p> <p>Type: External</p>
<p>Relationships:</p> <p>Association: User</p> <p>Include:</p> <p>Extend:</p> <p>Generalization: Create graph</p>
<p>Normal Flow of Events:</p> <ol style="list-style-type: none"> 1. The user navigates to the “Perch” page on the website. 2. The user clicks on the “data entry” button in the page. 3. The user then adds the required data to the graph. 4. The user presses the “save graph” button. 5. The graph is added to the website in the “Perch” page.
SubFlows:
<p>Alternate/Exceptional Flows:</p> <ol style="list-style-type: none"> 1a. The “Perch” page pops up as an error. 4a. The graph does not save properly.

Use Case Name: Edit graph data series	ID: 26	Importance Level: low
Primary Actor: User		Use Case Type: Data Analysis
<p>Stakeholders and Interests:</p> <p>User – User may want to edit a data series on a graph.</p> <p>Website - Tool used to collect information about NCAA basketball.</p> <p>Perch Velocity – Tool used to create graphs.</p>		
Brief Description: This use case allows for the user to edit a graph.		
<p>Trigger: User enters the Perch Velocity page and wants to edit a graph</p> <p>Type: External</p>		
<p>Relationships:</p> <p>Association: User</p> <p>Include:</p>		

Extend: Generalization: Edit graph data series
Normal Flow of Events: <ol style="list-style-type: none"> 1. The user navigates to the “Perch” page on the website. 2. The user finds the graph that needs to be edited. 3. The user then triple clicks on the graph. 4. The graph will display edit options and the user clicks on what needs to be edited. 5. The user edits the necessary information. 6. The user presses the save “save edit” button. 7. The saved graph will now show on the website.
SubFlows:
Alternate/Exceptional Flows: <ol style="list-style-type: none"> 1a. The “Perch” page pops up as an error. 6a. The graph edit made did not save properly.

Use Case Name: Delete Graph	ID: 27	Importance Level: Low
Primary Actor: User		Use Case Type: Detail
Stakeholders and Interests: User – User may want to edit a data series on a graph. Website - Tool used to collect information about NCAA basketball. Perch Velocity – Tool used to create graphs.		
Brief Description: This use case describes how graphs are deleted within Perch Velocity.		
Trigger: User enters the Perch Velocity page and wants to delete a graph. Type: External		
Relationships: Association: User Include: Extend: Generalization: Edit Graph		
Normal Flow of Events: 1. The user navigates to the “Perch” page on the website. 2. The user right clicks on the graph. 3. The user then presses the “delete” option. 4. A confirmation button will show up, the user presses “confirm”. 5. The graph will be deleted from the website.		
SubFlows:		

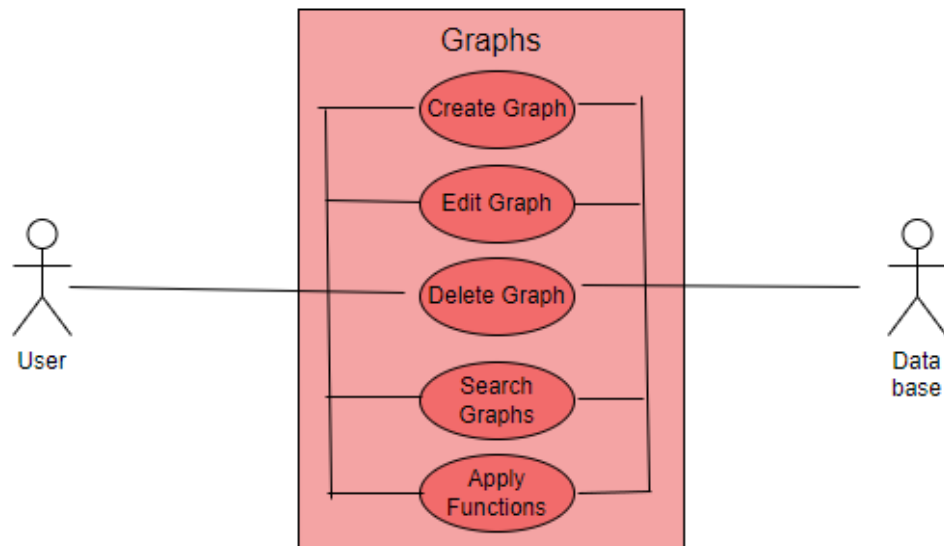
Alternate/Exceptional Flows: 1a. The “Perch” page pops up as an error. 5a. The graph did not delete from the page.

Use Case Name: Search within table or graph	ID: 28	Importance Level: High
Primary Actor: User		Use Case Type: Detail
Stakeholders and Interests: User – User may want to edit a data series on a graph. Website - Tool used to collect information about NCAA basketball. Perch Velocity – Tool used to create graphs.		
Brief Description: This use case allows for the user to search data within a table or graph		
Trigger: User enters the Perch Velocity page and clicks “Search”. Type: External		
Relationships: Association: User Include: Extend: Generalization: Search table or graph		
Normal Flow of Events: 1. The user navigates to the “Perch” page on the website. 2. The user presses the search bar labeled “Search Player”. 3. The user presses the enter key on the keyboard. 4. The website will then display a graph for that player.		
SubFlows:		
Alternate/Exceptional Flows: 1a. The “Perch” page pops up as an error. 3a. The player searched could not be found. 4a. A graph does not display for the player.		

Use Case Name: Apply functions to graph or table	ID: 29	Importance Level: High
Primary Actor: User	Use Case Type: Data Analysis, Detail	

<p>Stakeholders and Interests:</p> <p>User – User may want to edit a data series on a graph.</p> <p>Website - Tool used to collect information about NCAA basketball.</p> <p>Perch Velocity – Tool used to create graphs.</p>
<p>Brief Description: This use case allows for the user to apply a function to a table or graph within Perch Velocity.</p>
<p>Trigger: User enters the Perch Velocity page and wants to apply a function to a graph.</p> <p>Type: Internal</p>
<p>Relationships:</p> <p>Association: User</p> <p>Include:</p> <p>Extend:</p> <p>Generalization: Apply a function</p>
<p>Normal Flow of Events:</p> <ol style="list-style-type: none"> 1. The user navigates to the “Perch” page on the website. 2. The user right clicks on the table. 3. The user selects what function to apply. 4. The user presses enter. 5. The chart updates according to the function.
<p>SubFlows:</p>
<p>Alternate/Exceptional Flows:</p> <ol style="list-style-type: none"> 1a. The link on the website does not take the user to the “Perch” page. 5a. The function does not get applied properly

Use Case Diagram 24, 25, 26, 27, 28, and 29:



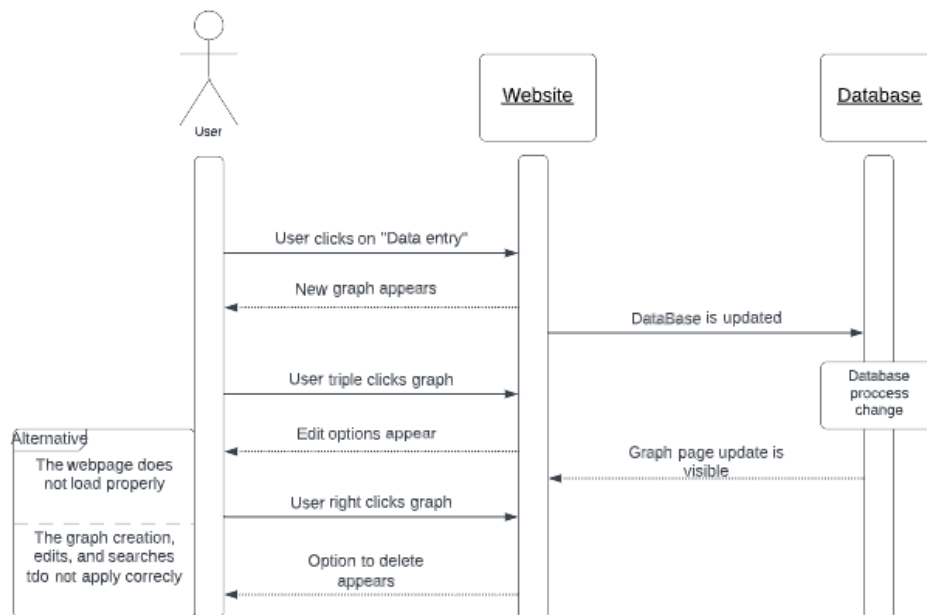
Narrative: The user creates, edits, deletes, searches, or applies a function and updates the database.

Use Case 24, 25, 26, 27, 28, and 29 Sequence Diagram:

Create, Edit, Delete, Search, and Apply Functions to Graphs Use Case

Main Flow:

1. The user navigates to the "Perch" page on the website.
2. The user clicks on "data entry"
3. The user triple clicks the graph to edit.
4. The user can right click to delete the graph.
5. The user can click the search bar to search for a player.
6. The user can right click the table to apply functions.

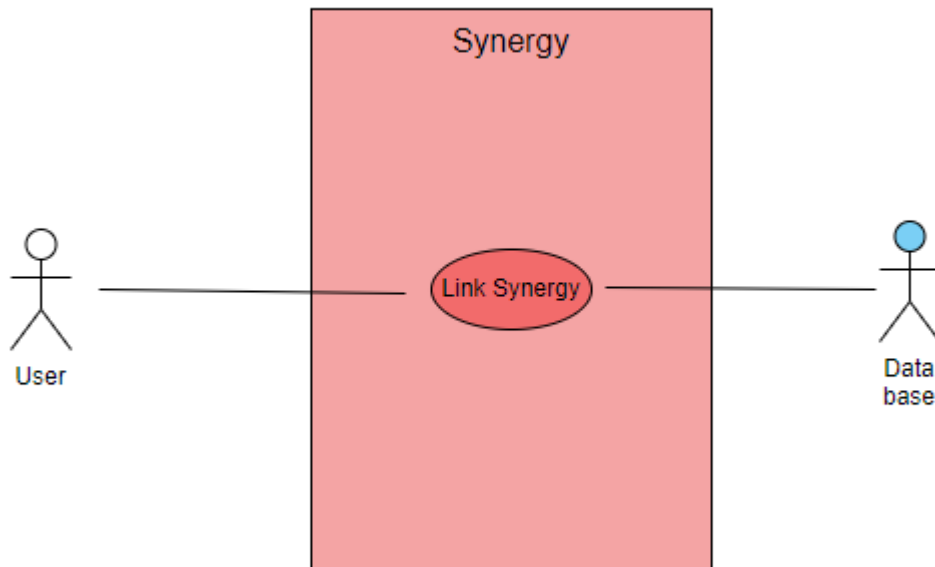


1. This use case is initiated when the user wants to create, edit, delete, search, or apply functions to the data
2. To do this the user would click on data entry and import the data, and right click to delete it, and click the search bar to search and add functions.

