Elaboration Phase Specification

CIS 320 Team: Cardinal Infrastructure

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Tables of Contents:

| System Requirements | 3 |
|--|-----|
| Functional Requirements: | 3 |
| Non-Functional Requirements: | 5 |
| Use Case Diagrams | 7 |
| Trace Matrix | 26 |
| Use Case Descriptions | 27 |
| Sequence Diagrams | 65 |
| Class Diagram | 82 |
| Database Design | 84 |
| Database Definitions | 86 |
| User Interface Navigation Diagram and Screen Layouts | 95 |
| User Interface Descriptions | 96 |
| Gannt Chart | 104 |
| Physical Architecture Design | 106 |
| Design Procedures for Security | 108 |
| Prototynes | 110 |

System Requirements

Functional Requirements:

Home Page Requirements:

- ID: SR01 The homepage will only be accessible via log-in
- ID: SR02 The homepage will prominently display the team logo and colors
- ID: SR03 The homepage will display upcoming games, feature contents
- ID: SR04 The homepage will display recent game results and statistics
- ID: SR05 The homepage will display the current team rankings and standings
- ID: SR06 The homepage will provide quick access to the latest team updates and stats
- ID: SR07 The homepage will allow users to search for games, players, or other information
- ID: SR08 The homepage will be able to be edited to display different/more information

Roster page Requirements:

- ID: SR09 The roster page will display the current roster of the basketball team
- ID: SR10 The roster page will allow users to add current roster
- ID: SR11 The roster page will allow users to edit current roster
- ID: SR12 The roster page will allow users to delete current roster
- ID: SR13 The roster page will allow users to filter the roster by name
- ID: SR14 The roster page will allow users to filter the roster by position
- ID: SR15 The roster page will display player biographical information
- ID: SR16 The roster page will allow users search for specific players

Schedule page Requirements:

- ID: SR17 The schedule page will be allowed to be created.
- ID: SR18 The schedule page will be allowed to be edited.
- ID: SR19 The schedule page will be allowed to be deleted.
- ID: SR20 The Outlook calendar will be embedded.
- ID: SR21 The embedded Outlook calendar will be allowed to be edited.
- ID: SR22 The embedded Outlook calendar will be allowed to be deleted.

Statistics page Requirements:

- ID: SR23 The statistics page will display team and player statistics
- ID: SR24 The statistics page will allow staff members to view data
- ID: SR25 The statistics page will allow staff members to enter data
- ID: SR26 The statistics page will allow administrators to edit data
- ID: SR27 The statistics page will allow users to filter the statistics by game
- ID: SR28 The statistics page will display graphs and charts to visualize statistics
- ID: SR29 The statistics page will allow users to download statistics as a PDF

Contact page Requirements:

- ID: SR30 The contact page will display coaches and staffs contact information
- ID: SR31 The contact page will allow coaches and staffs contact information can be edited
- ID: SR32 The contact page will allow users to submit general inquiry form
- ID: SR33 The contact page will provide directions to basketball facility
- ID: SR34 The contact page will display FAQs
- ID: SR35 The contact page will allow administrators to edit FAQs

Game Recap page Requirements:

ID: SR36 - The game recap page will display results and highlights of recent games

ID: SR37 - The game recap page will allow users to watch videos of game highlights

Guidelines page Requirements:

ID: SR38 - The guidelines page will display how user data is collected, used, and protected

ID: SR39 - The guidelines page will describe the terms and conditions of use

ID: SR40 - The guidelines page will allow users to request to delete data

Non-Functional Requirements:

Performance Requirements:

ID: SR41 - The website will load quickly

ID: SR42 - The website will respond to users request quickly

ID: SR43 - The website will handle a large number of users without crashing

ID: SR44 - The website will optimize for any devices and internet speeds

ID: SR45 - The website will update games information in real time

Security Requirements:

ID: SR46 - The website will be protected against cyber attacks

ID: SR47 - The website will use encryption protocols

ID: SR48 - The website will adhere to medical data protection laws

ID SR49 - The website will track edits to the site/data

Accessibility Requirements:

ID: SR50 - The website will be accessible to users with disabilities(ADA Compliant)

ID: SR51 - The website will provide options to change font size

Reliability Requirements:

ID: SR52 - The website will be available to user 24/7

ID: SR53 - The website will have backups of all important documents and information

<u>Usability Requirements:</u>

ID: SR54 - The website will be easy to use

ID: SR55 - The website will provide clear instructions for using features

ID: SR56 - The website will provide confirmation for users actions

Scalability Requirements:

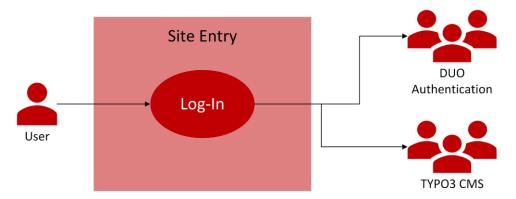
ID: SR57 - The website will be able to handle a large amount of data

ID: SR58 - The website will allow for any updates or improvements in the future

ID: SR59 - The website will be able to change size based on users demand or server capacity.

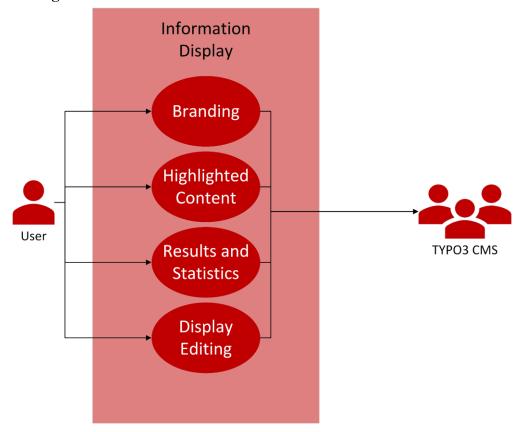
Use Case Diagrams

Use Case 1 Diagram:



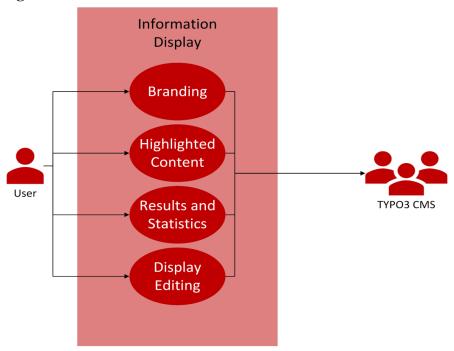
Narrative: Users will log in via dual-factor authentication to access the website.

Use Case 2 Diagram:



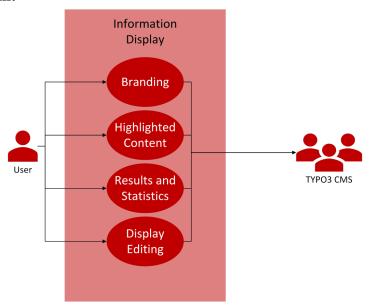
Narrative: The site will have an automatically applied theme that ensures brand compliance.

Use Case 3 Diagram:



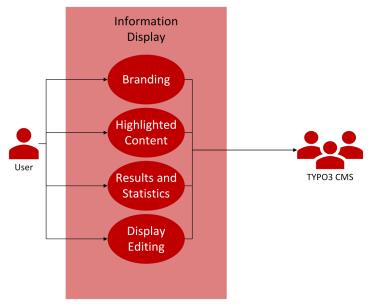
Narrative: The site will display specified highlighted content

Use Case 4 Diagram:



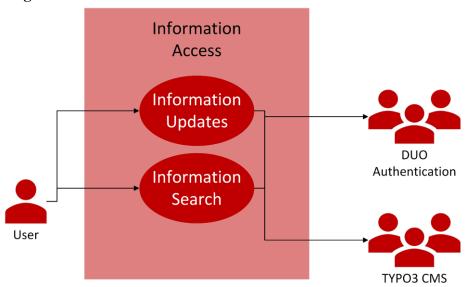
Narrative: The site will display game results/statistics

Use Case 5 Diagram:



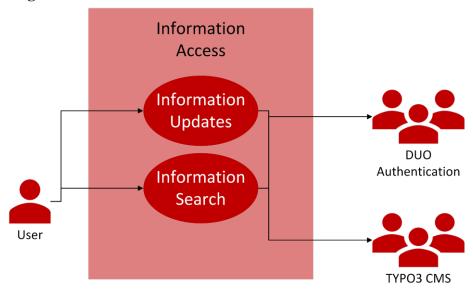
Narrative: The site will display rankings and standings

Use Case 6 Diagram:



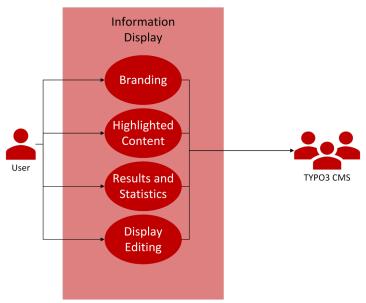
Narrative: The site will allow users to easily access the statistics portion of the site via homepage navigation and the information search portlet.

Use Case 7 Diagram:



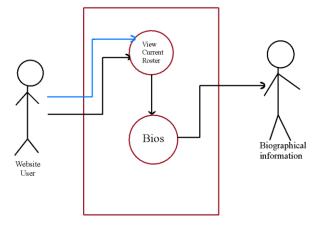
Narrative: The site will allow users to easily access the statistics portion of the site via homepage navigation and the information search portlet.

Use Case 8 Diagram:



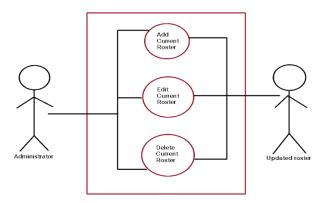
Narrative: The site will allow authorized users to edit the displayed content.

Use Case 9 Diagram:



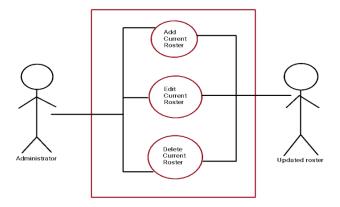
Narrative: The roster page will allow the user to see the current roster

Use Case 10 Diagram:



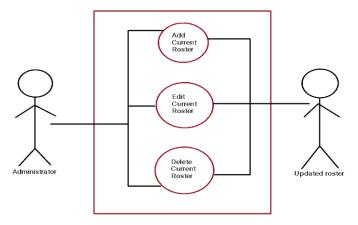
Narrative: The roster page will allow users to add current roster

Use Case 11 Diagram:



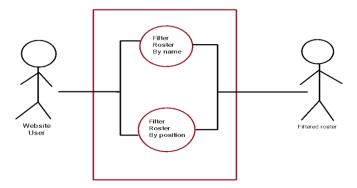
Narrative: The roster page will allow users to edit delete current roster

Use Case 12 Diagram:



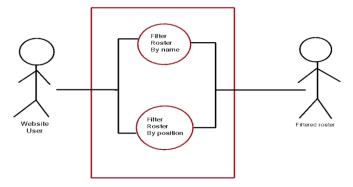
Narrative: The roster page will allow users to delete current roster

Use Case 13 Diagram:



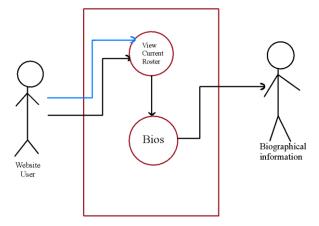
Narrative: The roster page will allow the user to filter the roster by name

Use Case 14 Diagram:



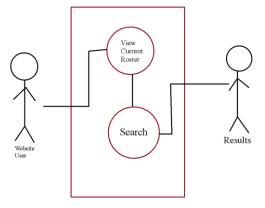
Narrative: The roster page will allow the user to filter the roster by position

Use Case 15 Diagram:



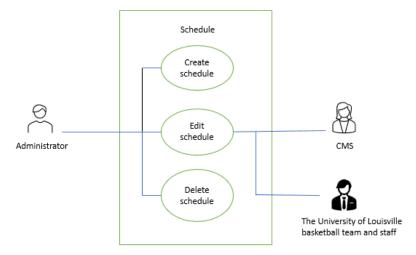
Narrative: The roster page will allow the user to see player statistics and biographical information

Use Case 16 Diagram:



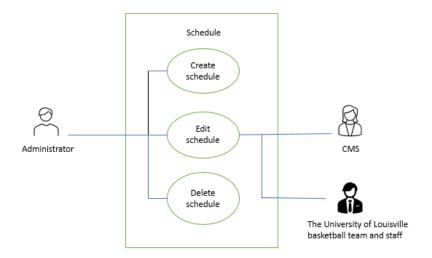
Narrative: The roster page will allow users search for specific players

Use Case 17 Diagram:



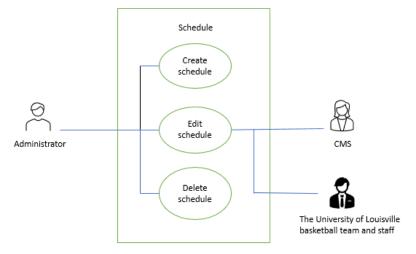
Narrative: Administrators are allowed to create schedules.

Use Case 18 Diagram:



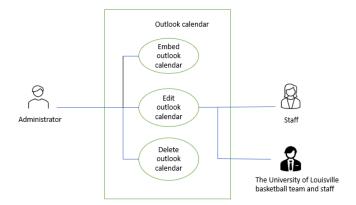
Narrative: Administrators are allowed to edit schedules.

Use Case 19 Diagram:



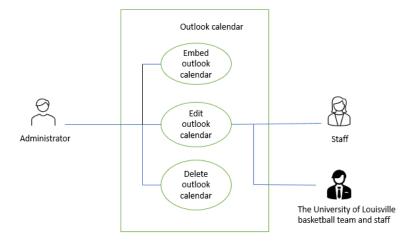
Narrative: Administrators are allowed to delete schedules.

Use Case 20 Diagram:



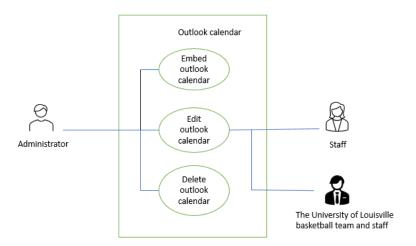
Narrative: Administrators can embed Outlook calendars.

Use Case 21 Diagram:



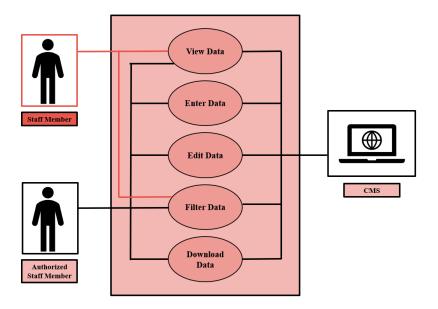
Narrative: Administrators can edit Outlook calendars.

Use Case 22 Diagram:



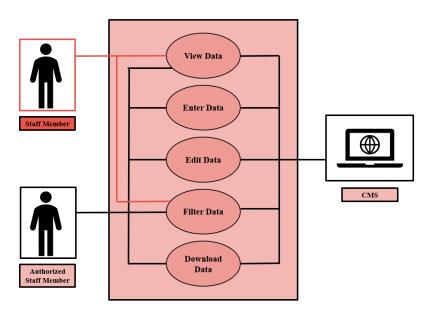
Narrative: Administrators can edit Outlook calendars.

Use Case 23 Diagram:



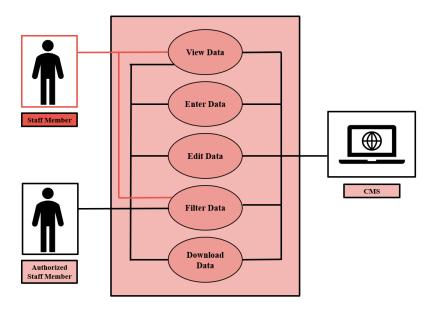
Narrative: Normal Staff Members will only be able to View and Filter Data.

Use Case 24 Diagram:



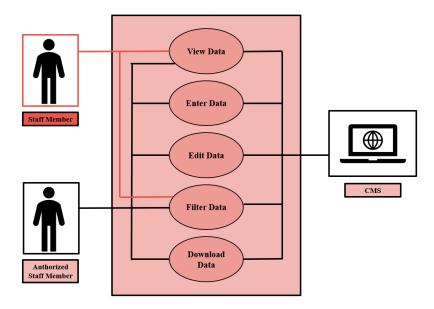
Narrative: In the statistics page, Authorized Staff Members will be allowed to perform all the tasks while normal Staff Members will only be able to View and Filter Data.

Use Case 25 Diagram:



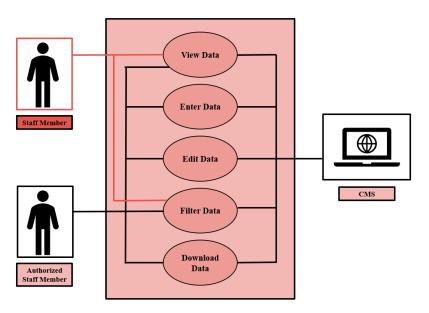
Narrative: In the statistics page, Authorized Staff Members will be allowed to perform all the tasks while normal Staff Member will only be able to View and Filter Data.

