

Software Requirements Specification for Sandlot: Softball League Scheduling and Management Web Application

Team 29

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Revision History

Date	Version	Notes
Oct. 7, 2024	1.0	TA Feedback
Oct. 11, 2024	1.1	Rev0

1 Purpose of the Project

1.1 User Business

The McMaster GSA softball league's current scheduling and management platform is used from the 1st week of May until the last week of August. The website creates a season schedule based on the 30-40 teams that are entered into the league by their respective captains. If scheduling conflicts or weather concerns occur, games are able to be rescheduled by the team captains based on a team's availability. For the many users interacting with the platform, individuals need an intuitive interface that is robust and will allow administrators to easily maintain the system, especially when the website experiences problems. The current platform lacks the capabilities to provide these functionalities to the players, captains, and commissioners. With this project, our team is provided an opportunity to apply our software engineering background to fulfill a desired need for an upgrade to an outdated website.

1.2 Goals of the Project

Our goals with the project are to recreate everything the current website solution does, with a better user interface and a more stable foundation, so that future site admins and league commissioners don't have to deal with the solution breaking or captains/players not understanding how to use the tool. We also plan to add features such as player accounts to help players view their schedules, and a standings viewer to see league scores.

2 Stakeholders

2.1 Client

The client of the project, Dr. Jake Nease, is an active participant in the McMaster GSA softball league and understands the difficulties associated with the current scheduling and management platform. The stability and maintainability concerns with the website are driving factors that contribute to the need for an improved interface.

2.2 Customer

The customers for this project include the players, captains, commissioners, umpires, and other individuals that may interact with the website. These individuals require an easy-to-use platform that allows them to seamlessly enter the website and view the season schedule, whether or not they have an account created.

2.3 Other Stakeholders

Future website administrators and maintainers have an interest in the maintainability, learnability of administrative functions, and the robustness of the website.

2.4 Hands-On Users of the Project

- | | |
|--------------------|---|
| Players | <ul style="list-style-type: none">– User creates an account, logs in to their account, and requests to join a team.– User needs to know their login details, the team they will join, game details from looking at the schedule. |
| Captains | <ul style="list-style-type: none">– User creates an account, logs in to their account, creates a team, and reschedules a game.– User needs to know their login details, game details from looking at the schedule, days the team is free to reschedule a game. |
| Commissioners | <ul style="list-style-type: none">– User creates an account, logs in to their account, can send league alerts, and assign teams to divisions.– User needs to know their login details, and what alerts they may need to send to the league. |
| Umpires | <ul style="list-style-type: none">– User needs to view the schedule for the game they will be the umpire for.– User needs to know the game details from looking at the schedule. |
| Project Supervisor | <ul style="list-style-type: none">– User will help gather stakeholders to test the product, meet with the team to discuss the project, provide insight to requirements desired in the product. |

- User needs to know how to contact the team, which stakeholders can be contacted to test the product, what requirements are needed to satisfy the needs of the project.

2.5 Personas

1. Josh Brown is a 26 year old player that has recently joined the McMaster GSA softball league and he is unfamiliar with how the website functions. As someone who understands how technology works though, he is able to navigate the interface quite well. However, some links he interacts with give him a 404 page not found error. This aggravates Josh as he just wants to understand certain information about the softball league, but the website isn't able to provide it to him because the links on the website are faulty or other issues occur. Josh, along with many others who are new to the league, may be technically literate, but due to the structural integrity of the system, there are many times where users may not be able to access certain information because there is either an error or a link that leads to nothing.
2. Ken Phillips is a 58 year old captain for his McMaster GSA softball team and he has been using the current website for as long as he can remember. Although he is not too familiar with how technology works, he is still able to navigate and utilize the website's functionalities as he has used them for quite some time now. Unfortunately, with the creation of the new website, even though the website has the same existing functions as the old system, he is not as familiar with how to navigate the interface the same way he has before. Ken and other individuals that may be comfortable and familiar with the current outdated platform, need the new website to be easy-to-use, especially for people that are either older or not as technically literate.