Use Case 30 Description:

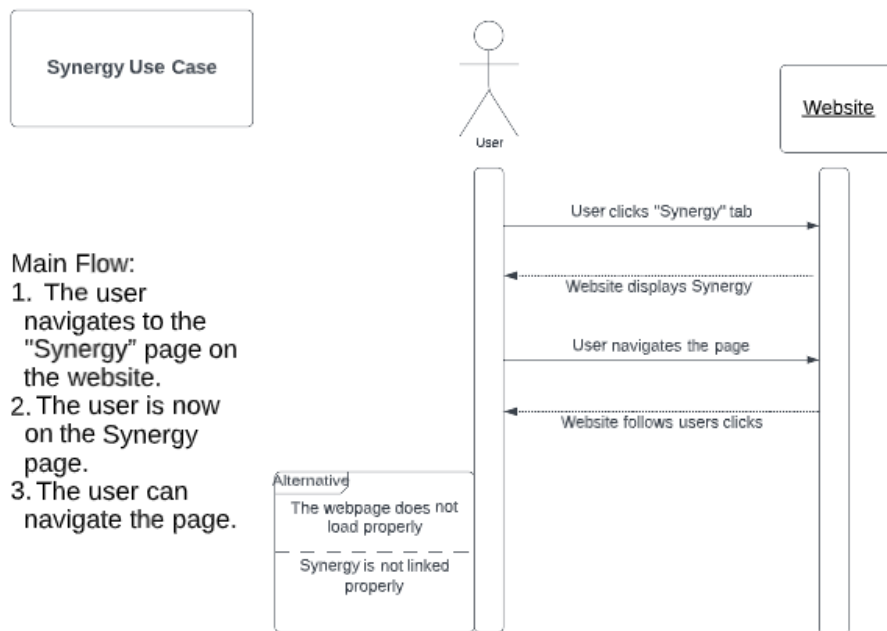
Use Case Name: Link “Synergy” Data	ID: 30	Importance Level: High
Primary Actor: User		Use Case Type: Detail, Essential
Stakeholders and Interests: User – User may want to access the synergy website. Website - Tool used to collect information about NCAA basketball. Synergy – Tool used to help coaching and team play.		
Brief Description: This use case will link the Synergy website to the private Louisville basketball website		
Trigger: User navigates to the Synergy page on the website. Type: External		
Relationships: Association: User Include: Extend: Generalization: Link the Synergy Website		
Normal Flow of Events: 1. The user navigates to the “Synergy” page on the website. 2. The user is now on the Synergy page. 3. The user can navigate the page.		
SubFlows:		
Alternate/Exceptional Flows: 1a. The link on the website does not take the user to the “Synergy” page.		

Use Case Diagram:



Narrative: The user clicks on the Synergy link.

Sequence Diagram:



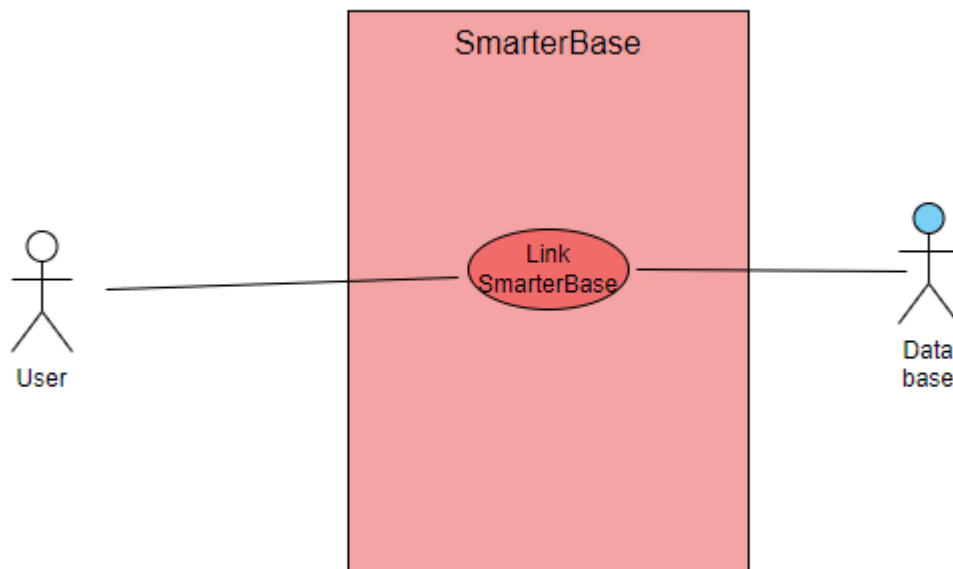
1. This use case is initiated when the user wants to use the synergy tab
2. To do this the user would click the synergy tab from the home screen and would be sent to the website

Use Case 31 Description:

Use Case Name: Link SmarterBase	ID: 31	Importance Level: High
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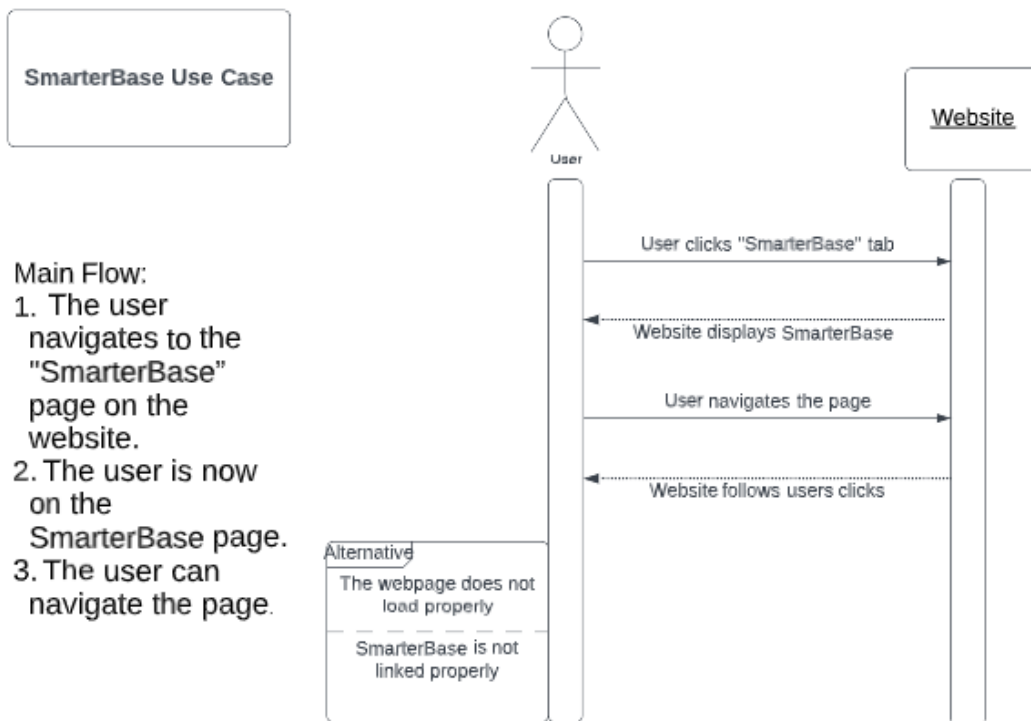
Primary Actor: User	Use Case Type: Detail, Essential
Stakeholders and Interests: User – User may want to access the SmarterBase website. Website - Tool used to collect information about NCAA basketball. SmarterBase– Used to help session planning and injury management.	
Brief Description: This use case allows SmarterBase Data to be accessible in the private UofL basketball website.	
Trigger: User clicks on the “SmarterBase” tab. Type: Internal	
Relationships: Association: User Include: Extend: Generalization: Link SmarterBase	
Normal Flow of Events: <ol style="list-style-type: none"> 1. The user navigates to the “SmarterBase” page on the website. 2. The user is now on the SmarterBase page. 3. The user can navigate the page. 	
SubFlows:	
Alternate/Exceptional Flows: <ol style="list-style-type: none"> 1a. The link on the website does not take the user to the “SmarterBase” page. 	

Use Case 31 Diagram:



Narrative: The user clicks on the SmarterBase link.

Use Case 31 Sequence Diagram:



1. This use case is initiated when the user wants to use SmarterBase
2. To do this the user would click the SmarterBase tab from the homepage

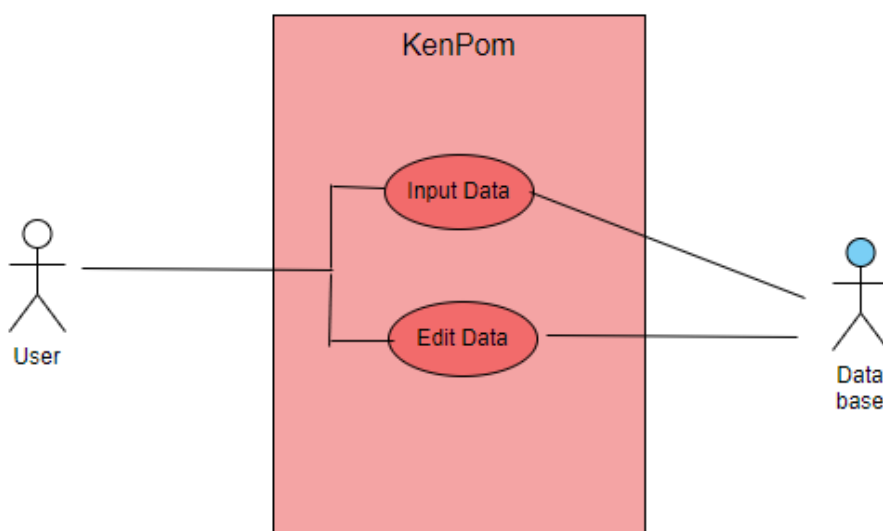
Use Case 32 Description:

Use Case Name: Input Data with KenPom	ID: 32	Importance Level: High
Primary Actor: User		Use Case Type: Detail, Essential
Stakeholders and Interests: User – User may want to access the KenPom Data. Website - Tool used to collect information about NCAA basketball. KenPom – Tool used for analytics.		
Brief Description: This use case describes how data is inputted with KenPom.		
Trigger: User presses the “KenPom” tab on the website. Type: Internal		
Relationships: Association: User Include: Extend: Generalization: Input Data with KenPom		
Normal Flow of Events: 1. The user navigates to the “KenPom” page on the website. 2. The user right clicks on the existing data. 3. The user selects “add data”. 4. The user finds the data they want to add and selects it. 5. The data is added to the existing data		
SubFlows:		
Alternate/Exceptional Flows: 1a. The link on the website does not take the user to the “KenPom” page. 5a. The data added did not save properly.		