Use Case 26 Diagram:



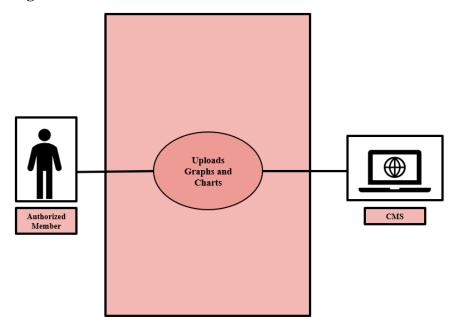
Narrative: In the statistics page, Authorized Staff Members will be allowed to perform all the tasks while normal Staff Members will only be able to View and Filter Data.

Use Case 27 Diagram:



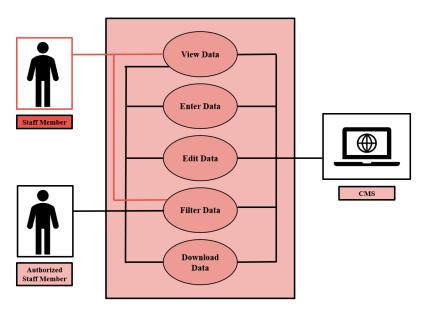
Narrative: In the statistics page, Authorized Staff Members will be allowed to perform all the tasks while normal Staff Members will only be able to View and Filter Data.

Use Case 28 Diagram:



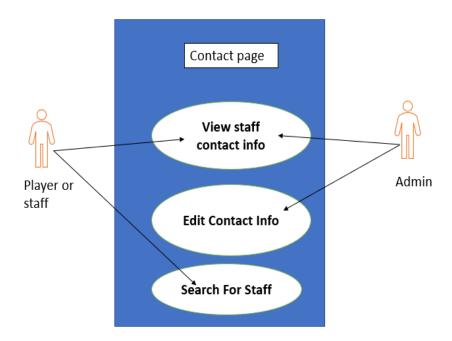
Narrative: After an Authorized Staff Members uploads graphs and charts, the statistics page will display graphs and charts to visualize statistics.

Use Case 29 Diagram:



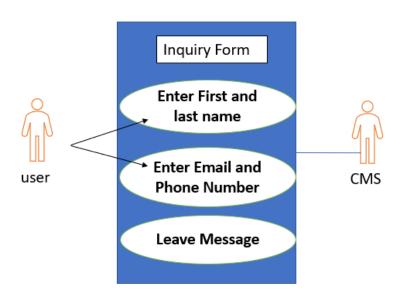
Narrative: In the statistics page, Authorized Staff Members will be allowed to perform all the tasks while normal Staff Members will only be able to View and Filter Data.

Use Case 30: View Staff contact information, 31: Edit contact information, 33: Directions to basketball facility



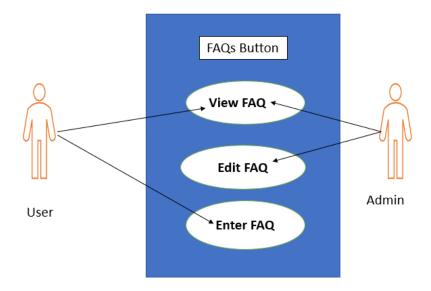
Narrative: Players and staff can view contact information and directions to the Basketball facility. Admin can edit and view staff contact information.

Use Case 32: Submit general inquiry form



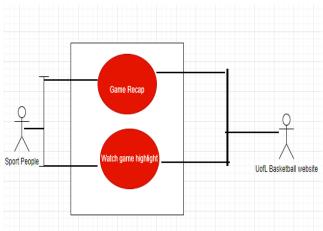
Narrative: player will submit inquiry and cms will send it to staff.

Use Case 34: Display FAQs, 35: Edit FAQs



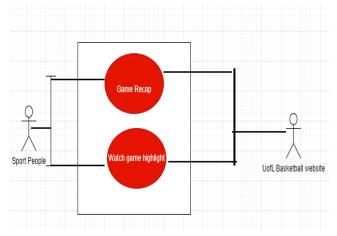
Narrative: User will view, enter faq and admin will edit faqs.

Use Case 36 Diagram:



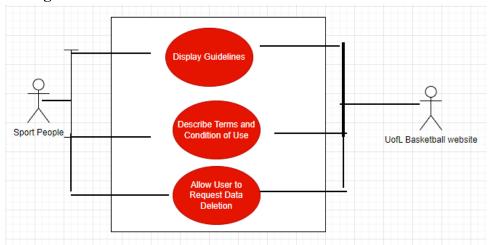
Narrative: This website is able to create game recap will display results and highlights of recent games, allow users to watch videos of game highlights

Use Case 37 Diagram:



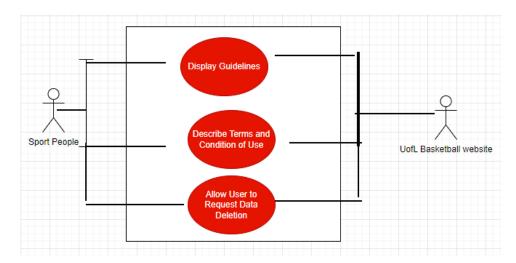
Narrative: This website is able to create game recap will display results and highlights of recent games, allow users to watch videos of game highlights

Use Case 38 Diagram:



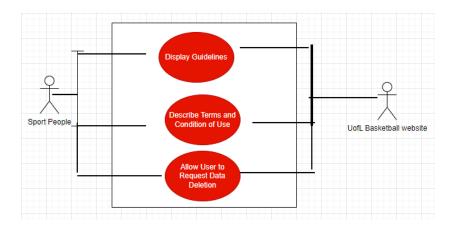
Narrative: This website has a guideline page that will display how user data is collected, used, and protected.

Use Case 39 Diagram:



Narrative: This website has guidelines page will describe the terms and conditions of use

Use Case 40 Diagram:



Narrative: This website has a guideline page that will allow users to request to be deleted.

Trace Matrix

Trace Matrix.xlsx

| Trace Matrix | Use cases | Log-in | Brand compliance | Highlighted content | Pankings and standings | Information updates | Information search | View team's roster Display editing | Add current roster | Edit current team stats | Delete current roster | Filter roster by position | View player's biographical information | Schedule can be created Search option | Schedules can be updated | Schedule can be deleted | pedded outbook calendar can be created | dded outbokcalendar can be deleted | Edit teamand player statistics | View Data | Enter Data | Filter the statistics by game | display graphs and charts | Download statistics as PDF | Edit contact information | submit general inquiry form | Display FAOS Directions to basketball facility | Edit FAOS | Displaygame recap | View guide line | View terms and conditions |
|---|-----------|---------|------------------|---------------------|------------------------|---------------------|--------------------|------------------------------------|--------------------|-------------------------|-----------------------|---------------------------|--|--|--------------------------|-------------------------|--|------------------------------------|--------------------------------|-----------|------------|-------------------------------|---------------------------|----------------------------|--------------------------|-----------------------------|--|-----------|-------------------|-----------------|---------------------------|
| Sytem Requirements | | | | _ | _ | - | | _ | + | - | | | - | | - | | _ | + | | _ | _ | _ | _ | | _ | | - | | | | _ |
| ID: SR01 - The homepage will only be accessible via log-in | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID COOR THE COURT OF THE COURT | | Х | | + | + | + | | + | + | + | | | + | | + | | + | + | | - | - | + | + | | - | - | | | | | _ |
| ID: SR02 - The homepage will prominently display the team logo and colors | | | × | + | + | + | | - | + | - | | | + | | + | | + | + | | - | + | + | + | | - | | - | | | + | |
| ID: SR03 - The homepage will display upcoming games, feature contents | | | | x | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID: SRO4 - The homepage will The homepage will display recent game results and statistics | | | Π. | | | + | \Box | + | + | | | | | | | | | | \Box | | + | | | \Box | | | | | | + | |
| | | | | х | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID: SR05 - The homepage will display the current team rankings and standings | | | | | Х | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D: SRO6 - The homepage will provide quick access to the latest news and updates about the team | | | | | | х | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID: SR07 - The homepage will allow users to search for games, players, or other information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| D: SR08 - The homepage will be able to be edited to display different/more information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | |) | K | | | | | | | | | | | | | | | | | | | | | | | |
| D: SR09 - The roster page will display the current roster of the basketball team | | | | _ | | | | X | _ | | | | | | | | | 1 | | | | | | | | | | | | | |
| D: SR10 - The roster page will allow users to add current roster | | | | | | | | | Х | | | | | | | | | _ | | | | | | | | | | | | | |
| D: SR11 - The roster page will allow users to edit current roster | | | | 4 | | | | | 4 | X | | | | | | | | | | | _ | | | | | | _ | | | \perp | |
| D: SR12 - The roster page will allow users to delete current roster | | | | 4 | _ | + | | _ | + | - | X | | - | | + | | _ | + | | _ | _ | _ | _ | | _ | | - | | | | |
| D: SR13 - The roster page will allow users to filter the roster by name | | | | + | + | + | | _ | + | - | | X | - | | + | | + | + | | - | - | + | - | | - | | - | | | | _ |
| D: SR14 - The roster page will allow users to filter the roster by position | | | | - | - | - | | | + | - | | X | - | | - | | - | + | | - | - | - | - | | - | - | - | | | | _ |
| D: SR15 - The roster page will display player statistics and biographical information | | | | + | + | + | | - | + | - | | | X | | + | | + | + | | - | + | + | - | - | - | - | - | | | | _ |
| D: SR16 - The roster page will allow users search for specific players | | | | + | + | + | X | - | + | - | | | + | X | + | | + | + | | - | - | + | + | | - | - | - | - | | | |
| D: SR17 - The schedule page can be created. | | | | - | - | + | | - | + | - | | | + | X | - | | + | + | | - | - | + | - | | - | - | - | | | | _ |
| D: SR18 - The schedule page can be edited. | | | | + | - | + | | - | + | - | | | + | | X | | + | + | | - | - | + | - | - | | - | - | | | + | |
| ID: SR19 - The schedule pagecan be deleted. ID: SR20 - The outlook calendar can be embedded. | | | | + | - | + | | - | + | - | | \vdash | + | | + | X | | + | | - | - | + | - | - | - | - | - | | | + | |
| D: SR21 - The embeded outlook calendar can be embedded. D: SR21 - The embeded outlook calendar can be edited. | | | | + | + | + | | | + | - | | | - | | +- | | X | + | | - | + | + | + | | - | - | - | | | + | |
| ID: SR22 - The embeded outlook calendar can be edited. ID: SR22 - The embeded outlook calendar can be deleted. | | | | + | + | + | | - | + | - | | | + | | + | | X | х | | - | + | + | + | | | | - | | | + | + |
| D: SR22 - The embeded outlook calendar can be deleted. D: SR23 - The statistics page will display team and player statistics | | | | + | + | + | | | + | + | | | + | | + | | + | | x | - | + | + | + | | | | | | | + | |
| D: SR24 - The statistics page will allow staff members to view data | | | | + | + | + | | - | + | - | | | + | | + | | + | + | - | × | + | + | + | | | | - | | | + | |
| ID: SR25 - The statistics page will allow staff members to enter data | | | | + | + | + | | | + | + | | | | | + | | | + | | | ¥ | | | | | | | | | + | |
| ID: SR26 - The statistics page will allow staff members to edit data | | | | + | + | + | | | + | - | | | + | | + | | | + | | - ' | ^ v | | | | | | | | | - | |
| ID: SR27 - The statistics page will allow users to filter the statistics by game | | | | + | + | + | | | + | - | | | + | | + | | + | + | | _ | ^ | × | + | | | | | | | - | |
| ID: SR28 - The statistics page will display graphs and charts to visualize statistics | | | | + | + | + | | | + | | | | + | | + | | + | + | | _ | + | _^ | x | | | | | | | + | |
| ID: SR29 - The statistics page will allow users to download statistics as a PDF | | | | + | | + | | | + | | | | | | | | | | | \neg | + | | Ŷ | x | | | | | | | |
| D: SR30 - The contact page will display coaches and staffs contact information | | | | + | | | | | + | | | | | | | | | | | | + | | | , | | | | | | + | |
| D: SR31 - The contact page will allow coaches and staffs contact information can be edited | | | | + | | | \Box | + | | | | | | | | \Box | | | \Box | | + | | | H | X | | + | | | + | |
| D: SR32 - The contact page will allow users to submit general inquiry form | | \top | | \top | | \perp | П | \top | \top | | | | | | | | | \top | П | | \top | | | \Box | - | х | | | | \Box | \Box |
| ID: SR33 - The contact page will provide directions to basketball facility | | \perp | | \top | | † | \Box | | \top | | | | | | | | | \top | П | | \top | | | \Box | | Ü | X | | | \Box | \Box |
| D: SR34 - The contact page will display FAQs | | | \Box | \top | | | П | \top | | | | | | | | \Box | | | \Box | | \top | | | \Box | | | Х | | | \Box | \Box |
| ID: SR35 - The contact page will allow administrators to edit FAOs | | | | \top | | | П | | | | | | | | | | | | П | \neg | | | | \Box | | | | х | | \Box | |
| ID: SR36 - The game recap page will display results and highlights of recent games | | | | \top | | \perp | \Box | | \top | | | | | | | | | | \Box | | \top | | | \Box | | | | 1 | х | \Box | |
| ID: SR37 - The game recap page will allow users to watch videos of game highlights | | | | \top | | \perp | \Box | \top | \top | | | | | | | | | | П | | \top | | | \Box | | | | | X | \Box | |
| D: SR38 - The guidelines page will display how the website collects, uses, and protects users data | | | | | | | П | | | | | | | | | | | | | | | | | \Box | | | | | | х | |
| D: SR39 - The guidelines page will describe the terms and conditions of use | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | х |
| D: SR40 - The guidelines page will provide option to delete user data | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Use Case Descriptions

Use Case 1:

| Use Case Name: Log-In | ID: 01 | Importance Level: High |
|---|--------|----------------------------------|
| Primary Actor: All Organization Members | | Use Case Type: Essential, Detail |

Stakeholders and Interests:

Coaches: Want team statistics to stay secure to maintain competitive advantage

Players: Want their medical information to remain private

Support Staff: Want to make sure data is accurate and untampered with

Brief Description: This use case describes how users will log-in to access the website.

Trigger: User navigates to, and attempts to access, the website.

Type: External

Relationships:

Association: Statistics, Medical Information, Game Results, Site Editing

Include:

Extend: Use of site

Generalization: Provides security clearance information for other features

Normal Flow of Events:

- 1. User attempts to navigate to site
- 2. User is redirected to a log-in screen
- 3. If log-in is successful, user is redirected to their original destination and is now able to access all sections of the site for which they have clearance

SubFlows:

Alternate/Exceptional Flows:

3a. If log-in is not successful, user is redirected to an insufficient privileges page.

Use Case 2:

| Use Case Name: Branding | ID: 02 | Importance Level: Low |
|-------------------------|--------|-------------------------------|
| Primary Actor: Admin | | Use Case Type: Real, Overview |

Stakeholders and Interests:

Coaches: Want to be able to design new pages and have a theme automatically applied.

Players: Want to feel pride and a sense of unity when using the site. Support Staff: Want to make sure the site looks and feels official.

Brief Description: This use case describes how the site is designed

Trigger: User navigates to, and successfully accesses, the website.

Type: Internal

Relationships:

Association: Statistics, Medical Information, Game Results, Site Editing

Include:

Extend: Display of all other pages

Generalization: Provides a template for other site pages.

Normal Flow of Events:

- 1. User successfully logs into the site
- Site loads with brand-compliant theme

SubFlows:

Alternate/Exceptional Flows:

Use Case 3:

| Use Case Name: Highlighted Content | ID: 03 | Importance Level: Low |
|------------------------------------|--------|-----------------------------|
| Primary Actor: Admin | | Use Case Type: Real, Detail |

Stakeholders and Interests:

Coaches: Want to be able to display featured content and upcoming games on the front page.

Players: Want to be able to quickly see when upcoming games are.

Brief Description: This use case describes how the site will display upcoming games and featured

content

Trigger: User navigates to, and successfully accesses, the homepage.

Type: Internal

Relationships:

Association: Game Results, Schedule

Include: Extend:

Generalization:

Normal Flow of Events:

- 1. User successfully logs into the site
- 2. User is able to view upcoming games and featured content without leaving the homepage

SubFlows:

Alternate/Exceptional Flows:

Use Case 4:

| Use Case Name: Results and Statistics | ID: 04 | Importance Level: High |
|---------------------------------------|--------|-----------------------------|
| Primary Actor: Admin | | Use Case Type: Real, Detail |

Stakeholders and Interests:

Coaches: Want to be able to display recent game results and statistics on the front page. Players: Want to be able to quickly see what recent game results and statistics are.