Use Case Name: Edit Data with KenPom	ID: 33	Importance Level: High
Primary Actor: User		Use Case Type: Detail, Essential
Stakeholders and Interests: User – User may want to access the KenPom Data. Website - Tool used to collect information about NCAA basketball. KenPom – Tool used for analytics		

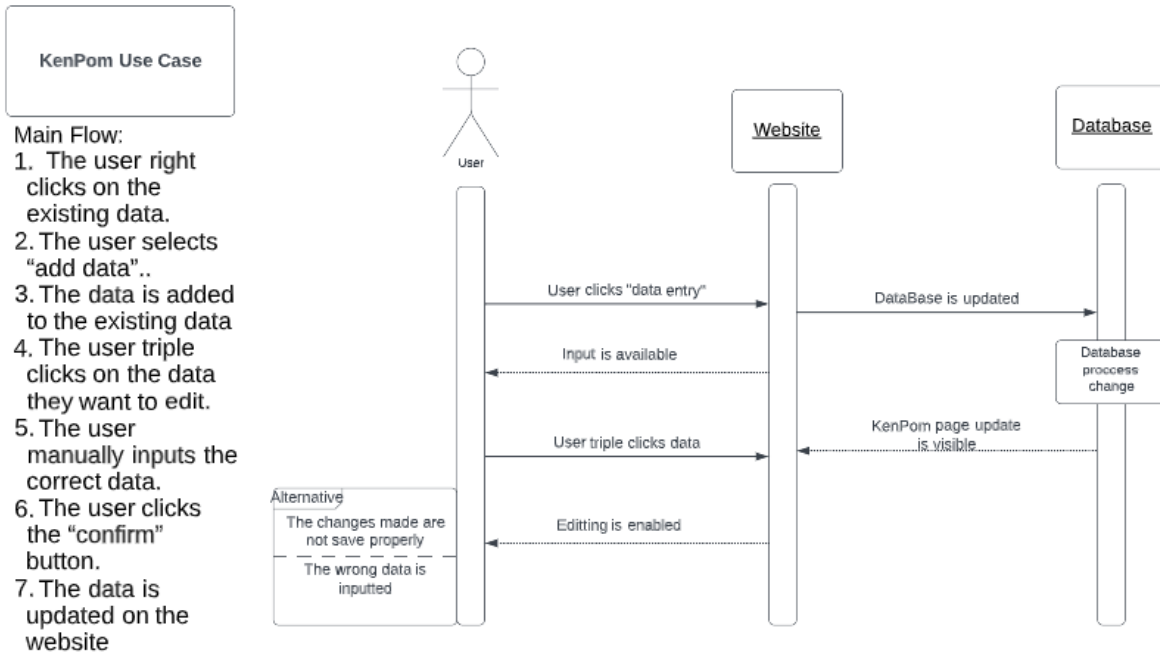
Brief Description: This use case describes how a user can edit data in the KenPom tab.
Trigger: User clicks on the “KenPom” tab on the website. Type: Internal
Relationships: Association: User Include: Extend: Generalization: Edit Data with KenPom
Normal Flow of Events: <ol style="list-style-type: none"> 1. The user navigates to the “KenPom” page on the website. 2. The user triple clicks on the data they want to edit. 3. The user manually inputs the correct data. 4. A confirmation message appears. 5. The user clicks the “confirm” button. 6. The data is updated on the website.
SubFlows:
Alternate/Exceptional Flows: <ol style="list-style-type: none"> 1a. The link on the website does not take the user to the “SmarterBase” page. 6a. The data did not get edited properly.

Use Case 32 Diagram:



Narrative: The user inputs or edits data with KenPom and updates the database.

Use Case 32 Sequence Diagram:



1. This use case is initiated when the user wants to import or edit KenPom data
2. To do this the user would click add data and then triple click the data that needs to be edited.

Trace Matrix

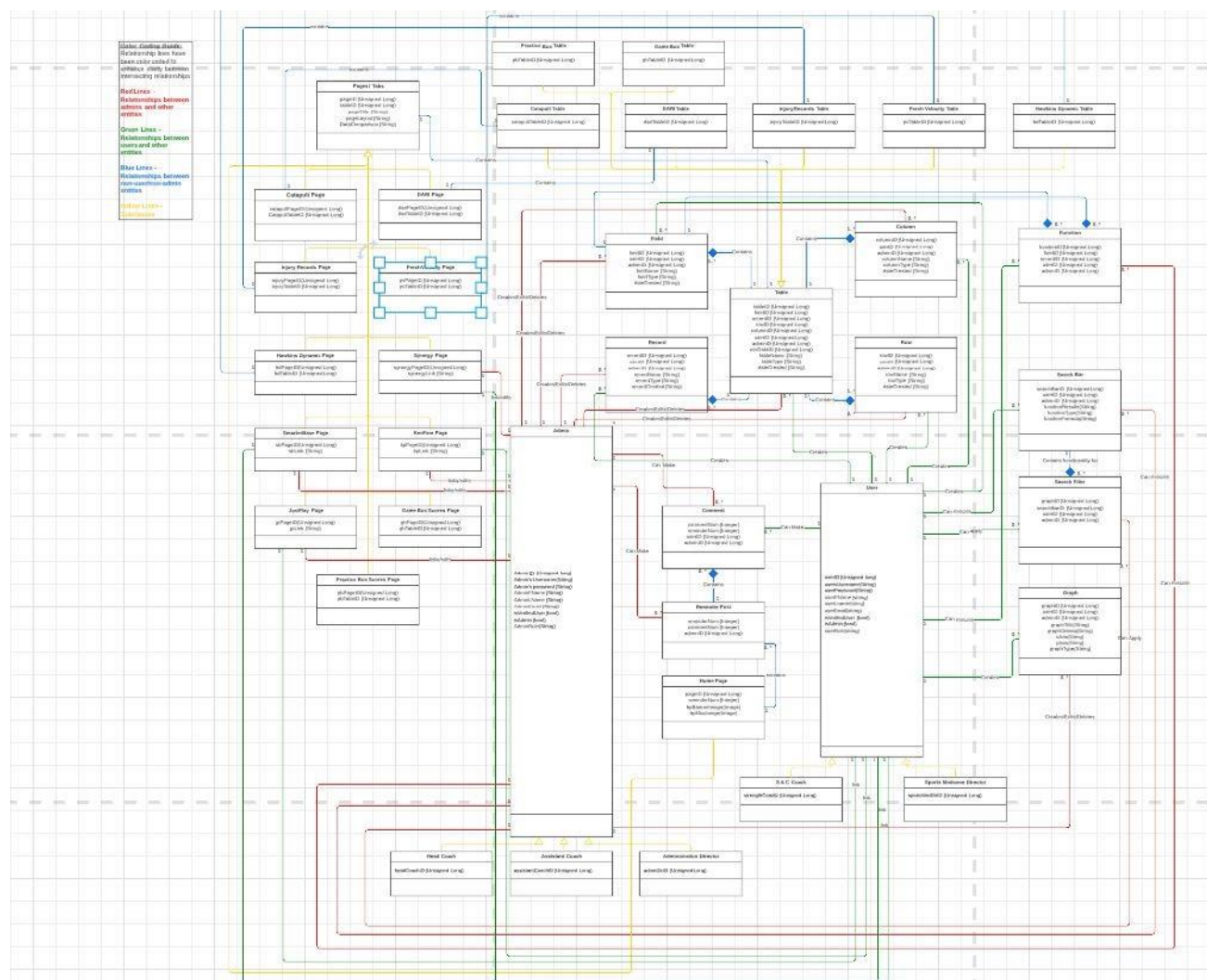
<https://docs.google.com/spreadsheets/d/e/2PACX-1vT68DuAXSHUyLdNYKZJ5OY3VAQH9kM9oFPG9oIm-T8bVufosU9fvpzWRStdXB0cdCq47EhYe44HJSbY/pubhtml>

[illegible]

Class Diagram

Our class diagram showcases the relationships between use-case entities using verb-noun structure where verbs are methods/functions and nouns are attributes. Attributes are displayed with public and foreign key denotations as well as the access level (public, private, etc.) of each attribute. Relationships are color coded based on which entities they are associated with. This was done to reduce confusion in the intersection of relationships on the diagram. A color-coding guide is provided in the top left corner of the diagram. The administrator and user are the primary entities in this diagram and they each have their own subclasses connected to them. The administrator's duties are listed as the class methods. They can create, edit, and delete website pages, tables, reminder posts, comments, and more from the website. They are able to link data from outside resources such as Synergy and SmarterBase. The user possesses the same abilities as the admin, minus the abilities to edit or delete any kind of content. Some website users are restricted from accessing data that they do not require access to. For example, the sports medicine director does not require access to other tables and forms outside of injury records.

unsigned longs, etc. This information will be vital when the development of the project begins. It will help the development team organize and allow them to work in a more efficient manner.



As it is a bit indiscernible to read in the document, a link is provided to the diagram below:

Database Diagram on LucidChart

Database Definitions

Web Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Page ID	Unique identifier for the page	Unsigned long	4 bytes	Primary
Table ID	Unique identifier for the table associated with a page	Unsigned Long	4 bytes	Foreign
Page Title	Unique identifier for the title of the page	String	255 bytes max	No
Page Layout	Describes the layout of the page	String	255 bytes max	No
Data Comparison	Shows the results of data comparison between two or more data points	String	255 bytes max	Np

Home Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
HomeID	Unique identifier for the page	Unsigned long	4 bytes	Primary
ReminderNum	Unique identifier for the reminder	Unsigned long	4 bytes	Foreign

Reminder

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
ReminderNum	Unique identifier for the reminder	Unsigned long	4 bytes	Primary
CommentNum	Unique identifier for the comment	Unsigned long	4 bytes	Foreign

AdminID	Unique identifier for the user	Unsigned long	4 bytes	Foreign
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Comment

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
CommentNum	Unique identifier for the comment	Unsigned long	4 bytes	Primary
ReminderNum	Unique identifier for the reminder	Unsigned long	4 bytes	Foreign
AdminID	Unique identifier for the user	Unsigned long	4 bytes	Foreign

Catapult Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Catapult Page ID	Unique identifier for the page	Unsigned long	4 bytes	Primary
Catapult Table ID	Unique identifier for the CSV table data input by user or admin	Unsigned long	4 bytes	Foreign

DARI Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Catapult Page ID	Unique identifier for the page	Unsigned long	4 bytes	Primary
Catapult Table ID	Unique identifier for the CSV table data input by user or admin	Unsigned long	4 bytes	Foreign

Injury Records Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Records Page ID	Unique identifier for the page	Unsigned long	4 bytes	Primary
Records Table ID	Unique identifier for the CSV table data input by user or admin	Unsigned long	4 bytes	Foreign

Hawkins Dynamic Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
HD Page ID	Unique identifier for the page	Unsigned long	4 bytes	Primary
HD Table ID	Unique identifier for the CSV table data input by user or admin	Unsigned long	4 bytes	Foreign

Perch Velocity Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
PV Page ID	Unique identifier for the page	Unsigned long	4 bytes	Primary
PV Table ID	Unique identifier for the CSV table data input by user or admin	Unsigned long	4 bytes	Foreign

Table

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
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Table ID	Unique identifier for the table	Unsigned Long	4 bytes	Primary
Field ID	Unique identifier for the fields contained within the table	Unsigned Long	4 bytes	Foreign
Record ID	Unique identifier for the records contained within the table	Unsigned Long	4 bytes	Foreign
Row ID	Unique identifier for the rows contained within the table	Unsigned Long	4 bytes	Foreign
Column ID	Unique identifier for the columns contained within the table	Unsigned Long	4 bytes	Foreign
CSV Data ID	Unique identifier for the CSV table data input by user or admin	Unsigned Long	4 bytes	No
Table Name	Unique identifier for the name of the table	String	255 bytes max	No
Table Type	Unique identifier that shows which subtype the table is	String	255 bytes max	No
Date Created	Unique identifier for the date the table was created	String	255 bytes max	No

Catapult Table

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Catapult Table ID	Unique identifier for the table	Unsigned long	4 bytes	Primary

DARI Table

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
DARI Table ID	Unique identifier for the table	Unsigned long	4 bytes	Primary

Injury Records Table

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Injury Table ID	Unique identifier for the table	Unsigned long	4 bytes	Primary

Perch Velocity Records Table

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
PV Table ID	Unique identifier for the table	Unsigned long	4 bytes	Primary

Hawkins Dynamic Table

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
HD Table ID	Unique identifier for the table	Unsigned long	4 bytes	Primary

Practice Box Scores Table

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
PB Table ID	Unique identifier for the table	Unsigned long	4 bytes	Primary

Game Box Scores Table

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
GB Table ID	Unique identifier for the table	Unsigned long	4 bytes	Primary

Field

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Field ID	Unique identifier for the fields contained within a table	Unsigned Long	4 bytes	Primary
Table ID	Unique identifier for the table the field(s) is contained within	Unsigned Long	4 bytes	Foreign
User ID	Unique identifier for the use who creates the field	Unsigned Long	4 bytes	Foreign
Admin ID	Unique identifier for the admin who creates, edits, or deletes the field	Unsigned Long	4 bytes	Foreign

Field Name	Unique identifier for the name of the field	Unsigned Long	4 bytes	No
Field Type	Unique identifier for the type(s) of data contained within a field(s)	String	255 bytes max	No
Date Created	Unique identifier for the date the field was created	String	255 bytes max	No

Record

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Record ID	Unique identifier for the records contained within a table	Unsigned Long	4 bytes	Primary
Table ID	Unique identifier for the table the record(s) is contained within	Unsigned Long	4 bytes	Foreign
User ID	Unique identifier for the use who creates the record	Unsigned Long	4 bytes	Foreign
Admin ID	Unique identifier for the admin who creates, edits, or deletes the record	Unsigned Long	4 bytes	Foreign
Record Name	Unique identifier for the name of the record	Unsigned Long	4 bytes	No

Record Type	Unique identifier for the type(s) of data contained within a record(s)	String	255 bytes max	No
Date Created	Unique identifier for the date the record was created	String	255 bytes max	No

Row

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Row ID	Unique identifier for the rows contained within a table	Unsigned Long	4 bytes	Primary
Table ID	Unique identifier for the table the row(s) are contained within	Unsigned Long	4 bytes	Foreign
User ID	Unique identifier for the user who creates the row	Unsigned Long	4 bytes	Foreign
Admin ID	Unique identifier for the admin who creates, edits, or deletes the row	Unsigned Long	4 bytes	Foreign
Row Name	Unique identifier for the name of the row	Unsigned Long	4 bytes	No
Row Type	Unique identifier for the type(s) of data contained within a row(s)	String	255 bytes max	No

Date Created	Unique identifier for the date the row was created	String	255 bytes max	No
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Column

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Column ID	Unique identifier for the columns contained within a table	Unsigned Long	4 bytes	Primary
Table ID	Unique identifier for the table the column(s) are contained within	Unsigned Long	4 bytes	Foreign
User ID	Unique identifier for the use who creates the column	Unsigned Long	4 bytes	Foreign
Admin ID	Unique identifier for the admin who creates, edits, or deletes the column	Unsigned Long	4 bytes	Foreign
Column Name	Unique identifier for the name of the column	Unsigned Long	4 bytes	No
Column Type	Unique identifier for the type(s) of data contained within a column(s)	String	255 bytes max	No
Date Created	Unique identifier for the date the column was created	String	255 bytes max	No

Administrator

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Admin ID	Unique identifier for the employee	Unsigned long	4 bytes	Primary
Username	Admin's username	String	255 bytes max	No
Password	Admin's password	String	255 bytes max	No
FName	Admin's first name	String	255 bytes max	No
LName	Admin's last name	String	255 bytes max	No
Admin Email	Admin's email address	String	255 bytes max	No
isVerifiedUser	Checks login credentials	Bool	1 byte	No
isAdmin	Checks to see if a user is an admin	Bool	1 byte	No
Admin Role	What role does the admin have	String	255 bytes max	No

Head Coach Admin

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Head Coach ID	Unique identifier for the head coach	Unsigned long	4 bytes	Primary

Assistant Coach Admin

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
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Assistant Coach ID	Unique identifier for the assistant coach	Unsigned long	4 bytes	Primary
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Administration Director Admin

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
AdminDir ID	Unique identifier for the administration director	Unsigned long	4 bytes	Primary

User

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
User ID	Unique identifier for the user	Unsigned long	4 bytes	Primary
Username	User's username	String	255 bytes max	No
Password	User's password	String	255 bytes max	No
FName	User's first name	String	255 bytes max	No
LName	User's last name	String	255 bytes max	No
Admin Email	User's email address	String	255 bytes max	No
isVerifiedUser	Checks login credentials	Bool	1 byte	No
isAdmin	Checks to see if a user is an admin	Bool	1 byte	No

User Role	What role does the user have	String	255 bytes max	No
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Sport's Medicine User

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
SportsMedDir ID	Unique identifier for the sport's medicine director user	Unsigned long	4 bytes	Primary

Strength & Conditioning Coach User

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
strengthCond ID	Unique identifier for the S&C coach user	Unsigned long	4 bytes	Primary

Perch Velocity Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
PV Page ID	Unique identifier for the perch velocity page	Unsigned long	4 bytes	Primary
PV Table ID	Unique identifier for link associated with the PV data	Unsigned long	4 bytes	Foreign

Synergy Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Synergy Page ID	Unique identifier for the Synergy page	Unsigned long	4 bytes	Primary
Synergy Table ID	Unique identifier for link associated with the Synergy data	Unsigned long	4 bytes	Foreign

SmarterBase Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
SB Page ID	Unique identifier for the SB page	Unsigned long	4 bytes	Primary
SB Table ID	Unique identifier for link associated with the SB data	Unsigned long	4 bytes	Foreign

KenPom Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
KP Page ID	Unique identifier for the KenPom page	Unsigned long	4 bytes	Primary
KP Table ID	Unique identifier for link associated with the KenPom data	Unsigned long	4 bytes	Foreign

JustPlay Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
JP Page ID	Unique identifier for the JustPlay page	Unsigned long	4 bytes	Primary
JP Table ID	Unique identifier for link associated with the JP data	Unsigned long	4 bytes	Foreign

Practice Box Scores Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
PB Page ID	Unique identifier for the page	Unsigned long	4 bytes	Primary

PB Table ID	Unique identifier for the CSV table data input by user or admin	Unsigned long	4 bytes	Foreign
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Game Box Scores Page

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
GB Page ID	Unique identifier for the page	Unsigned long	4 bytes	Primary
GB Table ID	Unique identifier for the CSV table data input by user or admin	Unsigned long	4 bytes	Foreign

Functions

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Function ID	Unique identifier for the page	Unsigned long	4 bytes	Primary
Field ID	Unique identifier for the CSV table data input by user or admin	Unsigned long	4 bytes	Foreign
Record ID	Identifier for the specific record that is being used	Unsigned long	4 bytes	Foreign
User ID	Unique identifier for the user	Unsigned long	4 bytes	Foreign
Admin ID	Unique identifier for the admin	Unsigned long	4 bytes	Foreign

Search Bar

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Search Bar ID	Unique identifier for the search bar being used	Unsigned long	4 bytes	Primary
User ID	Unique identifier for the user	Unsigned long	4 bytes	Foreign
Admin ID	Unique identifier for the admin	Unsigned long	4 bytes	Foreign
Function Results	The return of a function	String	255 bytes max	No
Function Type	A certain search using a function	String	255 bytes max	No
Function Formula	A series of traits in a function	String	255 bytes max	No

Search Filter

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Graph ID	Unique identifier for a graph	Unsigned long	4 bytes	Primary
Search Bar ID	Unique identifier for the search bar	Unsigned long	4 bytes	Foreign

User ID	Unique identifier for the user	Unsigned long	4 bytes	Foreign
Admin ID	Unique identifier for the admin	Unsigned long	4 bytes	Foreign

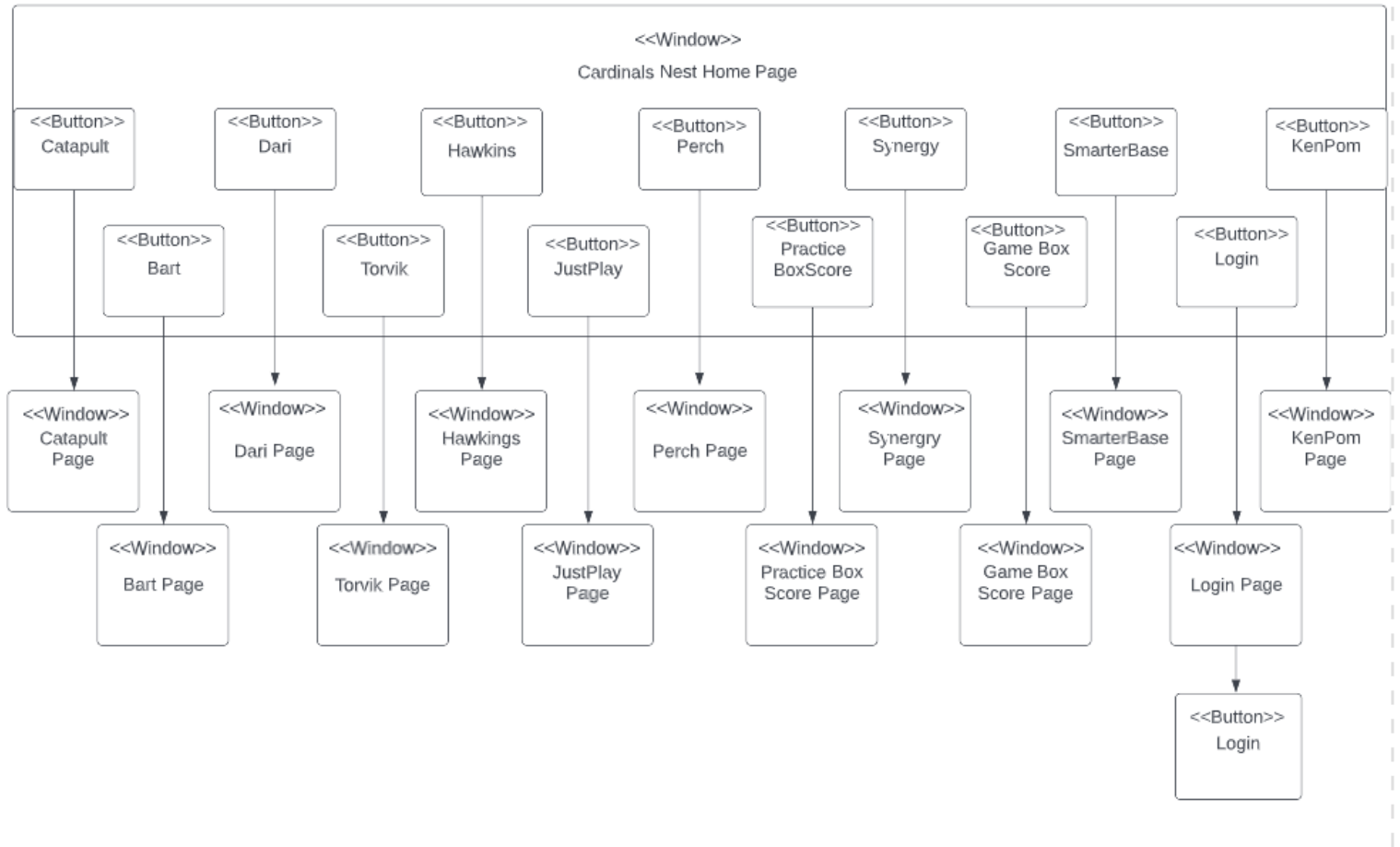
Graph

Attribute	Attribute Definition	Attribute Type	Attribute Size	Key
Graph ID	Unique identifier for the graph	Unsigned long	4 bytes	Primary
User ID	Unique identifier for the user	Unsigned long	4 bytes	Foreign
Admin ID	Unique identifier for the admin	Unsigned long	4 bytes	Foreign
Graph Title	Unique title for a graph	String	255 bytes max	No
Graph Criteria	The attributes included in a graph	String	255 bytes max	No
X Axis	The name of the x axis in a graph	String	255 bytes max	No
Y Axis	The name of the y axis in a graph	String	255 bytes max	No

Graph Type	The type of graph that is being used	String	255 bytes max	No
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User Interface Navigation Diagram and Screen Layouts

The user interface navigation diagram is a visual representation that shows the flow a user will go through to find the information they are looking for as well as how the different interact when they are clicked.