Brief Description: This use case describes how the site will display current team rankings/standings

Trigger: User navigates to, and successfully accesses, the homepage.

Type: Internal

Relationships:

Association: Game Results, Statistics

Include: Extend: Generalization:

Normal Flow of Events:

- 1. User successfully logs into the site
- 2. User is able to view recent game results and statistics without leaving the homepage

SubFlows:

Alternate/Exceptional Flows:

Use Case 5:

| Use Case Name: Rankings and Standings | ID: 05 | Importance Level: Low |
|---------------------------------------|--------|-----------------------------|
| Primary Actor: Admin | | Use Case Type: Real, Detail |

Stakeholders and Interests:

Coaches: Want to be able to display current rankings/standings on the front page.

Players: Want to be able to quickly see what the current team rankings/standings are.

Brief Description: This use case describes how the site will display current team rankings/standings

Trigger: User navigates to, and successfully accesses, the homepage.

Type: Internal

Relationships:

Association: Game Results, Statistics

Include:

| Extend: Generalization: | |
|--|--|
| Normal Flow of Events: 1. User successfully logs into the site 2. User is able to view current team rankings/standings without leaving the homepage | |
| SubFlows: | |
| Alternate/Exceptional Flows: | |

Use Case 6:

| Use Case Name: Information Updates | ID: 06 | Importance Level: High |
|-------------------------------------|--------|------------------------------------|
| Primary Actor: All Authorized Users | | Use Case Type: Essential, Overview |

Stakeholders and Interests:

Coaches: Want to be able to quickly navigate to the statistics section of the site. Players: Want to be able to quickly see what their current standing is on the team.

Support Staff: Want to be able to quickly access the data related to their occupation.

Brief Description: This use case describes how the site will allow users to easily access the statistics portion of the site

Trigger: User chooses a data category to view from the homepage nav.

Type: Internal

Relationships:

Association: Statistics, Information Access Control

Include

Extend: Editing Data, Deleting Data, Uploading Data, Viewing Data, Analyzing Data Generalization:

Normal Flow of Events: 1. User successfully logs into the site

- 2. User attempts to access data
- 3. If the User has the correct clearance to view the data, they are brought to the new page
- 4. If the User has the correct clearance, they may edit or delete data from the page

SubFlows:

Alternate/Exceptional Flows:

3a. If the User does not have clearance to view the data, they are brought to an error page.

4a. If the User does not have clearance to edit/delete the data, they are brought to an error page

Use Case 7:

| Use Case Name: Information Search | ID: 07 | Importance Level: High |
|-------------------------------------|--------|----------------------------------|
| Primary Actor: All Authorized Users | | Use Case Type: Essential, Detail |

Stakeholders and Interests:

Coaches: Want to be able to search for specific areas of the site deeper than the overall nav.

Players: Want to be able to look up their own information easily.

Support Staff: Want to be able to search for specific areas of the site beyond the overall nav.

Brief Description: This use case describes how the site will include a search function

Trigger: User starts entering text into the search bar located on the homepage.

Type: Internal

Relationships:

Association: Information Access Control

Include: Extend: Generalization:

Normal Flow of Events:

- 1. User successfully logs into the site
- 2. Users attempt to search for their desired portion of the site.
- 3. If the User has the correct clearance to view the site page, they are brought to the new page

SubFlows:

Alternate/Exceptional Flows:

3a. If the User does not have clearance to view the page, they are brought to an error page.

Use Case 8:

| Use Case Name: Display Editing | ID: 08 | Importance Level: High |
|--------------------------------|--------|------------------------------------|
| Primary Actor: Admin | | Use Case Type: Essential, Overview |
| Stakeholders and Interests: | | |

Admin: Want to be able to change what information is displayed on the homepage to reflect organizational needs.

Brief Description: This use case describes how the site can be edited

Trigger: User clicks the site editing portal

Type: Internal

Relationships:

Association: Information Access Control, Information Display

Include: Extend:

Generalization:

Normal Flow of Events:

- 1. User successfully logs into the site
- 2. User attempts to log into the site via another portal to enter the editing environment
- 3. If the User has the correct clearance to edit site page, they are brought to the editing environment

SubFlows:

Alternate/Exceptional Flows:

3a. If the User does not have clearance to edit the site, they are brought to an error page.

Use Case 9:

| Use Case Name: View team's statistics | ID: 09 | Importance Level: High |
|---------------------------------------|--------|----------------------------------|
| Primary Actor: Website users | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Players - want to see the current roster.

Website - tool used to display team statistics

Brief Description: This use case describes how information can be displayed

Trigger: Website users wants to see current roster

Type: External

Relationships:

Association: Website users, the website

Include:

Extend: Add current roster, edit current roster, delete current roster

Generalization:

Normal Flow of Events:

- 1. The website user wants to see current roster
- 2. Website users click the "Roster" button.

SubFlows:

Alternate/Exceptional Flows:

Use Case 10:

| Use Case Name: Add current roster | ID: 10 | Importance Level: High |
|-----------------------------------|--------|----------------------------------|
| Primary Actor: Administrator | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Administrator: Admin wants to add new information to current roster

Website – tool used to add current roster

Brief Description: This use case describes how new roster can be added

Trigger: current roster needs to be updated

Type: Internal

Relationships:

Association: Administrator

Include: Extend:

Generalization: Modify roster

Normal Flow of Events:

- 1. The current roster needs to be updated
- 2. The administrator clicks on "Add roster"
- 3. The administrator adds the necessary information on the roster page.
- 4. The administrator clicks the "Submit" button to process
- 5. The administrator is directed to a webpage verifying that the process was accepted.

SubFlows:

Alternate/Exceptional Flows:

- 5a. The adding was not processed.
- 5b. A pop-up message notifies the administrator that the addition was not accepted and to try again.

Use Case 11:

| Use Case Name: Edit current roster | ID: 11 | Importance Level: High | | |
|--|--------|----------------------------------|--|--|
| Primary Actor: Administrator | | Use Case Type: Detail, Essential | | |
| Stakeholders and Interests: Administrator: Admin wants to add new information to current roster Website - tool used to edit current roster | | | | |
| Brief Description: This use case describes how current roster can be edited | | | | |
| Trigger: current roster needs to be updated Type: External | | | | |

Relationships:

Association: Administrator

Include: Extend:

Generalization: Modify current roster

Normal Flow of Events:

- 1. The current roster needs to be updated
- 2. The administrator clicks the "Edit Roster" button to edit roster information.
- 3. The administrator edits what needs to be edited
- 4. The administrator clicks the "Submit" button to process the editing.
- 5. The administrator is directed to a webpage verifying that the editing was accepted.

SubFlows:

Alternate/Exceptional Flows:

- 5a. The editing was not processed.
- 5b. A pop-up message notifies the donor that the editing was not accepted and to try again.

Use Case 12:

| Use Case Name: Delete current roster | ID: 12 | Importance Level: High |
|--------------------------------------|--------|----------------------------------|
| Primary Actor: Administrator | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Administrator: Admin wants to delete information from current roster

Website - tool used to delete current roster

Brief Description: This use case describes how current roster can be deleted

Trigger: current roster needs to be updated

Type: External

Relationships:

Association: Administrator

Include: Extend:

Generalization: Modify current roster

Normal Flow of Events:

- 1. The current roster needs to be updated
- 2. The administrator clicks the "Delete Roster" button to delete roster information.
- 3. The administrator deletes what needs to be deleted
- 4. The administrator clicks the "Submit" button to process the deletion.
- 5. The administrator is directed to a webpage verifying that the deletion was accepted.

SubFlows:

Alternate/Exceptional Flows:

- 5a. The deletion was not processed.5b. A pop-up message notifies the donor that the deletion was not accepted and to try again.

| Use Case 13: | | | |
|---|-------------|--------------------------|--|
| Use Case Name: Filter roster by name | ID: 13 | Importance Level: Low | |
| Primary Actor: Website users | | Use Case Type: Essential | |
| Stakeholders and Interests: Website users - wants to filter the roster Website - tool used to filter | | | |
| Brief Description: This use case describes how roste | er can be f | iltered by name | |
| Trigger: The information of the roster is hard to find manually Type: External | | | |
| Relationships: Association: Website users, the website Include: Extend: Generalization: Filter Roster | | | |
| Normal Flow of Events: 1. The information of the roster is hard to find manually. 2. The website user clicks the "Filter" button. 3. The website user clicks the "by name" button. | | | |
| SubFlows: | | | |
| Alternate/Exceptional Flows: 3a. No result that matches the input | | | |

Use Case 14:

| Use Case Name: Filter roster by position | ID: 14 | Importance Level: Low | |
|--|--------|--------------------------|--|
| Primary Actor: Website users | | Use Case Type: Essential | |
| Stakeholders and Interests: Website users - wants to filter the roster. | | | |

Website - tool used to filter

Brief Description: This use case describes how roster can be filtered by position

Trigger: The information of the roster is hard to find manually

Type: External

Relationships:

Association: Website users, the website

Include: Extend:

Generalization: Filter Roster

Normal Flow of Events:

- 1. The information of the roster is hard to find manually.
- 2. The website user clicks the "Filter" button.
- 3. The website user clicks the "by position" button.

SubFlows:

Alternate/Exceptional Flows:

3a. No result that matches the input

Use Case 15:

| Use Case Name: View player's biographical information | ID: 15 | Importance Level: Low | |
|---|--------|----------------------------------|--|
| Primary Actor: Website user | | Use Case Type: Detail, Essential | |

Stakeholders and Interests:

Website user - wants to see player's biographical information. Website - tool used to display player's biographical information

Brief Description: This use case describes how biographical information can be displayed.

Trigger: Website users need to see player's biographical information

Type: External

Relationships:

Association: Website user, the website

Include:

Extend: current roster

Generalization: display current roster

Normal Flow of Events:

1. Website users need to see player's biographical information.

- 2. Website users click the "Roster" button.
- 3. Website users click the "Full bio" button.
- 4. The website will display every player's biographical information.

SubFlows:

Alternate/Exceptional Flows:

Use Case 16:

| Use Case Name: Search option | ID: 16 | Importance Level: Low |
|------------------------------|--------|----------------------------------|
| Primary Actor: Website user | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Website user - wants to quickly search for a specific player in the roster page.

Website - tool used to search

Brief Description: This use case describes how searching option work

Trigger: Website user want to quickly search for specific player

Type: External

Relationships:

Association: Website user, the website

Include:

Extend: Display biographical information

Generalization: Search option

Normal Flow of Events:

- 1. Website users want to quickly search for a specific player.
- 2. Website users click the "Roster" button.
- 3. Website users click the "Search..." bar.
- 4. Website users type what they want to search.
- 5. Website users enter or click the "Search" button.
- 6. The website displays the results.

SubFlows:

Alternate/Exceptional Flows:

- 5a. The website cannot find any information that matches website user input.
- 5b. The pop-up message "No result".

Use Case 17:

| Use Case Name: Schedule can be created. | ID: 17 | Importance Level: High |
|---|--------|------------------------|
|---|--------|------------------------|

Primary Actor: Administrators

Use Case Type: Detail, Essential

Stakeholders and Interests:

Players - wants to be kept up to date about the schedules.

Coaches – need to be kept updated so they can prepare for the game.

Administrators – Developers that create the schedule page based on administrator's instructions.

Website – A CMS used to create and manage the content on the schedule page.

Brief Description: This use case includes information about the schedule of the team.

Trigger: Staff and coaches navigate to the schedule page on the website.

Type: External

Relationships:

Association: Administrators, Developers, CMS

Include:

Extend: Edit schedule, Delete schedule

Generalization:

Normal Flow of Events:

- 1. The administrators navigate to the schedule page on the website.
- 2. The administrators input the important information into the schedule page.
- 3. The administrators click the "update" button to send the information to all the staff, players, coaches, and players.
- 4. The staff, coaches and players are notified of the information.

SubFlows:

Alternate/Exceptional Flows:

- 4a. If there are changes to the schedule, the content on the schedule page needs to be updated accordingly.
 - 5a. Only authorized users can input information on the page.
- 6a. In the event of an emergency, such as a weather-related cancellation or a security threat, the schedule page may need to be updated immediately to inform staff and players.

Use Case 18:

| Use Case Name: Edit schedule | ID: 18 | Importance Level: High |
|-------------------------------|--------|----------------------------------|
| Primary Actor: Administrators | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Administrators – administrators may want to create a separate schedule page for staff.

Website – A CMS used to create and manage the content on the schedule page.

Brief Description: This use case describes how schedules are edited.

Trigger: Administrators navigate to the donation page on the website.

Type: External

Relationships:

Association: Administrators

Include: Extend:

Generalization: Create schedule

Normal Flow of Events:

- 1. The administrator navigates to the donation page on the website.
- 2. The administrator clicks the "Edit schedule" button to edit information.
- 3. The administrator edits the necessary schedule information on the webpage.
- 4. The administrator clicks the "Submit" button to process the edits.
- 5. The administrator is directed to a webpage verifying that the edit was accepted.
- 6. A notification email is sent to the administrators 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 administrators that the edit was not accepted and to try again.

Use Case 19:

| Use Case Name: Delete schedule | ID: 19 | Importance Level: High |
|--------------------------------|--------|----------------------------------|
| Primary Actor: Administrator | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Administrators – Administrators may want to delete the content within the scheduled page.

Website - A CMS used to create and manage the content on the schedule page.

Brief Description: This use case describes how content within scheduled is deleted.

Trigger: Administrators navigate to the schedule page on the website.

Type: External

Relationships:

Association: Administrators

Include: Extend:

Generalization: Create Schedule

Normal Flow of Events:

- 1. The administrator navigates to the schedule page on the website.
- 2. The administrator clicks the "Edit" button to delete information in the schedule page.

- 3. The administrator clicks the "Submit" button to process the deletion.
- 4. The administrator is directed to a webpage verifying that the deletion was accepted.

SubFlows:

Alternate/Exceptional Flows:

- 5a. The deletion was not processed.
- 5b. A pop-up message notifies the administrator that the deletion was not accepted and to try again.

Use Case 20:

| Use Case Name: Create outlook calendar | ID: 20 | Importance Level: High |
|--|--------|----------------------------------|
| Primary Actor: Administrator | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Administrator - wants to embed an outlook calendar to notify players and staff efficiently and effectively.

Website - involves creating an iframe on the website.

Staff - Coaches, trainers, and other staff members may be interested in using the Outlook calendar to keep track of team events and schedule changes.

Players - They may want to use the calendar to schedule meetings with coaches or other staff members.

Brief Description: This use case describes how embedding an outlook calendar is more effective and efficient.

Trigger: Administrator navigates to the outlook calendar page on the website.

Type: External

Relationships:

Association: Administrator, Players, staff,

Include:

Extend: Edit outlook calendar. Delete outlook calendar

Generalization:

Normal Flow of Events:

- 1. The administrator navigates to the outlook calendar page on the website.
- 2. The administrator makes the changes he wants.
- 3. The administrator clicks the "update" button.
- 4. The administrator updates information for all the staff members.

SubFlows:

Alternate/Exceptional Flows:

7a. There was an error in updating information.

7b. A pop-up message notifies the administrator that the changes was not processed and to try again.

Use Case 21:

| Use Case Name: Edit outlook calendar | ID: 21 | Importance Level: high |
|--------------------------------------|--------|----------------------------------|
| Primary Actor: Administrator | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Administrator - wants to edit information for schedule changes.

Outlook app - used to make any edits necessary.

Brief Description: This use case describes how to efficiently make edits to the calendar.

Trigger: Administrator navigates to the outlook page on the website.

Type: External

Relationships:

Association: Administrator

Include: Extend:

Generalization: Create outlook calendar

Normal Flow of Events:

- 1. The Administrator navigates to the outlook app on their phones or website.
- 2. The Administrator selects the "Edit Information" button.
- 3. The Administrator edits the necessary information on the webpage or app.
- 4. The Administrator clicks the "Submit" button to process the edits.
- 5. The Administrator is notified by verification that the edit was accepted.

SubFlows:

Alternate/Exceptional Flows:

- 5a. The edit was not processed.
- 5b. notification that the edit was not accepted and to try again.

Use Case 22:

| Use Case Name: Delete outlook calendar | ID: 22 | Importance Level: Low |
|--|--------|----------------------------------|
| Primary Actor: Administrator | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Administrator - may want to delete the information within the calendar.

Website - used to edit calendar information

Brief Description: This use case describes how calendar information is deleted.

Trigger: Administrator navigates to the calendar on the website app.

Type: External

Relationships:

Association: Administrator

Include: Extend:

Generalization: edit outlook calendar

Normal Flow of Events:

- 1. The Administrator navigates to the calendar page on the website or app.
- 2. The Administrator selects the "Edit Information" button.
- 3. The Administrator clicks the "Delete Information" button to delete information.
- 4. The Administrator is notified that the deletion was accepted.