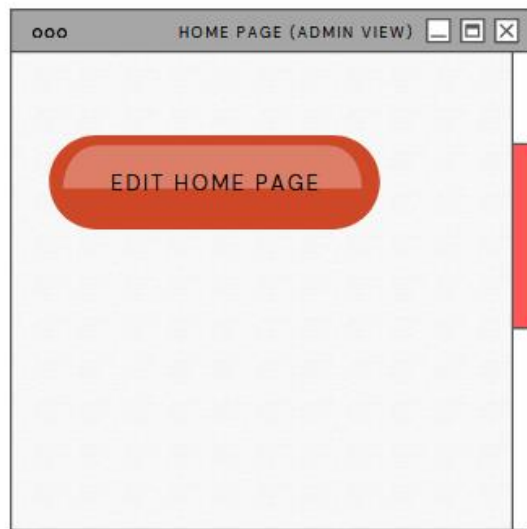


Data Capture Forms

These are mockups of the input forms for the screen layout of the new UofL Men's Basketball Website. Each of the use cases and prototypes presented for the input screen layouts are to portray what the user or administrator should see when they navigate through the website.

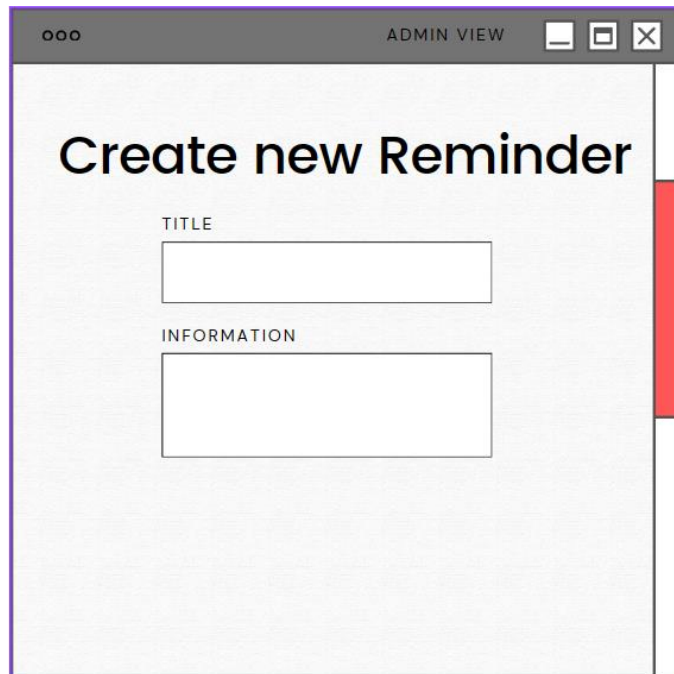
Edit the Home Page Information

This screen will appear through the administrator's login whenever they access the website to work on the home page. The home page is an important part of the website as it is where users can read reminders and respond with comments, as well as navigate the website through the tabs listed on the navigation bar.



Create, Edit, and Delete Reminders

Reminders are an addition to the website that allows admins to display important information to all users when they open the website's home page. The administrator will be capable of creating the news feed when new information must be shared and have the ability to edit the reminders after the reminders have been created, as well as delete reminders if necessary. The prototype shows the way the reminder input screen layout will be shown for an administrator.

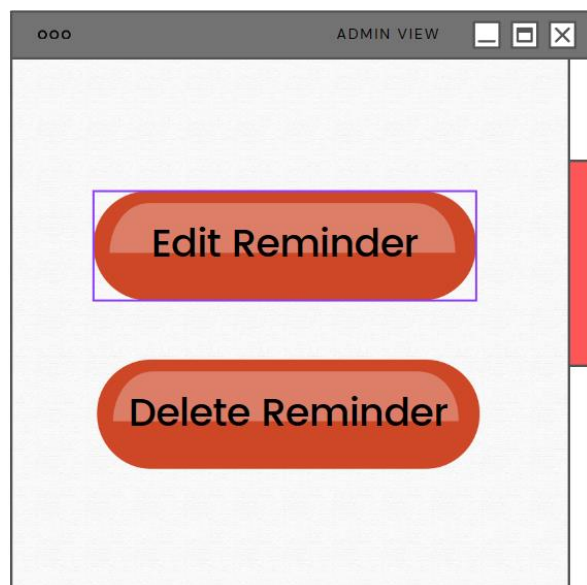


Admin View

Create new Reminder

TITLE

INFORMATION



Admin View

Edit Reminder

Delete Reminder

Create, Edit, and Delete Comment

Comments are an addition to the website that allows any user to comment on a reminder to communicate with admins regarding important information listed in the reminders. All users will be capable of creating comments under reminders, as well as editing their own comments and deleting them entirely. The prototype shows the way the comment input screen will be shown for all users.

ooo USER VIEW

Create new Comment

COMMENT

Edit the Catapult, DARI, Injury Records, Perch Velocity, and Hawkins Dynamic Pages

This screen will appear through the administrator's login whenever they access the website to work on any of the pages (to input or delete CSV data). The Catapult page is an essential part of the website as it is where users with access can view and compare player data recorded from wearable devices. DARI is useful for motion capture data. The injury records page shows injury data for the players. Perch Velocity measures velocity-based training statistics. Finally, Hawkins Dynamic measures force plate training results for strength and conditioning.

ooo USER VIEW

Input Data

FILE

Select

Submit

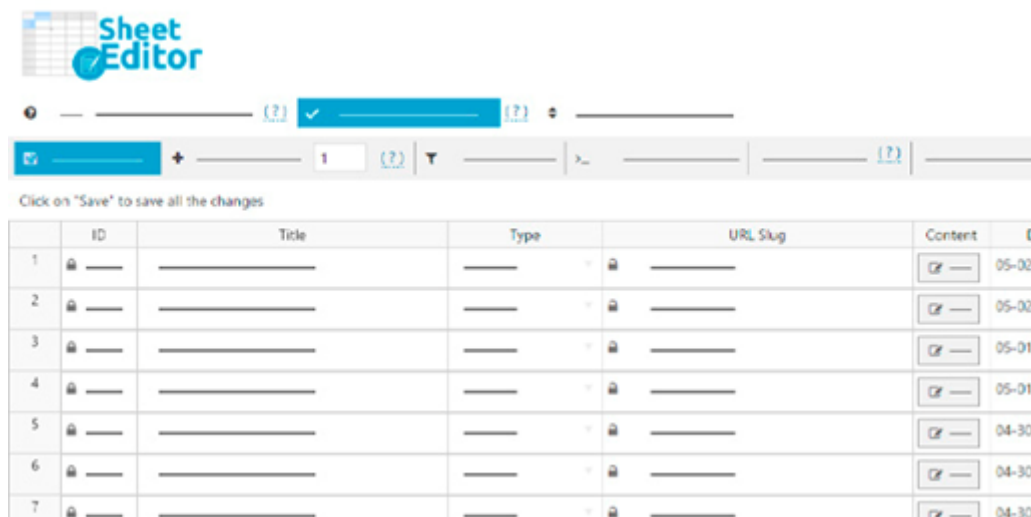
Create, Edit, and Delete the Catapult, DARI, Injury Records, Perch Velocity, and Hawkins Dynamic Tables

This screen shows how users and admins can create, edit, or delete a table. Each table will be imported from the external source related to each table as CSV data. Only admins have the power to edit or delete tables or table data. Users can only create tables. Table creation could be done manually if desired, but this is not likely the case. The website view is what the users will see initially. Clicking the link will take you to the database plugin view where you will then manually enter or change the desired values.

Website View:



Database Plugin View:

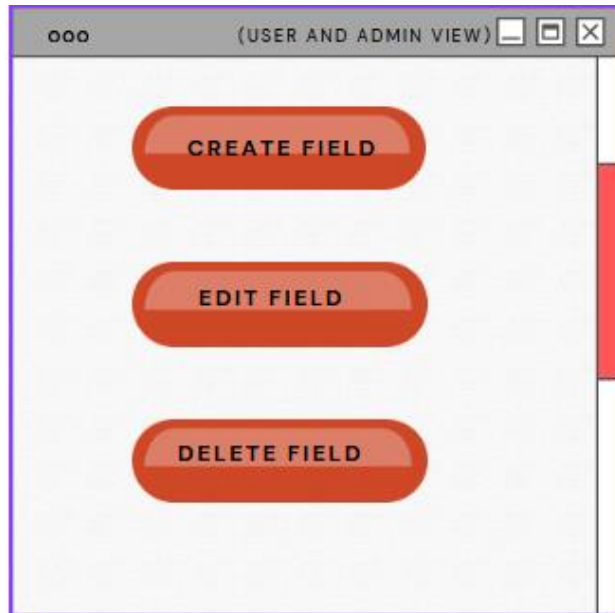


Create, Edit, Delete Fields: Catapult, DARI, Injury Records, Perch Velocity, Hawkins Dynamics, Practice Box Scores, Game Box Scores

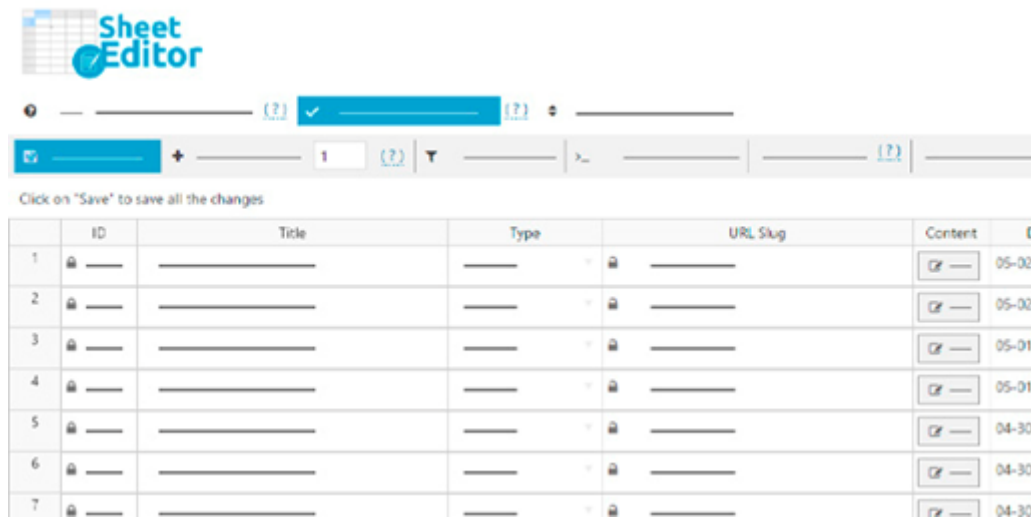
The Create, Edit, and Delete functions are included on every page that contains a table. This would be the case if a player data field needed to be updated. Only the administrator has the ability to

create, update, and delete the data. This layout displays how the administrator will see it when they visit the page. Clicking the link will take you to the database plugin view where you will then manually enter or change the desired values.