SubFlows:

Alternate/Exceptional Flows:

- 4a. The deletion was not processed.
- 4b. A pop-up message notifies the shopper that the deletion was not accepted and to try again.

Use Case 26:

| Use Case Name: Edit Team and Player Statistics | ID: 26 | Importance Level: Low |
|--|----------|----------------------------------|
| Primary Actor: Authorized U of L Basketball Team Members | 's Staff | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Authorized U of L Basketball Team's Staff Members – Want to Edit team and player statistics.

Website - Tool used to Edit new player and/or team statistics.

Cardinal Infrastructure – Allows the staff member to Edit team and player statistics.

Brief Description: This use case describes how an authorized staff member of the team can Edit the statistics of the team and/or individual players on the statistics page.

Trigger: An authorized staff member of the U of L basketball team navigates to the Statistics page on the website and clicks on the "Edit Data" button.

Type: Internal

Relationships:

Association: U of L Basketball Team's Staff Member

Include:

Extend:

Generalization: Allow authorized staff members to Edit data.

Normal Flow of Events:

- 1. A staff member of the basketball team logs into the website with their own credentials associated with their position in the team.
- 2. The staff member navigates to the Team and Player Statistics page on the website.
- 3. Statistics of the team or individual player are displayed there based on the accessibility of their account.
- 4. The staff member clicks on the "Edit Data" button to make manual changes to the statistics.
- 5. The staff member clicks on the "Update" button to save the changes.

SubFlows:

Alternate/Exceptional Flows:

- 5a. The statistics page does not update after making changes and clicking the "Update" button.
- 6a. The staff member goes back to the homepage.
- 7a. The staff member clicks on "Statistics" and is brought to the statistics page.
- 8a. The staff member makes the necessary changes again.
- 9a. The staff member clicks the "Update" button to successfully update the page.

Use Case 24:

| Use Case Name: View data | ID: 24 | Importance Level: Low |
|---|--------|----------------------------------|
| Primary Actor: U of L Basketball Team's Staff Mer | mbers | Use Case Type: Detail, Essential |

Stakeholders and Interests:

The U of L Basketball Team's Staff Members - Want to View team and player statistics.

Website - Tool used to display team and player statistics.

Cardinal Infrastructure – Allow the staff member to View team and player statistics.

Brief Description: This use case describes how a staff member of the team can view the statistics of the team and individual players on the statistics page based on the permission on their account.

Trigger: A staff member of the U of L basketball team navigates to the Statistics page on the website.

Type: Internal

Relationships:

Association: U of L Basketball Team's Staff Member

Include: Extend:

Generalization: View Team and Player Statistics

Normal Flow of Events:

- 1. A staff member of the basketball team logs into the website with their own credentials associated with their position in the team.
- 2. The staff member navigates to the Statistics page on the website.
- 3. Statistics of the team or induvial player are displayed there based on the accessibility of their account.

SubFlows:

Alternate/Exceptional Flows:

- 3a. The statistics page does not load proper statistics based on the account.
- 4a. The staff member clicks the back arrow and is taken back to the home page.
- 5a. The staff member logs out of their account.
- 6a. The staff member logs back into their account.
- 7a. The staff member clicks on "Statistics" and is brought to the statistics page.

Use Case 25:

| Use Case Name: Enter data | ID: 25 | Importance Level: Low |
|--|---|-----------------------|
| Primary Actor: Authorized U of L Basketball Team Members | Primary Actor: Authorized U of L Basketball Team's Staff Members | |

Stakeholders and Interests:

Authorized U of L Basketball Team's Staff Members - Want to Enter new team and player statistics. Website - Tool used to Enter new player and/or team statistics.

Cardinal Infrastructure – Allows certain staff members to Enter team and player statistics.

Brief Description: This use case describes how an authorized staff member of the team can Edit the statistics of the team and/or individual players on the statistics page.

Trigger: A authorized staff member of the U of L basketball team navigates to the Statistics page on the website and clicks on the "Enter Data" button.

Type: Internal

Relationships:

Association: U of L Basketball Team's Staff Member

Include: Extend:

Generalization: Allow authorized staff members to Enter data.

Normal Flow of Events:

- 1. An authorized staff member of the basketball team logs into the website with their own credentials associated with their position in the team.
- 2. The staff member navigates to the Statistics page on the website.
- 3. Statistics of the team or individual player are displayed there based on the accessibility of their account
- 4. The staff member clicks on the "Enter Data" button to add new statistics.

5. The staff member clicks on the "Update" button to save the changes.

SubFlows:

- 4a. When the staff member clicks on the "Enter Data", the staff member gets a pop-up error message "Not Authorized to enter new data, please exit."
- 5a. The staff member logs out of their account.
- 6a. The staff member logs back into their account.
- 7a. The staff member clicks on "Statistics" and is brought to the statistics page.
- 8a. The staff member clicks on the "Enter Data" button to add new statistics.
- 9a. The staff member clicks on the "Update" button to save the changes.

Use Case 26:

| Use Case Name: Edit data | ID: 26 | Importance Level: Low |
|--|--|-----------------------|
| Primary Actor: Authorized U of L Basketball Team Members | Primary Actor: Authorized U of L Basketball Team's Staff Members | |

Stakeholders and Interests:

Authorized U of L Basketball Team's Staff Members – Want to Edit team and player statistics.

Website - Tool used to Edit new player and/or team statistics.

Cardinal Infrastructure – Allows the staff member to Edit team and player statistics.

Brief Description: This use case describes how an authorized staff member of the team can Edit the statistics of the team and/or individual players on the statistics page.

Trigger: An authorized staff member of the U of L basketball team navigates to the Statistics page on the website and clicks on the "Edit Data" button.

Type: Internal

Relationships:

Association: U of L Basketball Team's Staff Member

Include: Extend:

Generalization: Allow authorized staff members to Edit data.

Normal Flow of Events:

- 6. A staff member of the basketball team logs into the website with their own credentials associated with their position in the team.
- 7. The staff member navigates to the Statistics page on the website.
- 8. Statistics of the team or individual player are displayed there based on the accessibility of their account.
- 9. The staff member clicks on the "Edit Data" button to make manual changes to the statistics.
- 10. The staff member clicks on the "Update" button to save the changes.

SubFlows:

- 5a. The statistics page does not update after making changes and clicking the "Update" button.
- 6a. The staff member goes back to the homepage.
- 7a. The staff member clicks on "Statistics" and is brought to the statistics page.
- 8a. The staff member makes the necessary changes again.
- 9a. The staff member clicks the "Update" button to successfully update the page.

Use Case 27:

| Use Case Name: Filter data | ID: 27 | Importance Level: High |
|--|---|------------------------|
| Primary Actor: Authorized U of L Basketball Team Members | Primary Actor: Authorized U of L Basketball Team's Staff Members | |

Stakeholders and Interests:

U of L Basketball Team's Staff Members – Want to Filter data to see team and player statistics in an organized way.

Website - Tool used to display player and/or team statistics.

Cardinal Infrastructure – Allows the staff member to Filter data of the team and player statistics.

Brief Description: This use case describes how a staff member of the team can Filter data of the team and/or individual players on the statistics page.

Trigger: A staff member of the U of L basketball team navigates to the Statistics page on the website and clicks on the "Filter" button.

Type: Internal

Relationships:

Association: U of L Basketball Team's Staff Member

Include: Extend:

Generalization: Allow staff members to Filter data.

Normal Flow of Events:

- 1. A staff member of the basketball team logs into the website with their own credentials associated with their position in the team.
- 2. The staff member navigates to the Statistics page on the website.
- 3. Statistics of the team or individual player are displayed there based on the accessibility of their account.
- 4. The staff member clicks on the "Filter Data" button to view the statistics in an organized way.

SubFlows:

- 4a. The filter options do not show up after clicking the "Filter" button.
- 5a. The staff member reloads the Statistics page.
- 6a. The staff member clicks the "Filter" button again.
- 7a. The staff member clicks the "Update" button after selecting filter options.

Use Case 28:

| Use Case Name: Display Graphs and Charts | ID: 28 | Importance Level: Low |
|--|--------|----------------------------------|
| Primary Actor: U of L Basketball Team | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

The U of L Basketball Team - Wants to view Graphs and Charts based on statistics.

Website - Tool used to display Graphs and Charts based on statistics.

Cardinal Infrastructure – Create a webpage to display Graphs and Charts based on statistics.

Brief Description: This use case describes how the statistics page will display Graphs and Charts based on statistics.

Trigger: A staff member of the basketball team navigates to the Statistics page on the website.

Type: Internal

Relationships:

Association: U of L Basketball Team, Cardinal Infrastructure website, Statistics webpage.

Include:

Extend: View Data, Add Data, Edit Data

Generalization: Display Graphs and Charts based on statistics.

Normal Flow of Events:

- 1. An authorized staff member of the basketball team logs into the website with their own credentials associated with their position in the team.
- 2. The staff member navigates to the Statistics page on the website.
- 3. Click on the "Enter Data" button.
- 4. Uploads Graphs and Charts.
- 5. Click

SubFlows:

- 3a. The graphs do not load properly.
- 4a. The person clicks the back arrow and is taken back to the home page.
- 5a. The person clicks on "Statistics" and is brought to the statistics page.
- 6a. The person scrolls down to see Graphs and Charts.

Use Case 29:

| Use Case Name: Download Statistic as PDF | ID: 29 | Importance Level: High |
|--|---|------------------------|
| Primary Actor: Authorized U of L Basketball Team Members | Primary Actor: Authorized U of L Basketball Team's Staff Members | |

Stakeholders and Interests:

Authorized U of L Basketball Team's Staff Members – Want to Download team and player statistics as PDF.

Website - Tool used to Download player and/or team statistics.

Cardinal Infrastructure – Allows the authorized staff member to Download team and player statistics.

Brief Description: This use case describes how an authorized staff member of the team can Download statistics of the team and/or individual players on the statistics page.

Trigger: An authorized staff member of the U of L basketball team navigates to the Statistics page on the website and clicks on the "Download" button.

Type: Internal

Relationships:

Association: U of L Basketball Team's Staff Member

Include: Extend:

Generalization: Allow authorized staff members to Download data.

Normal Flow of Events:

- 1. An authorized staff member of the basketball team logs into the website with their own credentials associated with their position in the team.
- 2. The staff member navigates to the Statistics page on the website.
- 3. The staff member clicks on the "Download" button.

SubFlows:

- 3a. The Download does not start for the page.
- 4a. The staff member reloads the Statistics page.
- 5a. The staff member clicks the "Download" button again.

Use Case 30:

| Use Case Name: Staff Contact Information | ID: 30 | Importance Level: High |
|--|--------|----------------------------------|
| Primary Actor: Users | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

- Users: Want to easily access contact information for coaches and staff associated with the men's basketball team.
- Coaches and staff: want their contact information to be accurately displayed on the website.

Brief Description:

The user triggers this use case by navigating to the staff contact information section of the men's basketball website. The website then displays a list of coaches and staff members with their contact information, including email addresses and phone numbers.

Trigger:. User navigates to the staff contact information section of the website.

Type: External

Relationships:

Association: This use case is associated with other use cases related to the men's basketball website

Include:

Extend:

Generalization:

Normal Flow of Events:

- 1: User navigates to the staff contact information section of the men's basketball website.
- 2:The website displays a list of coaches and staff members.
- 3: The user clicks on a specific coach or staff member to view their contact information.
- 4: The website displays the contact information, including email addresses and phone numbers.

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Alternate/Exceptional Flows:

1: If there is an error in the display of the contact information, the website displays an error message and prompts the user to try again.

2: If a coach or staff member's contact information changes, the website is updated to reflect the new information.

Use Case 31:

| Use Case Name: Edit Contact Information | ID: 31 | Importance Level: High |
|---|--------|----------------------------------|
| Primary Actor: Administrators | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Administrator: Wants to be able to edit contact information for coaches and staff associated with the men's basketball program on the website.

Coaches and staff: Want their contact information to be accurately displayed on the website.

Brief Description: The administrator triggers this use case by logging into the backend of the men's basketball website and navigating to the contact information section. The administrator is able to edit the contact information for coaches and staff, including email addresses and phone numbers. Once the edits are made, the updated information is displayed on the website.

Trigger: Administrator logs into the backend of the men's basketball website and navigates to the contact information section.

Type: External

Relationships:

Association: This use case is associated with other use cases related to the men's basketball website.

Include:

Extend:

Generalization:

Normal Flow of Events:

- 1: Administrator logs into the backend of the men's basketball website and navigates to the contact information section.
- 2: The website displays a list of coaches and staff members with their current contact information.
- 3: The administrator selects a specific coach or staff member to edit their contact information.
- 4: The website displays a form with fields for the contact information, which the administrator can edit.
- 5: The administrator saves the changes, and the website updates the contact information for the coach

| or staff member. | | | |
|---|-------------|---|--|
| SubFlows: | | | |
| Alternate/Exceptional Flows: 1: If the administrator encounters an error while edi | ting the co | ontact information, the website displays an | |
| error message and prompts the administrator to try again. 2: If the administrator accidentally deletes or enters incorrect contact information, the website allows the administrator to revert the changes to the previous version. | | | |
| Use case 32: | | | |
| Use Case Name: Submit General Inquiry Form | ID: 32 | Importance Level: Medium | |
| Primary Actor: All Authorized Users | | Use Case Type: Detail, Essential | |
| Stakeholders and Interests: | | | |
| Users: Want to be able to submit general inquiries to the men's basketball program and receive a response. Administrators: Want to receive and respond to inquiries in a timely and professional manner. | | | |
| Brief Description: The user triggers this use case by website that allows them to submit a general inquiry form and submits it to the men's basketball program and respond to it in a timely and professional manner. | y form. Th | e user fills out the required fields on the | |
| Trigger: User navigates to the section on the men's general inquiry form. | basketball | website that allows them to submit a | |
| Type: External | | | |
| Relationships: | | | |
| Association: Contact Page | | | |
| Include: | | | |
| Extend: | | | |

Generalization:

Normal Flow of Events:

- 1: User navigates to the section on the men's basketball website that allows them to submit a general inquiry form.
- 2: The user fills out the required fields on the form, which may include name, email address, subject, and message.
- 3: The user submits the form to the men's basketball program.
- 4: The program administrators receive the inquiry and respond to it in a timely and professional manner.

SubFlows:

Alternate/Exceptional Flows:

- 1: If the user encounters an issue or error with the inquiry form, they may need to contact the website administrators for assistance.
- 2: If the inquiry is urgent or time-sensitive, the user may need to contact the men's basketball program by phone or email instead of using the general inquiry form.

Use case 33:

| Use Case Name: Directions to Basketball Facility | ID: 33 | Importance Level: Low |
|--|--------|----------------------------------|
| Primary Actor: All Authorized Users | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

- -Users: Want to be able to easily access directions to the basketball facility and attend games or events.
- -Administrators: Want to ensure that the directions provided are accurate and up-to-date.

Brief Description: The user triggers this use case by navigating to the section on the men's basketball website that provides directions to the basketball facility. The website displays the most accurate and up-to-date directions to the facility. The user can use this information to navigate to the basketball facility for games or events.

Trigger: User navigates to the section on the men's basketball website that provides directions to the basketball facility.

| Type: External |
|--|
| Relationships: |
| Association: This use case is associated with other use cases related to the men's basketball website. |

Include:

Extend:

Generalization:

Normal Flow of Events:

- 1: User navigates to the section on the men's basketball website that provides directions to the basketball facility.
- 2: The website displays the most accurate and up-to-date directions to the facility.
- 3: The user uses this information to navigate to the basketball facility for games or events.

SubFlows:

Alternate/Exceptional Flows:

- 1: If the user encounters an issue or error with the directions provided, they may need to contact the website administrators for assistance.
- 2: If there are changes to the directions or the basketball facility location, the website administrators will need to update the information to ensure that it remains accurate and up-to-date.

Use Case 34:

| Use Case Name: Display FAQs | ID: 34 | Importance Level: High |
|-----------------------------|--------|----------------------------------|
| Primary Actor: Users | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

- -Users: Want to be able to view the FAQs section on the website and find answers to their questions about the men's basketball program.
 - -Administrators: Want to ensure that the FAQs section provides accurate and helpful information.

Brief Description: The user triggers this use case by navigating to the FAQs section on the men's basketball website. The website displays a list of questions and answers related to the men's basketball program. The user can read through the questions and answers to find the information they are looking for.

Trigger:. User navigates to the FAQs section on the men's basketball website.

Type: External

Relationships:

Association: This use case is associated with other use cases related to the men's basketball website.

Include:

Extend:

Generalization:

Normal Flow of Events:

- 1: User navigates to the FAQs section on the men's basketball website.
- 2: The website displays a list of questions and answers related to the men's basketball program.
- 3: The user can read through the questions and answers to find information they are looking for.

SubFlows:

- 1: If the user cannot find the information they are looking for in the FAQs section, they may need to contact the men's basketball program directly for assistance.
- 2: If there is a technical issue with the website and the FAQs section cannot be displayed, the user may need to try again later or contact the website administrators for assistance.
- 3: If the information in the FAQs section is outdated or incorrect, the user may need to contact the website administrators to request an update.

Use case 35:

| Use Case Name: Edit FAQs | ID: 35 | Importance Level: High |
|---|---------------------------|---|
| Primary Actor: Administrators | | Use Case Type: Detail, Essential |
| Stakeholders and Interests: | | |
| -Administrators: Want to be able to edit the FAQs -Users: Want the FAQs section to provide accurate basketball program. | | |
| Brief Description: The administrator triggers this us basketball website and navigating to the FAQs section and answers in the FAQs section, add new question information. Once the edits are made, the updated F | ion. The ac s and answ | Iministrator is able to edit the questions vers, and delete outdated or incorrect |
| Trigger:. Administrator logs into the backend of the FAQs section. | men's bas | ketball website and navigates to the |
| Type: Internal | | |
| Relationships: | | |
| Association: This use case is associated with oth | ner use cas | es related to the men's basketball website. |
| Include: | | |
| Extend: | | |
| Generalization: | | |
| Normal Flow of Events: | | |
| 1: Administrator logs into the backend of the men's section. | basketball | website and navigates to the FAQs |
| 2: The website displays a list of questions and answ | | |
| 3: The administrator selects a specific question to ed4: The website displays a form with fields for the question | | - |
| edit.5: The administrator saves the changes, and the web | osite update | es the FAQs section. |
| SubFlows: | | |
| | | |
| | | |

Alternate/Exceptional Flows:

- 1: If the administrator encounters an error while editing the FAQs, the website displays an error message and prompts the administrator to try again.
- 2: If the administrator accidentally deletes or enters incorrect information in the FAQs, the website allows the administrator to revert the changes to the previous version.

Use Case 36:

| Use Case Name: Display game recap | ID: 36 | Importance Level: High |
|-----------------------------------|--------|----------------------------------|
| Primary Actor: Sport people | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

UofL basketball website: want to provide a platform for people to stay updated on the latest results and highlights of recent games and increase fan engagement.

Sport people: want to stay updated on the latest results and highlights of recent games.

Advertisers: want to reach out to the target audience with relevant ads.

Brief Description: This use case describes the process of Sport people accessing the University of Louisville 's basketball website to view the results and highlights of recent games.

Trigger: The Sport people want to know the results and highlights of the recent games.

Type: External

Relationships:

Association: Sport people, UofL basketball website

Include:

Extend:

Generalization:

Normal Flow of Events:

- 1: The Sport People visits the Louisville Basketball website
- 2: The Sport People navigates to the Game Recap Page
- 3: The TYPO 3 system retrieves the latest results and highlights of recent games.
- 4: The TYPO 3 system displays the results and highlights on the Game Recap Page.
- 5: The Sport People view the result and highlights.

| SubFlows: | | |
|--|-------------|--|
| Alternate/Exceptional Flows: | | |
| 1: If the TYPO 3 system encounters an error retriev error message to Sports Fans. | ing results | and highlights, the system displays an |
| 2: If the Sport Fan is not logged in, the TYPO 3 system may prompt the Sports Fan to log in or create an account before accessing the Match Summary Page | | |
| 3: If Sports Fans experience technical problems, the | y can cont | act customer support for the system. |
| 4: Advertisers may display relevant ads on the Gam | e Recap P | age to reach the target audience. |
| Use Case 37: | | |
| Use Case Name: Watch Game Highlights | ID: 37 | Importance Level: High |
| Primary Actor: Sport people | | Use Case Type: Detail, Essential |
| Stakeholders and Interests: | | |
| UofL basketball website: want to increase fan engag the basketball team. | gement and | d provide up-to-date information about |
| Sport people: want to watch game highlights and stay informed about recent games. | | |
| Advertisers: want to reach out to the target audience with relevant ads. | | |
| Brief Description: This use case allows Sport people basketball websites. | e to watch | videos of games highlights on UofL |
| Trigger: The Sport people desire to watch videos of | game high | nlights. |
| Type: External | | |
| Relationships: | | |
| Association: Sport people, UofL basketball | l website | |
| Include: | | |

Extend:

Generalization:

Normal Flow of Events:

- 1: The Sports people visit the UofL basketball website and navigate to the Game Recap page.
- 2: The Sport people selects a specific game to view highlights video.
- 3: the website displays the selected game's highlight videos.
- 4: The Sport people watch the video and can choose to watch other game highlights.

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SubFlows:

Alternate/Exceptional Flows:

- 1: If there are no video highlights available for the selected game, the website displays a message informing the Sports people that no video highlights are available.
- 2: If there are technical difficulties with the video player or website, the website displays a message informing the Sports people of the issue and suggesting they try again later.

Use Case 38:

| Use Case Name: View Guideline | ID: 38 | Importance Level: High |
|-------------------------------|--------|----------------------------------|
| Primary Actor: Sport people | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Sport people: Want to know how their data will be collected, used, and protected on the basketball website.

UofL: want to provide clear and transparent information to users about their data practices.

Brief Description: This case views the guideline page to learn about how their data will be collected, used, and protected on the basketball website.

Trigger: the user navigates to the guidelines page on the basketball website.

Type: Primary, Essential

Relationships:

Association: The view guidelines page use case is associated with the User actor.

Include:

Extend:

Generalization:

Normal Flow of Events:

- 1: The user navigates to the guidelines page on the basketball page.
- 2: The basketball website the guideline page, which includes information about how user data will be collected, used, and protected.
- 3: The user reads the guidelines and gains an understanding of the basketball website's data practices.

SubFlows:

Alternate/Exceptional Flows:

- 1: If the guidelines page is not available or cannot be accessed, the basketball website displays an error message and the use case ends.
- 2: If the user has questions or concerns about the guidelines, they can contact the basketball website's customer support team for assistance. The user can initiate this by clicking on a "Contact us" on the guideline page.

Use Case 39:

| Use Case Name: View Term and Conditions | ID: 39 | Importance Level: High |
|---|--------|----------------------------------|
| Primary Actor: Sport people | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Sport people: want to know the terms and conditions of using the basketball websites.

UofL: Want to ensure that users are aware of and agree to the terms and conditions of using the basketball website.

Brief Description: This case views the terms and conditions page to learn about the rules and regulations of using a basketball website.

Trigger: the user navigates to the term and conditions page on the basketball page.

Type: Primary, Essential

Relationships:

Association: The View Terms and conditions use case is associated with the User actor.

Include:

Extend:

Generalization:

Normal Flow of Events:

- 1: The user navigates to the terms and conditions page on the basketball website.
- 2: The basketball website displays the terms and conditions page, which includes information about the rules and regulations of using the website.
- 3: The user reads the terms and conditions and gains an understanding of the basketball website's rules and regulations

SubFlows:

Alternate/Exceptional Flows:

- 1: If the terms and conditions page is not available or cannot be accessed, the basketball website displays an error message and the use case ends.
- 2: If the user does not agree to the terms and conditions, they cannot use the basketball website and use case end.

Use Case 40:

| Use Case Name: Delete User Data | ID: 40 | Importance Level: High |
|---------------------------------|--------|----------------------------------|
| Primary Actor: Registered User | | Use Case Type: Detail, Essential |

Stakeholders and Interests:

Register User: want to be able delete their account and personal information from the basketball website.

UofL basketball website: Want to ensure the delete process is secure and adheres to the privacy regulations. Also is required to do so by the state of California and the European Union.

Brief Description: the case describes the step taken by a registered user to request the deletion of their account from the Basketball website.t

Trigger: the registered user's desire to delete their account and personal information from the website

Type: Primary, Essential

Relationships:

| Association: The registered user must be associated with a user account on the website in order on |
|--|
| Include: |
| Extend: |
| • |

SubFlows:

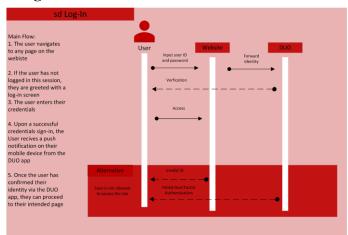
Generalization:

- 1: The registered user navigates to the account setting page.
- 2: The registered user selects the option to delete their account.
- 3: the website presents a confirmation message to the user, explaining that the deletion process is permanent and all personal information will be deleted.
- 4: The registered users confirm their desire to delete their account.
- 5: The websites send a confirmation email to the registered user, with instructions on how to complete the deletion process.
- 6: The registered user follows the instructions in the email to complete the deletion process.
- 7: The website removes all personal information associated with the user's account.

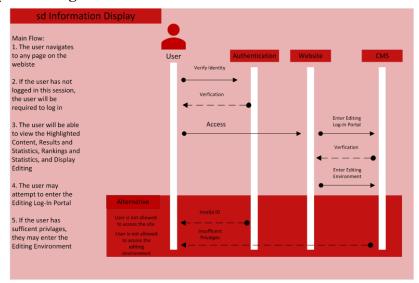
- 1: If the registered user cancels the deletion process at any point, the website should return them to their account settings page without deleting any personal information.
- 2: If the registered user encounters technical issues while attempting to delete their account, they should be able to contact website administrators for assistance.

Sequence Diagrams

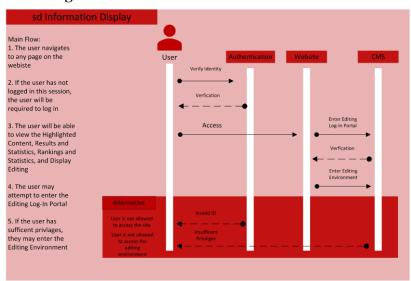
Use Case 1 Sequence Diagram:



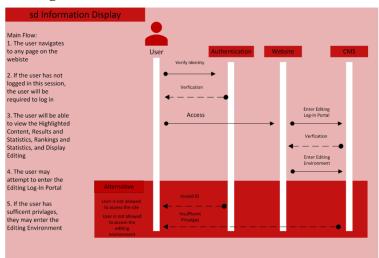
Use Case 2 Sequence Diagram:



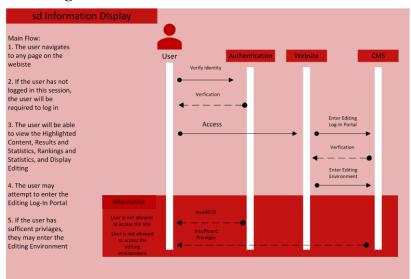
Use Case 3 Sequence Diagram:



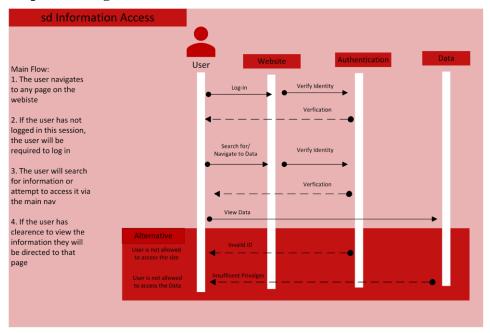
Use Case 4 Sequence Diagram:



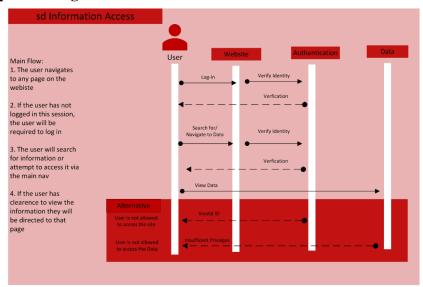
Use Case 5 Sequence Diagram:



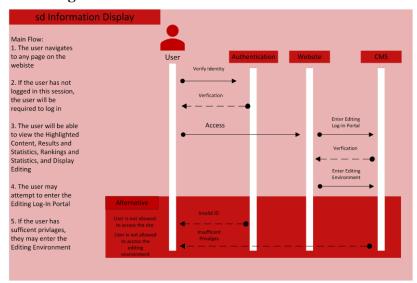
Use Case 6 Sequence Diagram:



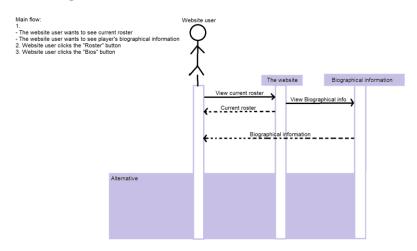
Use Case 7 Sequence Diagram:



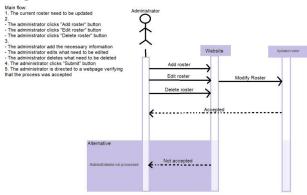
Use Case 8 Sequence Diagram:



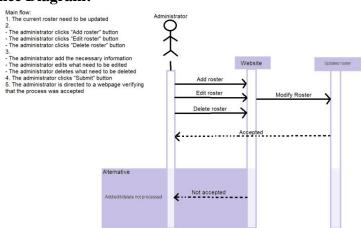
Use Case 9 Sequence Diagram:



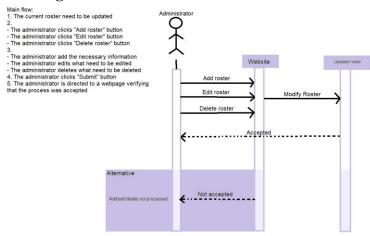
Use Case 10 Sequence Diagram:



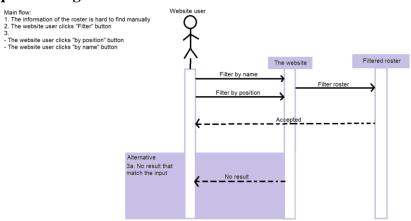
Use Case 11 Sequence Diagram:



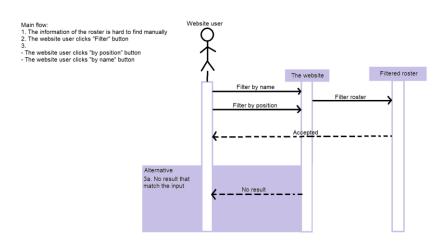
Use Case 12 Sequence Diagram:



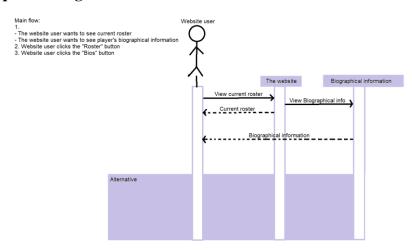
Use Case 13 Sequence Diagram:



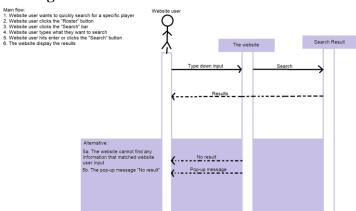
Use Case 14 Sequence Diagram:



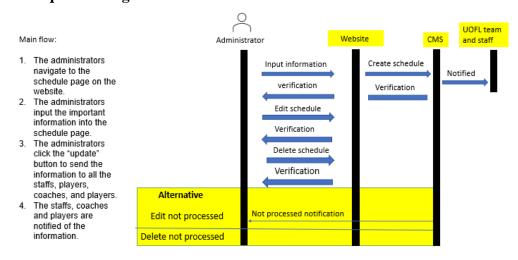
Use Case 15 Sequence Diagram:



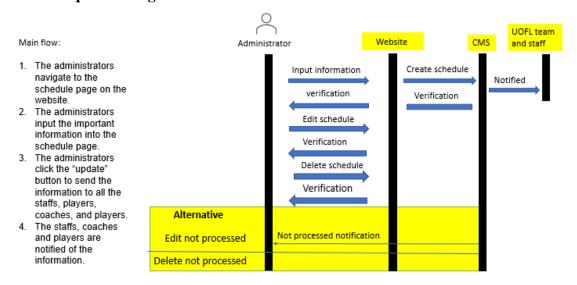
Use Case 16 Sequence Diagram:



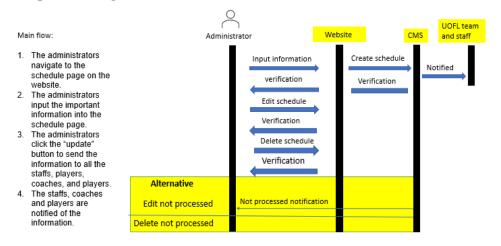
Use Case 17 Sequence Diagram:



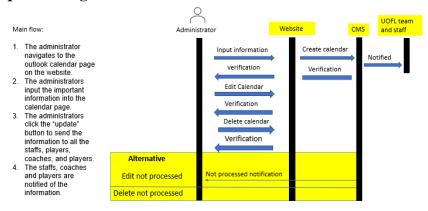
Use Case 18 Sequence Diagram:



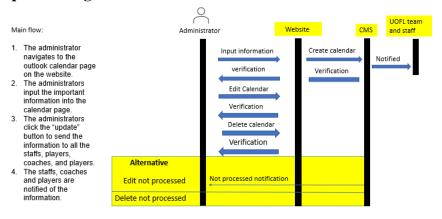
Use Case 19 Sequence Diagram:



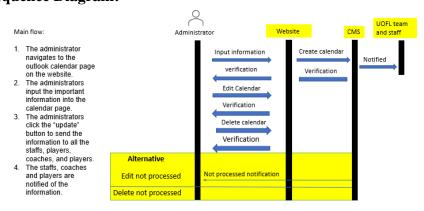
Use Case 20 Sequence Diagram:



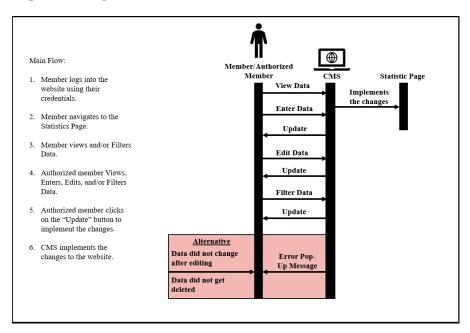
Use Case 21 Sequence Diagram:



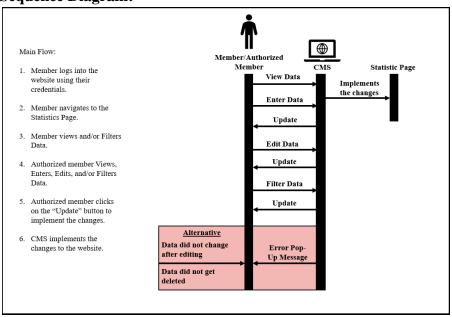
Use Case 22 Sequence Diagram:



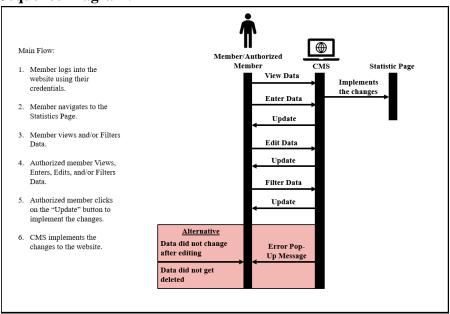
Use Case 24 Sequence Diagram:



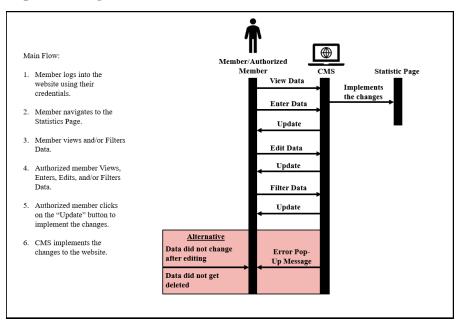
Use Case 25 Sequence Diagram:



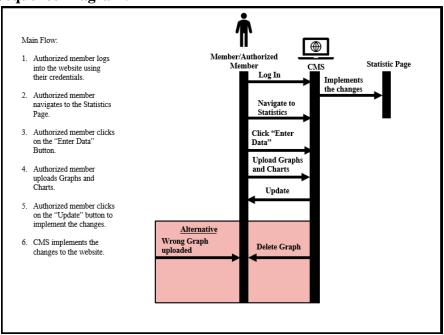
Use Case 26 Sequence Diagram:



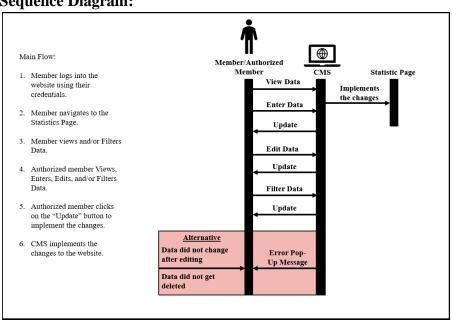
Use Case 27 Sequence Diagram:



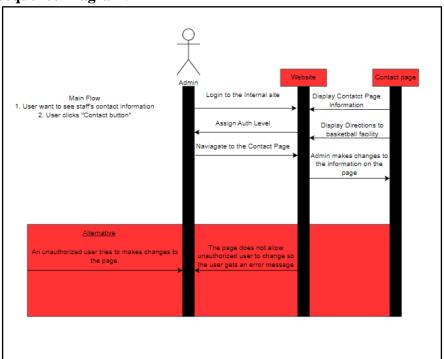
Use Case 28 Sequence Diagram:



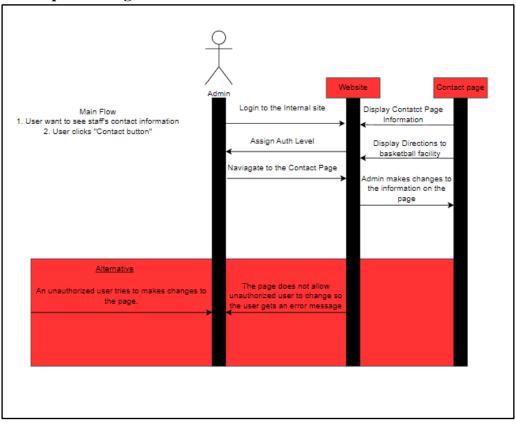
Use Case 29 Sequence Diagram:



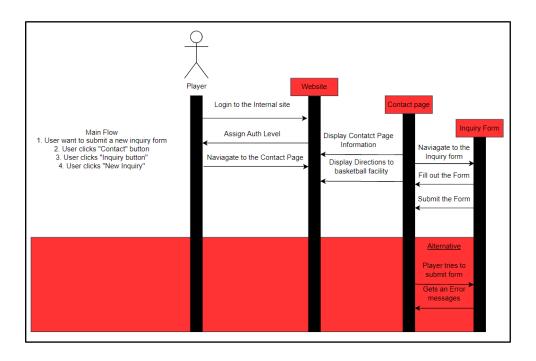
Use Case 30 Sequence Diagram:



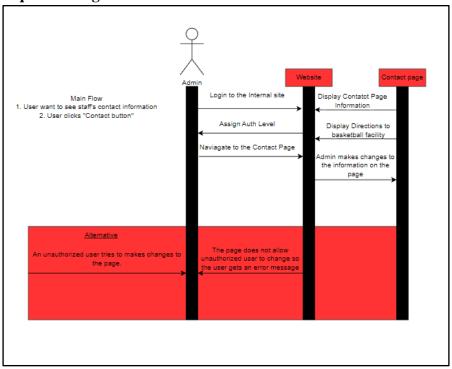
Use Case 31 Sequence Diagram:



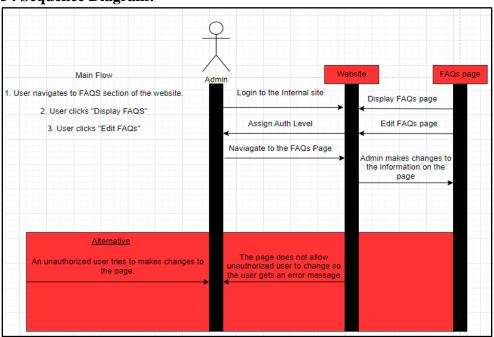
Use Case 32 Sequence Diagram:



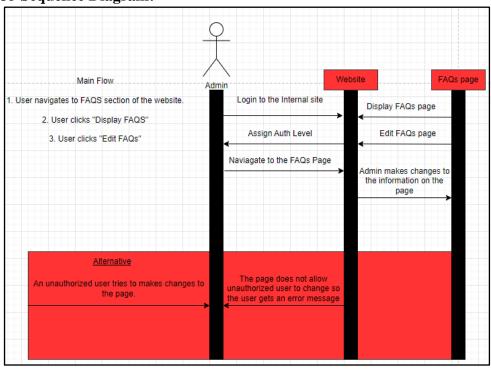
Use Case 33 Sequence Diagram:



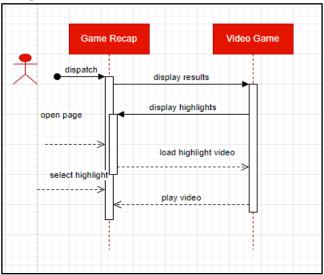
Use Case 34 Sequence Diagram:



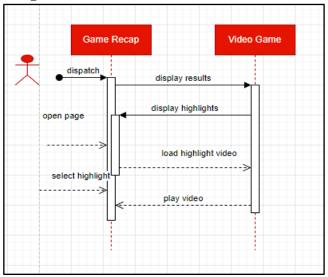
Use Case 35 Sequence Diagram:



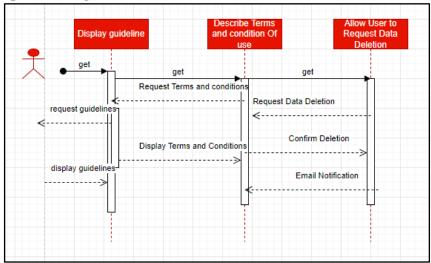
Use Case 36 Sequence Diagram:



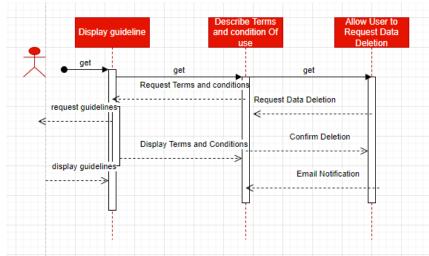
Use Case 37 Sequence Diagram:



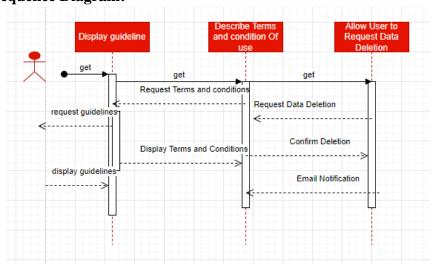
Use Case 38 Sequence Diagram:



Use Case 39 Sequence Diagram:

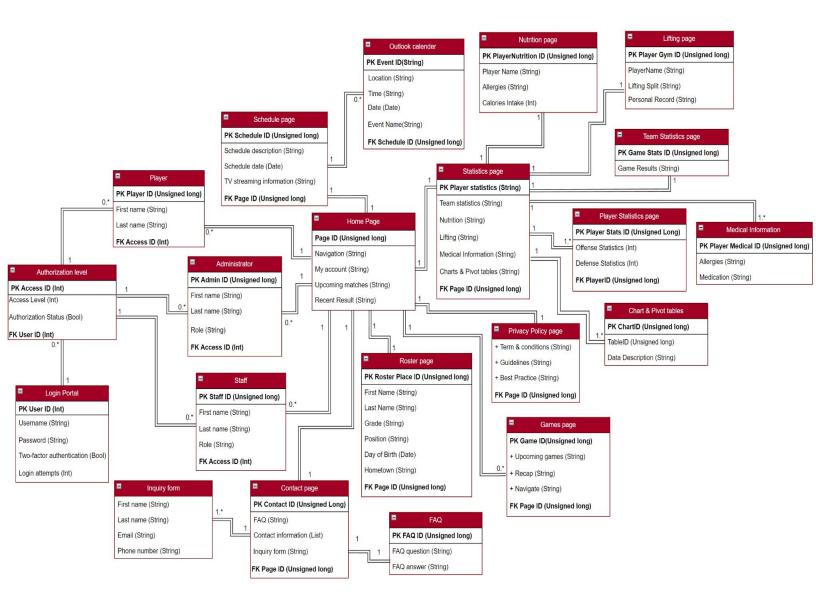


Use Case 40 Sequence Diagram:



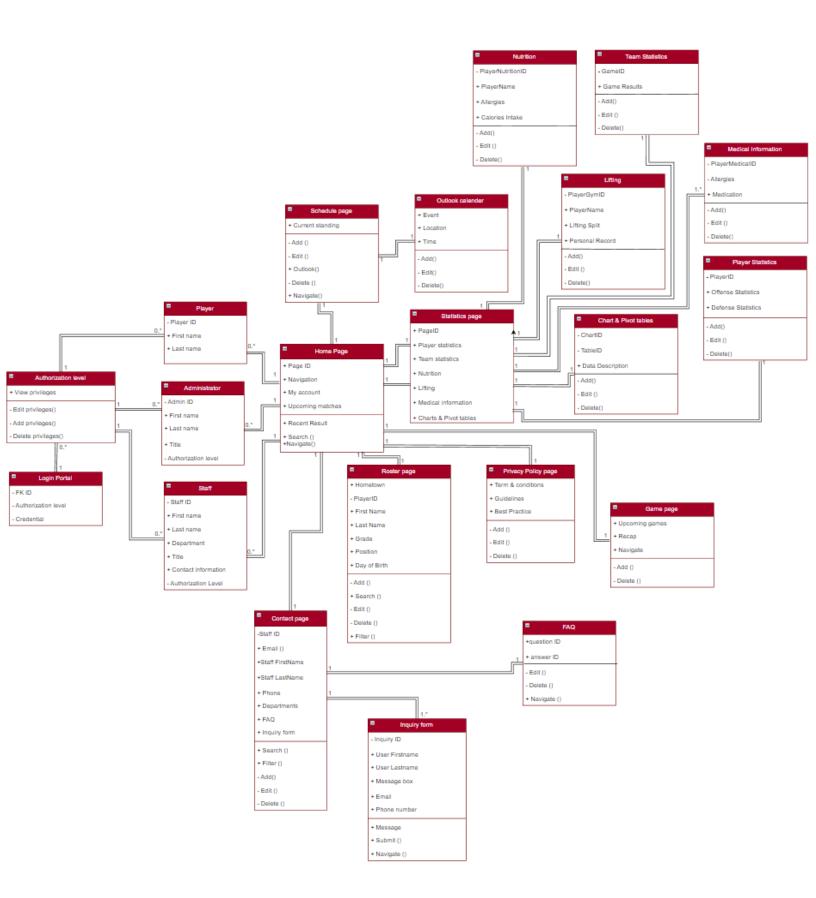
Class Diagram

This class diagram was created for a private website dedicated to men's basketball at the University of Louisville. It was derived using verb-noun analysis. This method analyzes use cases to create attributes from nouns and methods from verbs. The relationships between each class in the diagram helps to illustrate how many attributes and methods are associated between them. Each class is composed of attributes (characteristics) and methods (actions that the object can perform). The two main classes in this diagram are the Website Users (Players, Administrators, and Staff) and the Home page. The Administrator is responsible for managing various aspects of the website, including editing website pages, managing roster, creating schedule, and updating statistics. The players can interact with all the different pages and content on the website on a surface layer, and have more in depth access to their own personal data. Staff have access to all pages and content on the website, however, they are only able to add, edit, or delete data pertaining to their division(Nutrition, Lifting, etc). The Homepage is the center of all navigation and is the landing page for users once they log-in. All users must flow through the homepage so its functionality is of upmost importance.



Database Design

To achieve third normal form in the database design for a university's course registration system, partial dependencies and transitive dependencies were removed. Many tables contained partial dependencies where data about a course could be determined by only the Page ID. Those attributes were removed and then added to the Home page table, which is now in third normal form. Similarly, there were transitive dependencies where non-key attributes depended on other non-key attributes.