Website View:



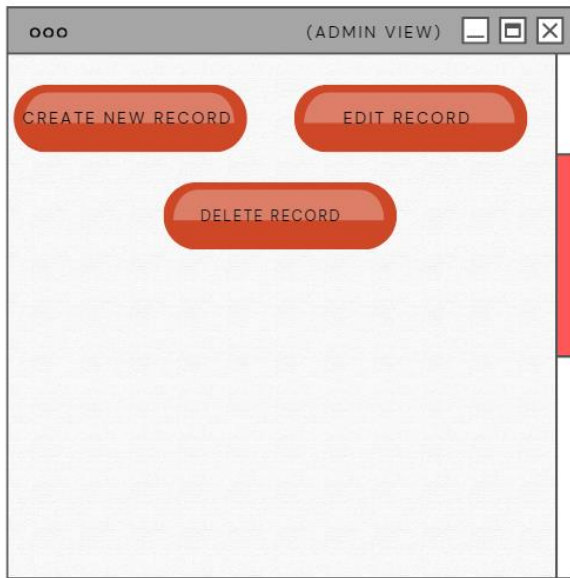
Database Plugin View:



Create, Edit, Delete Records: Catapult, DARI, Injury Records, Perch Velocity, Hawkins Dynamics, Practice Box Scores, Game Box Scores

The Create, Edit, and Delete functions are included on every page that contains a table. This would be the case if a player data record needed to be updated. Only the administrator has the ability to create, update, and delete the data. This layout displays how the administrator will see it when they visit the page. Clicking the link will take you to the database plugin view where you will then manually enter or change the desired values.

Website View:



Database Plugin View:

Sheet Editor

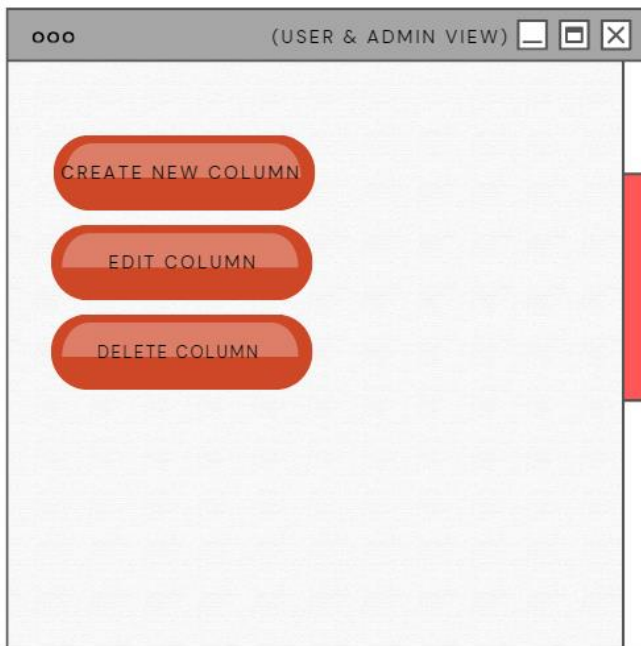
Click on "Save" to save all the changes

	ID	Title	Type	URL Slug	Content	
1						05-02
2						05-02
3						05-01
4						05-01
5						04-30
6						04-30
7						04-30

Create, Edit, Delete Columns: Catapult, DARI, Injury Records, Perch Velocity, Hawkins Dynamics, Practice Box Scores, Game Box Scores

This would occur when it is necessary to update a column that has inaccurate player information. Both the user and the admin could create, modify, and delete the data. This layout demonstrates how it appears to a user and an administrator. Clicking the link will take you to the database plugin view where you will then manually enter or change the desired values.

Website View:



Database Plugin View:

Sheet Editor

Click on "Save" to save all the changes

	ID	Title	Type	URL Slug	Content	
1		<input type="text"/>	<input type="text"/>		<input type="text"/>	05-02
2		<input type="text"/>	<input type="text"/>		<input type="text"/>	05-02
3		<input type="text"/>	<input type="text"/>		<input type="text"/>	05-01
4		<input type="text"/>	<input type="text"/>		<input type="text"/>	05-01
5		<input type="text"/>	<input type="text"/>		<input type="text"/>	04-30
6		<input type="text"/>	<input type="text"/>		<input type="text"/>	04-30
7		<input type="text"/>	<input type="text"/>		<input type="text"/>	04-30

Create, Edit, Delete Rows: Catapult, DARI, Injury Records, Perch Velocity, Hawkins Dynamics, Practice Box Scores, Game Box Scores

All pages that contain tables have corresponding Create, Edit, and Delete buttons. This would occur when it was necessary to update a row that included outdated data. The user and the admin can create, change, and delete the data. The user and admin interfaces appear in this layout. Clicking the link will take you to the database plugin view where you will then manually enter or change the desired values.

Website view:



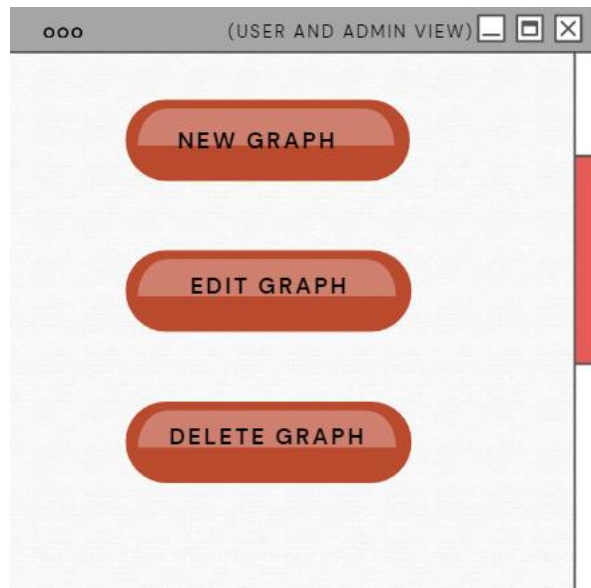
Database Plugin View:

Click on "Save" to save all the changes

	ID	Title	Type	URL Slug	Content	Date
1		<input type="text"/>	<input type="text"/>		<input type="text"/>	05-02
2		<input type="text"/>	<input type="text"/>		<input type="text"/>	05-02
3		<input type="text"/>	<input type="text"/>		<input type="text"/>	05-01
4		<input type="text"/>	<input type="text"/>		<input type="text"/>	05-01
5		<input type="text"/>	<input type="text"/>		<input type="text"/>	04-30
6		<input type="text"/>	<input type="text"/>		<input type="text"/>	04-30
7		<input type="text"/>	<input type="text"/>		<input type="text"/>	04-30

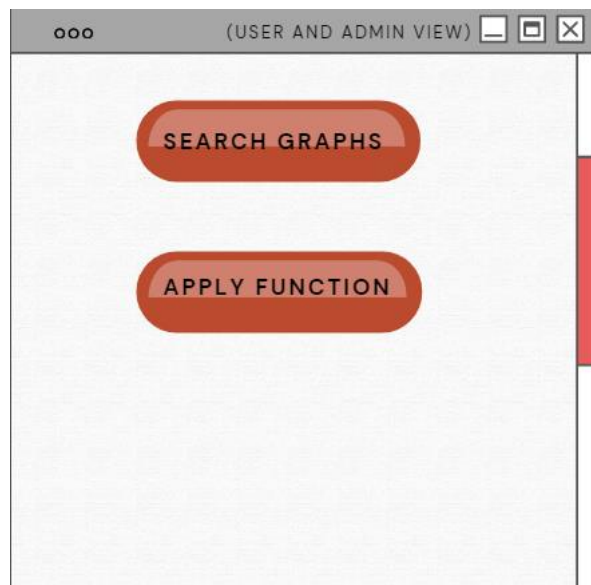
Create Graph, Change Graph and Delete Graph

Being able to have control over the graphs such as creating, editing, and deleting graphs is important for the staff to be able to have as much data and statistics as they can. This also creates a big opportunity to organize the data as the staff sees fit.



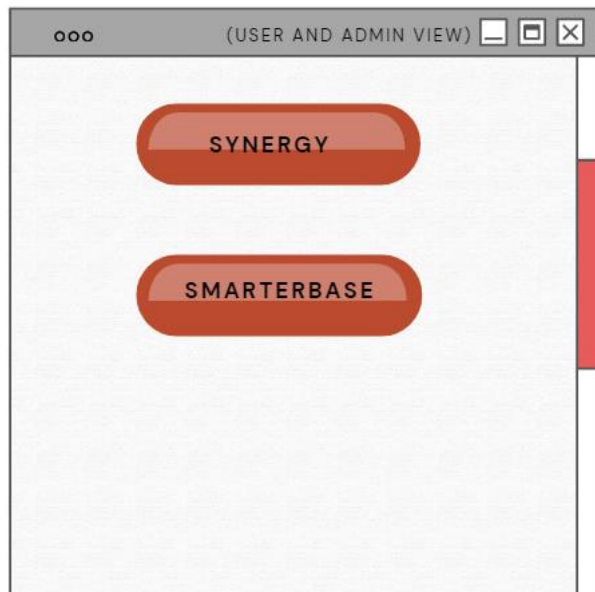
Search Tool and Function Tool

The search tool will be able to allow the staff to search for specific charts or graphs, assisting in making the process as efficient as possible. The function tool allows the staff to narrow down the information they will receive when searching through the graphs and tables.



Link Synergy and SmarterBase

Synergy and SmarterBase are both important tools to gather information but cannot be fully integrated into the website. The full website allows for the maximum amount of information; therefore, this page will have the link to make it easily accessible.



Input and Edit KenPom Data

KenPom is a great resource when it comes to gathering data, but offers little help to the website if the data cannot be transferred in. This allows for the KenPom data to be inserted into the website while still being able to edit it if needed.

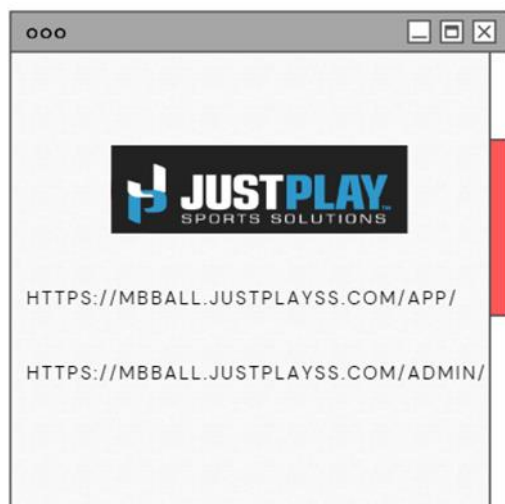
Input, Edit, Delete the Practice Box Score and Game Box Score Page

The practice and game box score pages are important for the players and the team. It shows to the basketball players their weakness, their strength and the areas that need to be improved. The data from those tabs can be input, edited, and deleted by the administrator. This layout shows what it looks like for the administrator when they enter.



JustPlay Page

The users and the admin will be able to access the website by this link. It is important for them to have a user interface friendly and efficient. The first link will directly bring the players to their access portal and the second link will bring the coach and administrator directly to theirs. Just Play is an important role in the life of a college athlete and it helps them get the exposure that they need. The prototype shows the way the just play links will be show for all users.



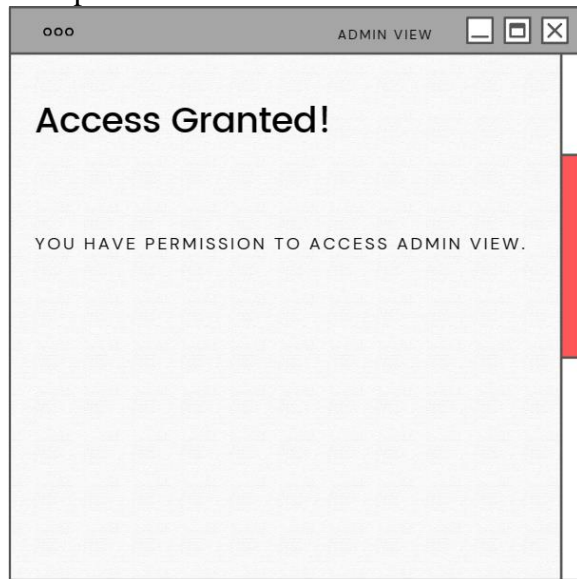
Data Presentation

These layouts are mockups of the system's data presentation, or how the system responds to user input. This includes accepting or rejecting a user from accessing Admin View.

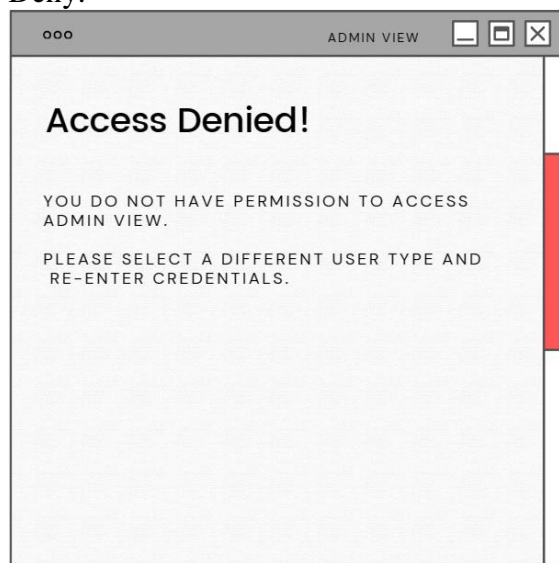
Admin View Accept/Deny Submission:

This shows a mockup of how the system will respond to a user trying to login as an admin. Based on what credentials the user enters, the system will accept or reject the user from logging in as an admin.

Accept:

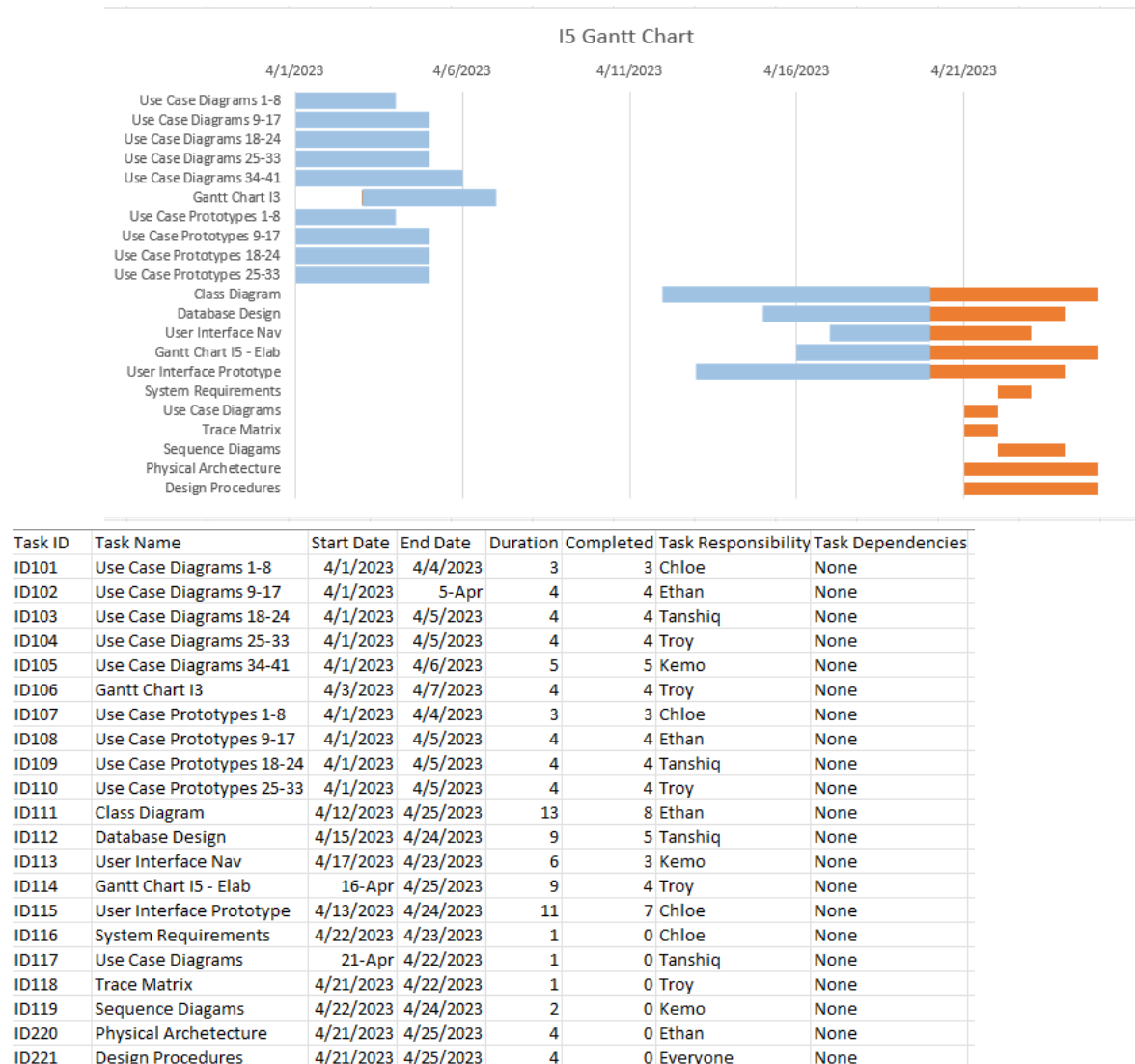


Deny:

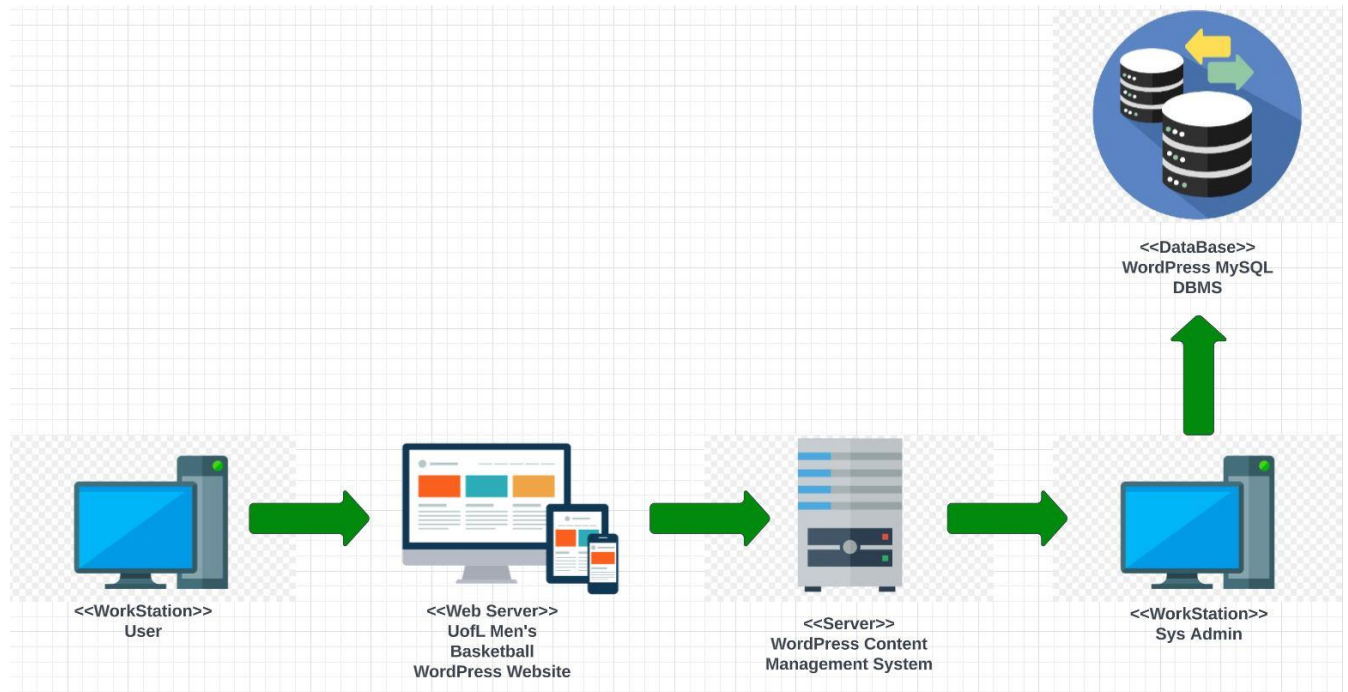


Gantt Chart

A Gantt Chart is a tool that is used to help manage the overall workflow of a project. It visualizes which tasks have been started, when they were started, who is working on it or who is assigned to it, what still needs to be done and who still has stuff to do within the project, along with the duration of days each task should take. If used properly a Gantt Chart can become the ultimate tool for project management and a very useful guide to how a project should develop. Our group, TECKS, have used a Gantt Chart to help guide us through the tasks and responsibilities of each member associated with iteration 3, as well as iteration 5 and the elaboration specification.



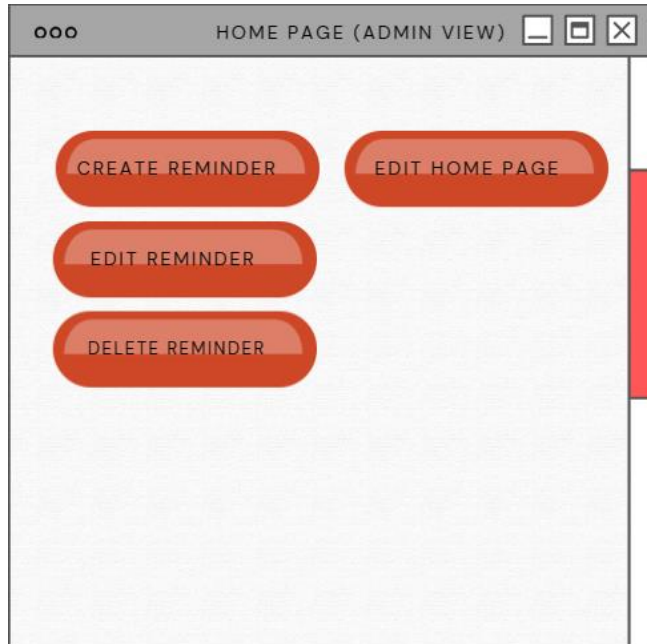
Physical Architecture Design



Design Procedures for Security Concerns and Non-Functional Requirements

Elaboration Phase Prototypes

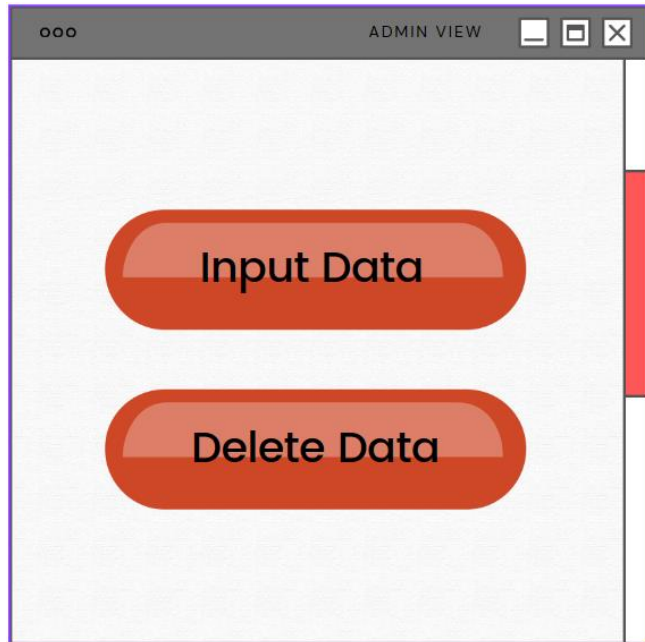
Use Case 1, 2, 3, and 4: Edit Home Page, Create Reminder, Edit Reminder, and Delete Reminder