Database Definitions

Home Page

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|------------------|----------------------------------|----------------|----------------|---------|
| Page ID | Unique identifier for home page. | Unsigned long | 10 Bytes | Primary |
| Navigation | Navigation | String | 10 Bytes | No |
| My account | My account | String | 9 Bytes | No |
| Upcoming matches | Upcoming matches | String | 15 Bytes | No |
| Recent results | Recent results | String | 12 Bytes | No |

Roster Page

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|------------|----------------------------------|----------------|----------------|---------|
| Player ID | Unique identifier for the roster | Unsigned long | 4 bytes | Primary |
| Grade | Player's grade | String | 4 bytes | No |
| First Name | Player's First Name | Char | 10 bytes | No |

| Last Name | Player's First Name | Char | 10 bytes | No |
|---------------|------------------------|------|----------|----|
| Date of Birth | Player's date of birth | Date | 3 bytes | No |
| Position | Player's position | Char | 10 bytes | No |
| Hometown | Player's hometown | Char | 10 bytes | No |

Schedule page

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|-------------------------|---|----------------|----------------|---------|
| Page ID | Unique identifier for the page. | Unsigned long | 4 bytes | Primary |
| Schedule description | Displays the current standings in the league. | String | 255 bytes | No |
| Schedule date | Navigating the displays. | Date | 3 bytes | No |
| TV streaming info | Streaming information of the games. | String | 255 bytes | No |

Outlook calendar

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|---------------------|--|----------------|----------------|---------|
| Outlook calendar ID | Unique identifier for the outlook calendar ID. | Unsigned long | 4 bytes | Primary |
| Event description | Displays upcoming events. | String | 255 bytes | No |
| Location | location of upcoming events. | String | 255 bytes | No |
| Time | Time for upcoming events. | Integer | 255 bytes | No |

Statistics Page

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|-------------------|---|----------------|----------------|---------|
| PageID | Distinct integer for the page | Unsigned Long | 4 bytes | Primary |
| Player Statistics | Button to navigate to Player Statistics page | String | 255 bytes | No |
| Team Statistics | Button to navigate to to Team Statistics page | String | 255 bytes | No |
| Nutrition | Button to navigate to to Nutrition page | String | 255 bytes | No |

| Lifting | Button to navigate to Lifting Page | String | 255 bytes | No |
|--------------------------|---------------------------------------|--------|-----------|----|
| Medical Information | Button to navigate to to Player page | String | 255 bytes | No |
| Charts & Pivot Tables | Button to navigate to to Player page | String | 255 bytes | No |

Player Statistics

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|--------------------|----------------------------------|----------------|----------------|---------|
| PlayerID | Distinct integer for each player | Unsigned Long | 4 bytes | Primary |
| Offense Statistics | Every Players offense statistics | String | 255 bytes | No |
| Defense Statistics | Every Players Defense statistics | String | 255 bytes | No |

Team Statistics

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|--------------|--|----------------|----------------|---------|
| GameID | Distinct integer to represent each game played | Unsigned Long | 4 bytes | Primary |
| Game Results | Results of the each game played by the team | String | 255 bytes | No |

Nutrition

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|-------------------|---|----------------|----------------|---------|
| PlayerNutritionID | Distinct integer for each players nutrition record | Unsigned Log | 4 bytes | Primary |
| PlayerName | Player's name | String | 255 bytes | Foreign |
| Allergies | Any allergies the might have | String | 255 bytes | No |
| CaloriesIntake | How many calories does the player consume per day | Integer | 4 bytes | No |

Lifting

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|----------------|---|----------------|----------------|---------|
| PlayerGymID | Distinct integer for each players gym record | Unsigned Log | 4 bytes | Primary |
| PlayerName | Player's name | String | 255 bytes | Foreign |
| LiftingSplit | How the players training session is designed | String | 255 bytes | No |
| PersonalRecord | Highest amount of weight lifted by the player on every exercise | String | 255 bytes | No |

Medical Information

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|-----------------|--|----------------|----------------|---------|
| PlayerMedicalID | Distinct integer for each players medical record | Unsigned Long | 4 bytes | Primary |
| Allergies | Any allergies the might have | String | 255 bytes | No |
| Medication | Any medication the players take | String | 255 bytes | No |

Charts & Pivot Tables

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|------------------|--|----------------|----------------|---------|
| PageID | Distinct integer for the page | Unsigned Long | 4 bytes | Primary |
| ChartID | Integer for the charts on the page | String | 4 bytes | No |
| TableID | Integer for the tables on the page | String | 4 bytes | No |
| Data Description | Few sentences to describe each charts and tables | String | 255 bytes | No |

Game Page

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|--|---|----------------|----------------|---------|
| GameID | The primary key identifying a specific game played by the team | Integer | 10 digits | Primary |
| Game Results | The final score and outcome of the game, including win/loss or tie, and the points scored by the team | String | 50 characters | No |
| Navigate A Boolean field indicating whether the navigate is a game or not | | A Boolean | 1 byte | No |

Contact Page

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|------------------------|-------------------------------|----------------------|----------------|---------|
| Contact ID | Contact ID | Unsigned long | 4 bytes | Primary |
| FAQ | Frequently asked questions | String | 5 bytes | No |
| Contact Information | Contact Information | ion String 255 bytes | | No |
| Inquiry Form | y Inquiry Form String | | 11 bytes | No |
| Staff ID | Staff ID | Unsigned long | 7 bytes | No |
| Email | Email | String | 20 bytes | No |
| Staff FirstName | Staff FirstName String Stame | | 25 bytes | No |
| Staff LastName | Staff LastName | Name String 25 by | | No |
| Phone | Phone | String | 10 bytes | No |
| Departments | Departments | String | 15 bytes | No |

Inquiry Form

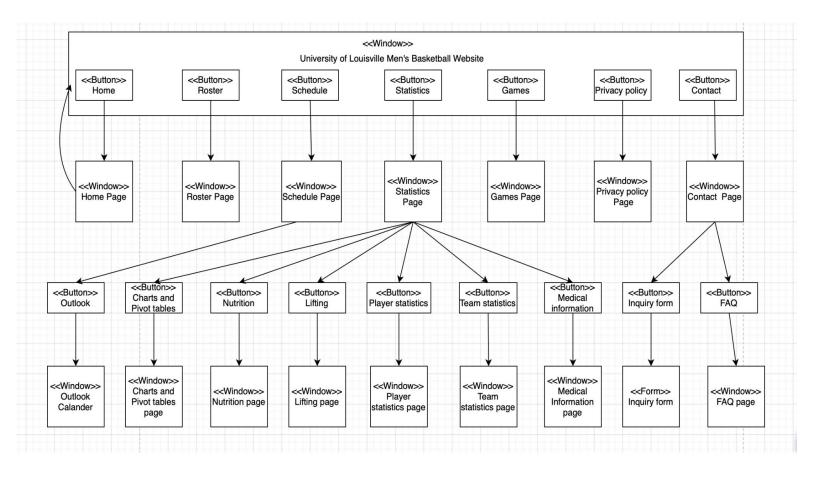
| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|-----------|----------------------|----------------|----------------|-----|
| | | | | |

| Inquiry ID | Inquiry ID | Unsigned long | 10 Bytes | Primary |
|----------------|----------------------|---------------|----------|---------|
| User FirstName | User FirstName | String | 25 Bytes | No |
| User LastName | User LastName String | | 25 Bytes | No |
| Email | Email | String | 20 Bytes | No |
| Phone | Phone | String | 10 Bytes | No |
| Message Box | Message Box | String | 70 Bytes | No |

FAQ

| Attribute | Attribute Definition | Attribute Type | Attribute Size | Key |
|-------------------------|----------------------|----------------|----------------|-----|
| | | | | |
| Question ID Question ID | | Unsigned long | 80 Bytes | No |
| Answer ID Answer ID | | Unsigned long | 80 Bytes | No |

User Interface Navigation Diagram and Screen Layouts



User Interface Descriptions

Outlook calendar can be created.

This page will provide a feature that allows users to create an Outlook calendar of upcoming Men's basketball games. This feature will enable users to stay informed about upcoming games and add them to their personal calendars. This file can then be imported into the user's Outlook calendar, and the user will be able to view the Men's basketball games alongside their other appointments. It will be easy to use, and it will improve the user experience by providing a convenient way to keep track of upcoming games and also help to promote the Men's basketball team and increase attendance at games.

View team's statistics

This page will provide a feature that allows users to view the team's statistics. The statistics will include information such as the team's win-loss record, individual player statistics, and game-by-game results. This will display a page that contains all of the relevant statistical information. The statistics will be presented in a clear and easy-to-read format, with options to filter and sort the data as needed.

Display upcoming games, feature contents

Display information about the next few basketball games that the team will play. This might include the date, time, location, and opponent for each game, as well as any relevant broadcast or ticket information. Highlights important or interesting content related to the team, such as

articles, videos, photos, or interviews. Serves as a gateway to the rest of the website, providing users with a quick snapshot of the team's upcoming schedule and the most compelling or noteworthy content the site has to offer.

Display recent game results and statistics

This section of the website will show the outcomes of recent basketball games, along with relevant statistics such as scores, team standings, and individual player stats. This information can provide visitors with an up-to-date summary of the team's performance and may include links to more detailed game recaps, box scores, and other related content.

The schedule page will be allowed to be created, edited, deleted.

This page allows the user or administrator of the application to have the ability to create, edit, and delete a page that displays a schedule of events, such as games, practices, and other related activities. The page may include various attributes, such as team names, dates, times, locations, and other relevant information. The creation of a schedule page can provide a centralized location for users to view and keep track of upcoming events, which can be especially useful for organizations with a busy schedule of activities.

The Outlook calendar will be embedded, edited, and deleted.

Outlook calendar will be displayed on a web page within the college basketball website. The embedded calendar will likely show upcoming events related to the basketball team, such as games, practices, and other activities. Allowed users may be able to add new events, modify existing events, or delete events that are no longer relevant. Users will have the ability to remove the embedded Outlook calendar from the web page altogether.

View Staff contact information

When a player or staff member wants to get in touch with the team's staff, they can easily do so by navigating to the "Contact" page on the website. On this page, they will find a list of all staff members and their contact information such as phone numbers and email addresses.

Edit contact information

On the contact page, the admin will have access to an "Edit" button which allows them to make changes to the staff information. This feature is particularly useful for keeping the contact page up-to-date and accurate.

Submit general inquiry form

On the contact page, there is an "Inquiry Form" tab that allows users to submit their questions or concerns to the team's staff. This form provides a simple and convenient way for users to reach out and receive assistance or information from the organization.

Directions to basketball facility

Users or staff members who need to meet with a staff member in person can access information about the staff member's office location and schedule on the website. This provides a convenient way to plan and schedule appointments with the staff.

Display FAQs and Edit FAQs

The contact page of a website has a FAQ (Frequently Asked Questions) tab, which allows users to easily access answers to common questions. This can include topics such as game details, event schedules, and health information.

Ranking and Standings

The ability for users to view how the current player and team statistics compare to one another is a valuable feature in sports analytics. This feature allows users to gain insights into how individual player performance contributes to team performance, and vice versa. It also provides a way to assess the overall effectiveness of a team in relation to its competitors.

Information Updates

Users who have an account on a website can easily update their personal information if there are changes, such as a change in their location or their Duo authentication number. This can be done through the user account section of the website.

View team's roster

The "View team's roster" use case is important for the website because it helps to improve team organization and communication. Coaches and team members need to be able to access up-to-date information about the team's roster, including player positions, statistics, and other relevant data. By providing a centralized location for this information, the website helps to ensure that everyone involved with the team has access to the same information.

Add/edit/delete current roster

The ability to add, edit, or delete player information provides flexibility and control for the website administrator, allowing them to quickly and easily make changes to the roster as needed. For example, if a player leaves the team or joins the team mid-season, the administrator can quickly update the roster to reflect the change, ensuring that the information remains accurate for all users of the website.

Filter current roster by name/position

The "Filter roster by name/position" use case is important for coaches and team members because it provides an efficient way of accessing player information. By allowing them to filter the roster by name or position, the use case helps coaches and team members to quickly identify players with specific skills or attributes that can inform game strategy and player development. This use case also saves time and effort by allowing coaches and team members to avoid manually scrolling through the entire roster to find the information they need. This can be especially useful in situations where time is of the essence, such as during a game or practice.

View player's biographical information

The "View player's biographical information" use case is important for coaches and team members because it provides them with valuable information about each player that can inform game strategy and player development. By providing detailed biographical information about each player, the use case helps coaches and team members to understand each player's strengths, weaknesses, and personal background, which can be useful when making decisions about playing time, team dynamics, and other important factors.

Search option

The "Search option for roster page" use case is important for coaches and team members because it helps to improve the efficiency of finding specific information about players. With a large roster of players, it can be time-consuming to find a specific player or piece of information manually. By providing a search function, the use case helps coaches and team members to

quickly find what they need, allowing them to focus on other important tasks, such as game strategy and player development.

View, Add, Edit, Delete Data

View, Add, Edit, and Delete are essential use cases in our system. The View use case allows users to see the data stored in the system, either in a single record or multiple records at once. The Add use case lets users input new data into the system based on their Authorization level and Department. The Edit use case enables users to modify existing records in the system, either by changing one or more fields within a record or by updating multiple records at once. This can be used to correct errors, update information, or make other necessary changes. The Delete use case allows users to remove records from the system, either single or multiple at once, that is no longer needed or were faulty in some way. These use cases are fundamental to effectively managing our site.

Filter Data

Filtering data is important because it allows users to extract specific information from a large dataset. With filtering, users can select specific criteria to locate and display data that meets those criteria. For example, a Nutritionist might want to view past dietary data for a particular player, or they may want to see all players' caloric intake information from a specific time period. By applying a filter, users can focus on the data they need, eliminating the need to sift through irrelevant information manually.

Display and Download Graphs and Charts

The ability to display and download graphs and charts is an important use case because it allows users to visualize and analyze complex data sets in a more accessible and understandable way. By displaying data in a graphical format, users can quickly identify patterns, trends, and anomalies that may not be immediately apparent when looking at raw data. Being able to download or export graphs and charts in a variety of formats allows users to share the data and analysis with others who may not have access to or the context to understand the raw data.

Upcoming Games, Display game recap, and Navigate

The website can feature an easily updatable schedule of upcoming games, allowing fans to plan their attendance accordingly. After each game, the website can showcase game recaps with highlights, key stats, and multimedia content. The website's navigation system can be designed to be responsive, user-friendly, and intuitive, making it easy for fans to access information about the program, including the roster and news updates. By leveraging the latest web design tools and technologies, this page highlights its Men's basketball program and engages fans from all around.

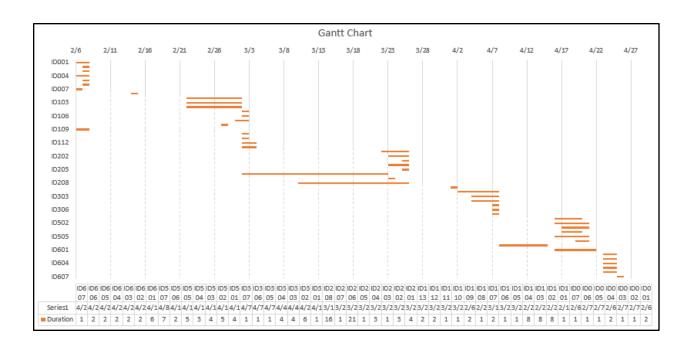
View Guidelines, terms, and conditions, and delete user data

The website will provide a feature that allows users to view guidelines. These guidelines could be related to team policies, player conduct, or any other rules and regulations that users need to be aware of. It provides users with important information that they need to follow to ensure a safe and enjoyable experience when attending Men's basketball games or engaging with the team in any other way. This page also provides a feature that allows users to view terms and conditions. The terms and conditions will be presented in a clear and easy-to-read format, with options to filter and search the information as needed. Lastly, this page provides a feature that allows the administrator to delete user data. This data could include personal information, login

credentials, and any other data that is stored on the website related to users. From there, they will be able to select the data that needs to be deleted and confirm the action. This feature is important to ensure the protection of user privacy and compliance with data protection laws.