Use Case 5, 6, and 7: Create Comment, Edit Comment, and Delete Comment



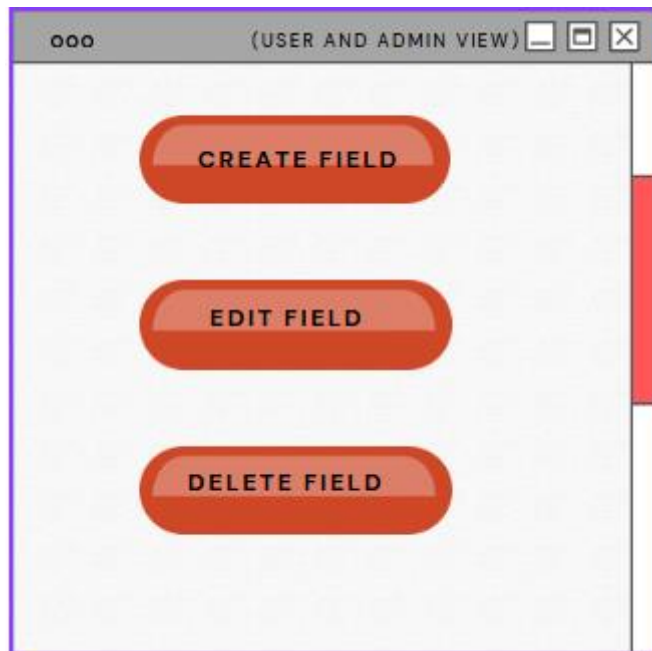
Use Case 8, 9, and 10: Input CSV Data, Edit CSV Data, Compare CSV Data



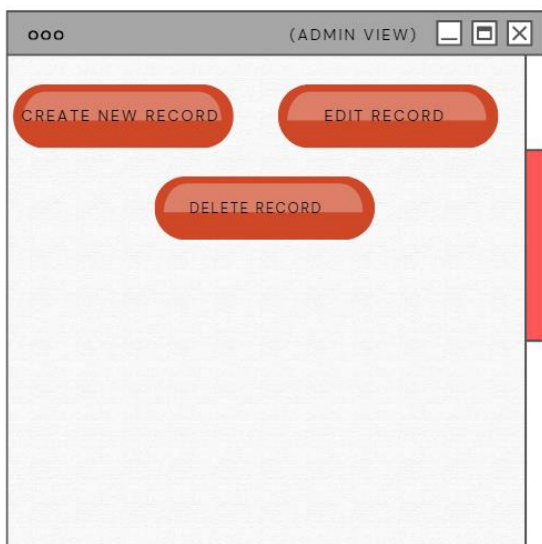
Use Case 11, 12, and 13: Create New Table, Edit Table, and Delete Table



Use Case 14, 15, and 16: Create New Field, Edit Field, and Delete Field



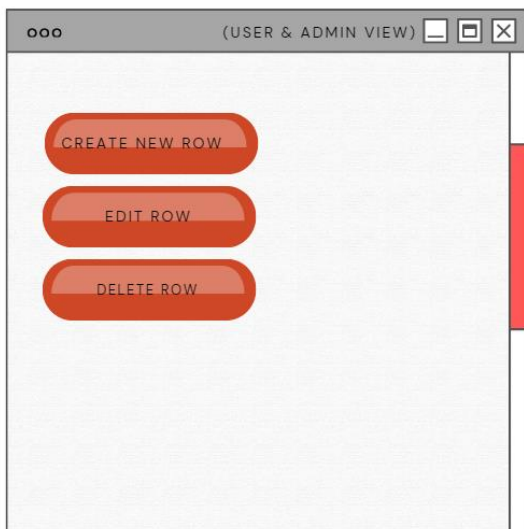
Use Case 16, 17, and 18: Create New Record, Edit Record, and Delete Record



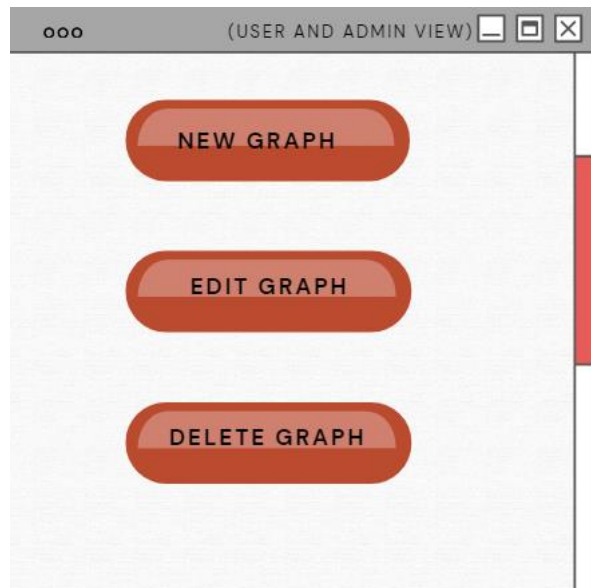
Use Case 19, 20, and 21: Create New Column, Edit Column, and Delete Column



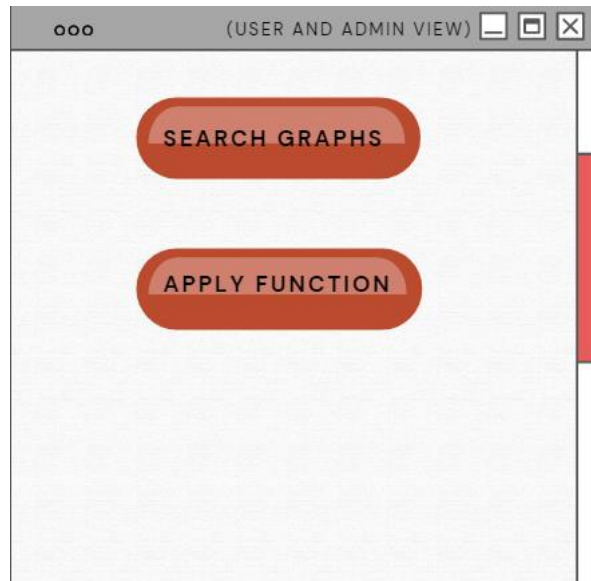
Use Case 22, 23, and 24: Create New Row, Edit Row, and Delete Row



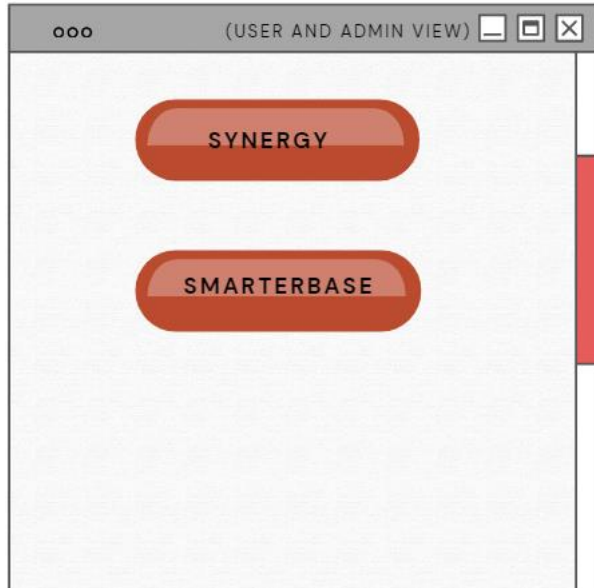
Use Case 25, 26, and 27: Create Graph, Change Graph and Delete Graph



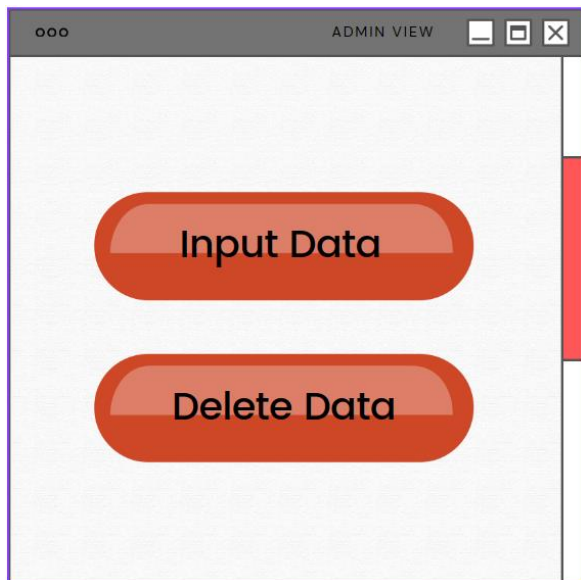
Use Case 28 and 29: Search Tool and Function Tool



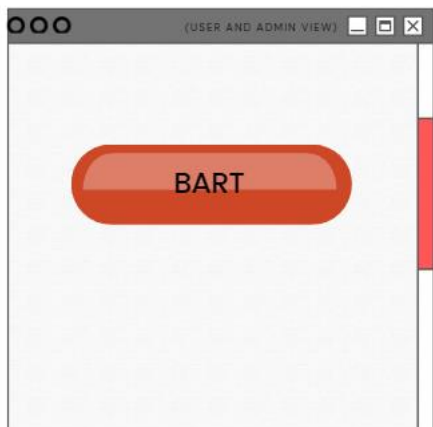
Use Case 30 and 31: Link Synergy and SmarterBase

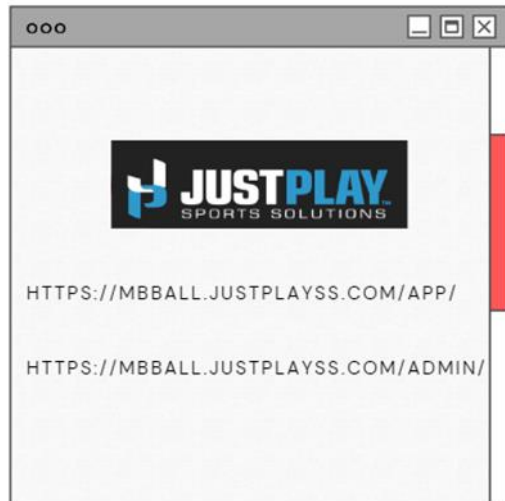


Use Case 32 and 33: Link and Edit KenPom Data

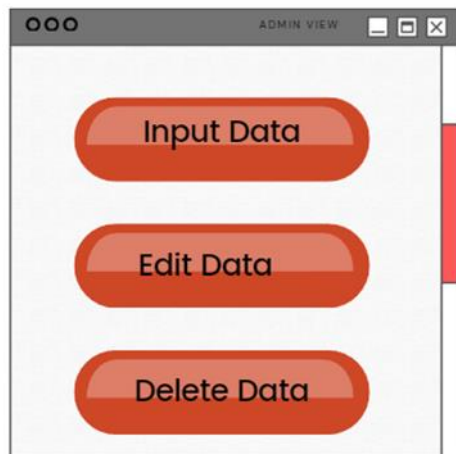


Use Case 34 - 37: Link and Edit Bart and Just Play





Use Case 38 and 39: Input and Edit Practice Box Score Data



Use Case 40 and 41: Input and Edit Game Box Score Data