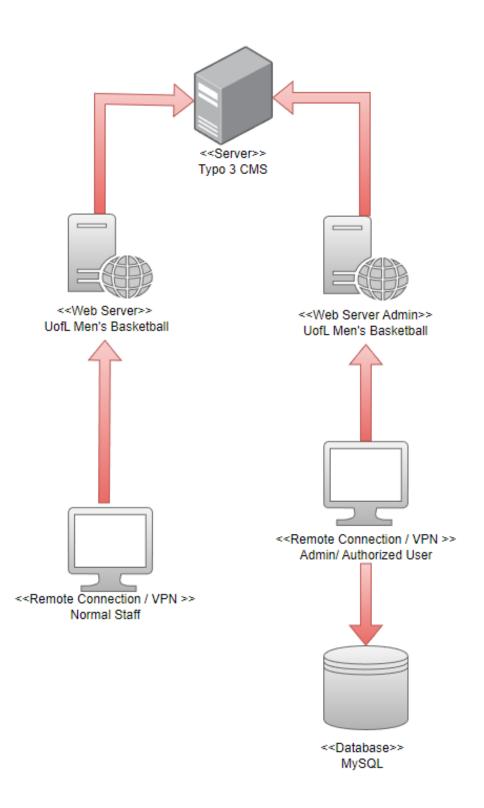
Gannt Chart

| Task ID | Task Name (I2, I2.5, Inception Phase, I3) | Start Date | End Date | Duration (Days) | Task Responsibility | Task Dependencies |
|---------|---|------------|----------|-----------------|---------------------|-------------------------|
| ID001 | System Request | 2/6 | 2/8 | 2 | Thomas | NO |
| ID002 | Narrative | 2/7 | 2/8 | 1 | Khem | NO |
| ID003 | Feasibility Analysis | 2/7 | 2/8 | 1 | Nhan | NO |
| ID004 | Process Models | 2/6 | 2/8 | 2 | Paige | NO |
| ID005 | Vision Document | 2/7 | 2/8 | 1 | Tu | NO |
| ID006 | Agile Stories | 2/7 | 2/8 | 1 | Bhuwan | NO |
| ID007 | Team Charter | 2/6 | 2/7 | 1 | Nhan Thomas | NO |
| ID101 | Iteration 2 | 2/14 | 2/14 | 1 | Everyone | YES (ID001 - ID006) |
| ID102 | System Request | 2/22 | 3/2 | 8 | Thomas | NO |
| ID103 | Narrative | 2/22 | 3/2 | 8 | Khem | NO |
| ID104 | Feasibility Analysis | 2/22 | 3/2 | 8 | Nhan | NO |
| ID105 | System Requirements | 3/2 | 3/3 | 1 | Nhan | NO |
| ID106 | Use Cases | 3/2 | 3/3 | 1 | Khem Thomas | YES (ID104) |
| ID107 | Trace Matrix | 3/1 | 3/3 | 2 | Khem Thomas | YES (ID 104 and 105) |
| ID108 | Architecture Considerations | 2/27 | 2/28 | 1 | Paige | NO |
| ID109 | Process Models | 2/6 | 2/8 | | Paige | NO |
| ID110 | Vision Document | 3/2 | 3/3 | | Tu | NO |
| ID111 | Risk Analysis | 3/2 | 3/3 | 1 | Tu | YES (ID105) |
| ID112 | Gantt Chart | 3/2 | 3/4 | 2 | Bhuwan | NO |
| ID113 | Prototype | 3/2 | 3/4 | 2 | Paige | NO |
| ID201 | System Requirements | 3/22 | 3/25 | 4 | Nhan | NO |
| ID202 | Use Cases | 3/23 | 3/25 | 3 | Thomas | NO |
| ID203 | Trace Matrix | 3/25 | 3/26 | 1 | Nhan Thomas | YES (ID201 and ID202) |
| ID204 | Risk Analysis | 3/23 | 3/26 | 3 | Khem | YES (ID202) |
| ID205 | Gantt Chart | 3/25 | 3/26 | 1 | Bhuwan | NO |
| ID206 | Prototype | 3/2 | 3/23 | 21 | Everyone | NO |
| ID207 | NPV Financial Analysis | 3/23 | 3/24 | 1 | Tu | NO |
| ID208 | Inception Phase | 3/10 | 3/26 | 16 | Everyone | YES(ID102, ID109, ID007 |
| ID301 | System Requirements | 4/1 | 4/2 | | Nhan | NO |
| ID302 | Use Cases | 4/2 | 4/8 | 6 | Khem/Thomas | YES(ID301) |
| ID303 | Use Case Diagrams | 4/4 | 4/8 | 4 | Everyone | YES(ID302) |
| ID304 | Use Case Narative | 4/4 | 4/8 | | Everyone | YES(ID303) |
| ID305 | Prototype | 4/7 | 4/8 | | Everyone | YES(ID302) |
| ID306 | Trace Matrix | 4/7 | 4/8 | 1 | Thomas | YES(ID301, ID302) |
| ID307 | Gantt Chart | 4/7 | 4/8 | 1 | Bhuwan | NO |
| ID501 | Class Diagram | 4/16 | 4/20 | 4 | Everyone | NO |
| ID502 | Database Diagram | 4/16 | 4/21 | 5 | Everyone | YES(ID501) |
| ID503 | Database Definitions | 4/17 | 4/21 | | Everyone | YES(ID502) |
| ID504 | User Interface Navigation Screen Layou | 4/17 | 4/20 | 3 | Nhan | NO |
| ID505 | Prototypes | 4/16 | 4/21 | 5 | Paige | NO |
| ID506 | Gantt Chart | 4/19 | | | Bhuwan | NO |
| ID507 | Iteration 3 | 4/8 | | | Everyone | NO |
| ID601 | Iteration 5 | 4/16 | | | Everyone | NO |
| ID602 | Database Diagram | 4/23 | | | Paige | YES(ID603) |
| ID603 | Class Diagram | 4/23 | | | Everyone | NO |
| ID604 | Sequence Diagrams | 4/23 | | | Everyone | NO |
| ID605 | Design Procedures for Security | 4/23 | | | Bhuwan | NO |
| ID606 | Physical Architecture Design | 4/23 | | | Nhan | NO |
| | Gantt Chart | 4/25 | | | Bhuwan | NO |



Physical Architecture Design

The physical architecture design of the internal basketball website provides an overview of how the website functions from both the users/staff and system administrator/authorized staff perspectives. Users/normal staff will access the website through their personal computers, which communicate with the Men's UofL Basketball web server to view website content. In contrast, system administrator/authorized staff will access the TYPO3 CMS through a separate VPN, allowing them to securely manage website content and configuration. The system administrator/authorized staff can also access the database, which contains all the data necessary for the website's features to function properly. By separating the users/normal staff and administrator/authorized staff, this design ensures that user experience is not impacted by irrelevant information and that website content remains secure and organized.



Design Procedures for Security

The site we have designed for the University of Louisville's Basketball team is completely internal, meaning only people associated with the basketball team will have access to the site. When creating this internal site, Security should be one of the most important factors if not the most important. The CMS we proposed, TYPO3, offers a variety of security features that are necessary for this site.

- Access Control: Typo3 provides granular control over user permissions and access rights, allowing administrators to restrict access to certain areas of the site or to specific functions.
 Access Control was one of our key points when designing this internal site. We will implement access control by creating three types of user accounts:
 - I. Player: A Player account will only have permission to "View" pages such as player stats, team stats, schedule, etc. They will also have the ability to make an Inquiry form and request changes to their medical information.
 - II. Staff: Staff accounts have varying permissions based on the department they are associated with. Nutritionists, for example, are able to view, edit, and add information solely on the Nutrition page, while coaches have the ability to view, edit, and add information on all Statistics pages, including Charts & Pivot Tables, Lifting, Player Statistics, and Team Statistics but not in Nutrition and Medical pages.
 - III. **Admin:** An Admin account will have all privileges within the site. These accounts will only be available to very few users. For example, the head coach, and IT Personals.
- 2. Two-Factor Authentication: Typo3 supports two-factor authentication, which adds an extra layer of security to user logins by requiring a code in addition to a password.

The University of Louisville already uses a Two-Factor Authentication app called DUO.

Upon first login, users are required to set up their accounts and connect their phones to the account. After the first log-on, the app sends a push notification to the user's phone, which they must respond to by reacting to the notification.

3. Security Extensions: Typo3 has a variety of security extensions that can be used to further enhance the security of the site, including security scanners, firewall modules, and intrusion detection systems.

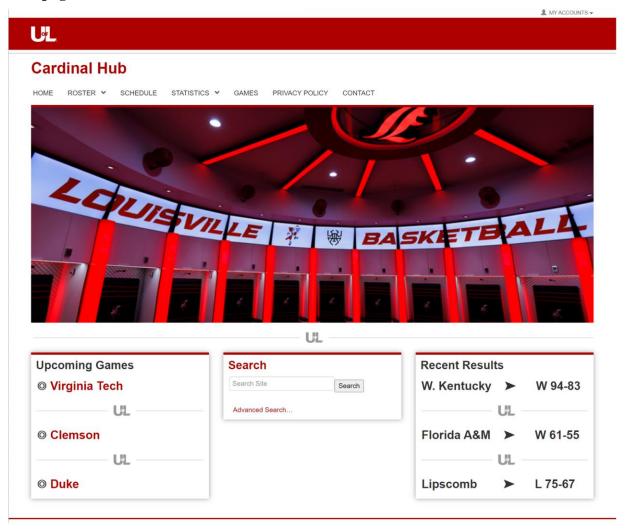
Security scanners help identify vulnerabilities that could be exploited by attackers, while firewall modules protect against attacks by filtering and blocking traffic from known malicious sources. Intrusion detection systems detect attacks in progress, giving administrators the opportunity to respond quickly and mitigate any potential damage.

Prototypes

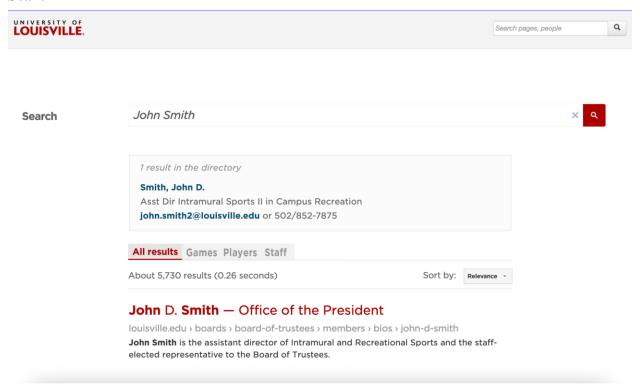
Log-In



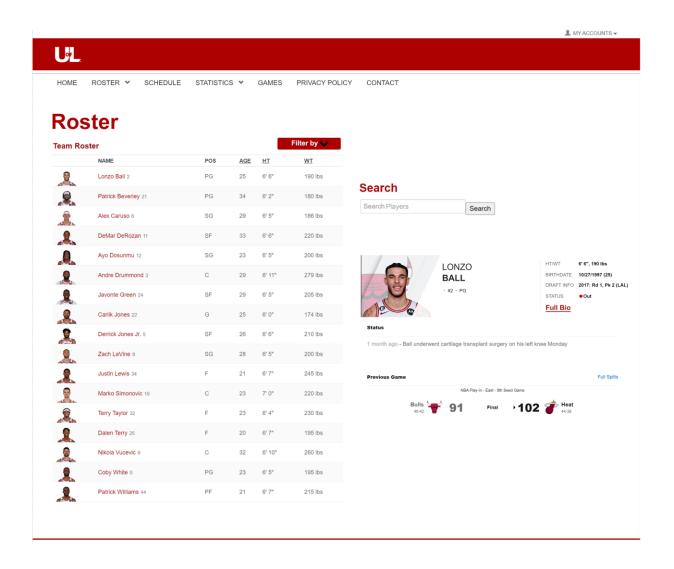
Homepage



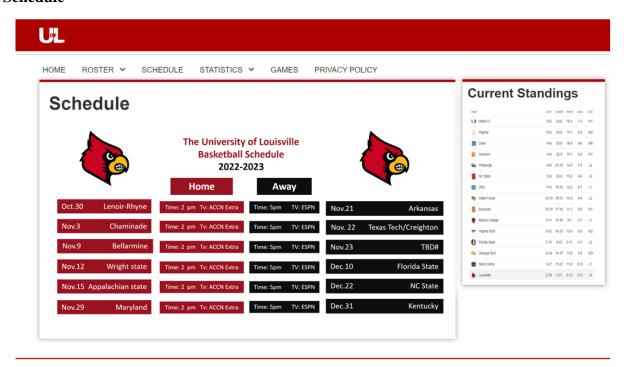
Search



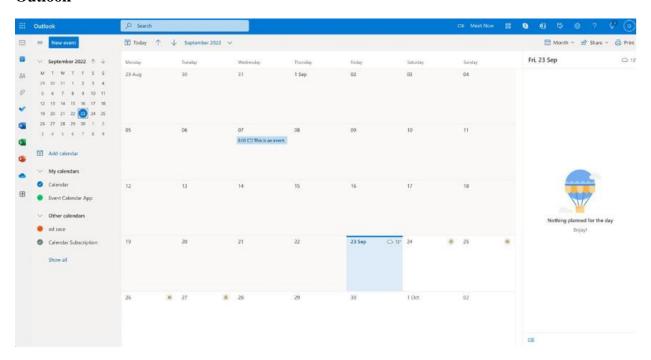
Roster



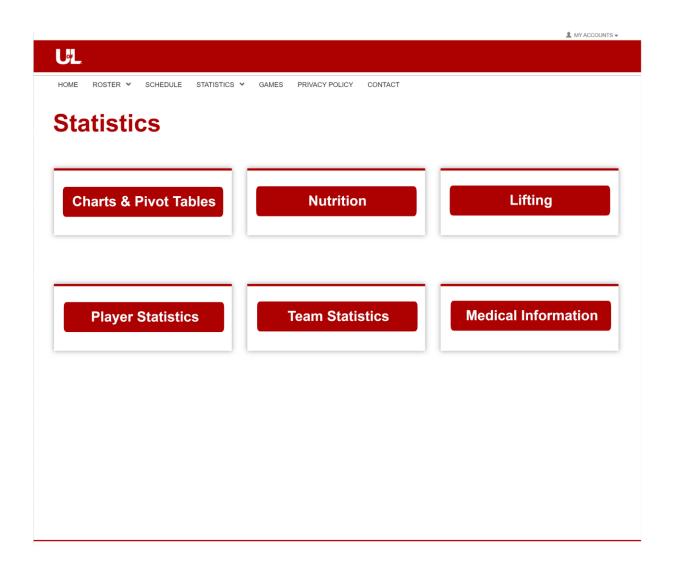
Schedule



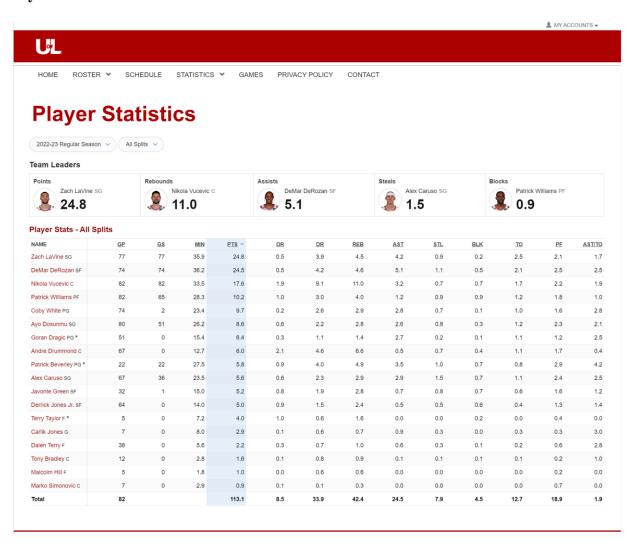
Outlook



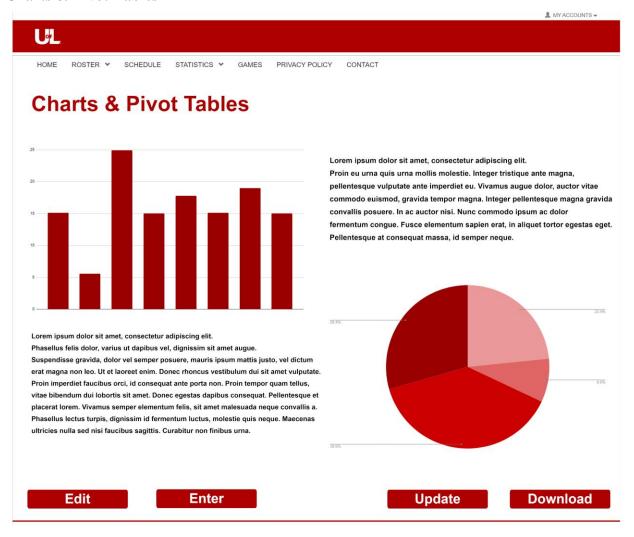
Statistics Home



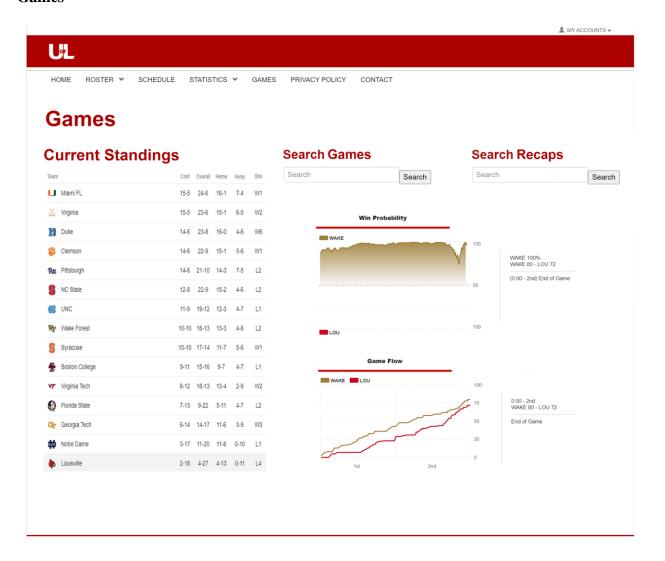
Player Statistics



Charts & Pivot Tables



Games



Guidelines

MY ACCOUNTS

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HOME ROSTER ♥ SCHEDULE STATISTICS ♥ GAMES PRIVACY POLICY CONTACT

Guidlines

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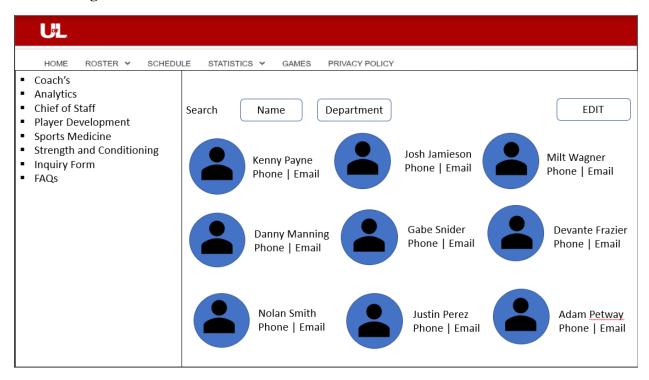
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Table of Contents

- > Best Practices
- > Medical Information
- > HIPPA
- > Staff Guidlines

Contact Page



Inquiry