2.6 Priorities Assigned to Users

- | | |
|-----------|-----------------|
| Key Users | – Players |
| | – Captains |
| | – Commissioners |

- | | |
|-----------------|-----------|
| Secondary Users | – Umpires |
|-----------------|-----------|

Unimportant Users – Spectators

2.7 User Participation

Mainly user participation will be for testing the product. This can be done by many users included below:

- Players
- Captains
- Commissioners
- Umpires
- Spectators
- Project Supervisor

Additionally, the project supervisor will provide valuable insight about the existing system and its capabilities. These will be used to improve the overall design that will be implemented in the new system.

2.8 Maintenance Users and Service Technicians

The team will be maintaining the product over the development phase until March 2025. Knowledge transfer will then be handed over to the project supervisor along with documentation and other information to aid in the maintaining of the new platform after development is completed.

3 Mandated Constraints

3.1 Solution Constraints

3.2 Implementation Environment of the Current System

Requirement #: **0** Requirement Type: **0** Event/BUC/PUC #: **0**

Description: **The system must be accessible by the internet.**

Rationale: **Users must be able to access all functionalities from their device.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Users can interact with the system when connected to the internet.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #:	0	Requirement Type:	0	Event/BUC/PUC #:	0
Description:	The system must implement a database.				
Rationale:	The system must store information including user login information, the season schedule, team composition, player/captain/commissioner contact information, and game scores.				
Originator:	Nicholas Fabugais-Inaba				
Fit Criterion:	The system is able to store and access information pertaining to the league.				
Customer Satisfaction:	5	Customer Dissatisfaction:	5		
Dependencies:	None	Conflicts:	None		
Materials:					
History:					

3.3 Partner or Collaborative Applications

Not applicable.

3.4 Off-the-Shelf Software

Not applicable.

3.5 Anticipated Workplace Environment

Not applicable.

3.6 Schedule Constraints

Requirement #: **0** Requirement Type: **0** Event/BUC/PUC #: **0**

Description: **The project shall be completed before the final demo.**

Rationale: **Project deadline is non-negotiable and the product must be completed before the final presentation.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **The product is successfully completed before the final demo.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

3.7 Budget Constraints

Requirement #: **0** Requirement Type: **0** Event/BUC/PUC #: **0**

Description: **The project shall be subject to a \$750 budget.**

Rationale: **Resources required for the project must be under a sum total of \$750.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **The total amount spent for the project is under \$750.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

3.8 Enterprise Constraints

Requirement #:	0	Requirement Type:	0	Event/BUC/PUC #:	0
Description:	The product shall be made available to the project supervisor.				
Rationale:	After project completion, the project supervisor will have access to the product for future use.				
Originator:	Nicholas Fabugais-Inaba				
Fit Criterion:	The project supervisor must be able to access all functionalities of the product.				
Customer Satisfaction:	5	Customer Dissatisfaction:	5		
Dependencies:	None	Conflicts:	None		
Materials:					
History:					

4 Naming Conventions and Terminology

4.1 Glossary of All Terms, Including Acronyms, Used by Stakeholders involved in the Project

Sandlot: Management software for a softball baseball league, the software that is the subject of this document.

Player: A person who plays on a baseball team in the league. They have an account on Sandlot and are a member of a team.

Captain: A person who plays and leads a baseball team in the league. They are in charge of defining the team's information on Sandlot.

Team: A name, list of players and record of match scores that represents a baseball team defined by a captain. Teams are stored on a database on Sandlot.

Commissioner: A person who manages the league. They may also play in the league. Commissioners have top level permissions on Sandlot, they may edit any team information like player list and past scores.

5 Relevant Facts And Assumptions

5.1 Relevant Facts

- The current solution is a website with url <https://www.gsasoftball.ca/>
- There are currently 25-32 teams in the league playing an average of 100 games a month.
- Many users are older and require an intuitive UI to enjoy using the site

5.2 Business Rules

Not applicable

5.3 Assumptions

- All users will understand how to log in to a website using a username and password.
- Users will know how a softball league is structured and how it functions.

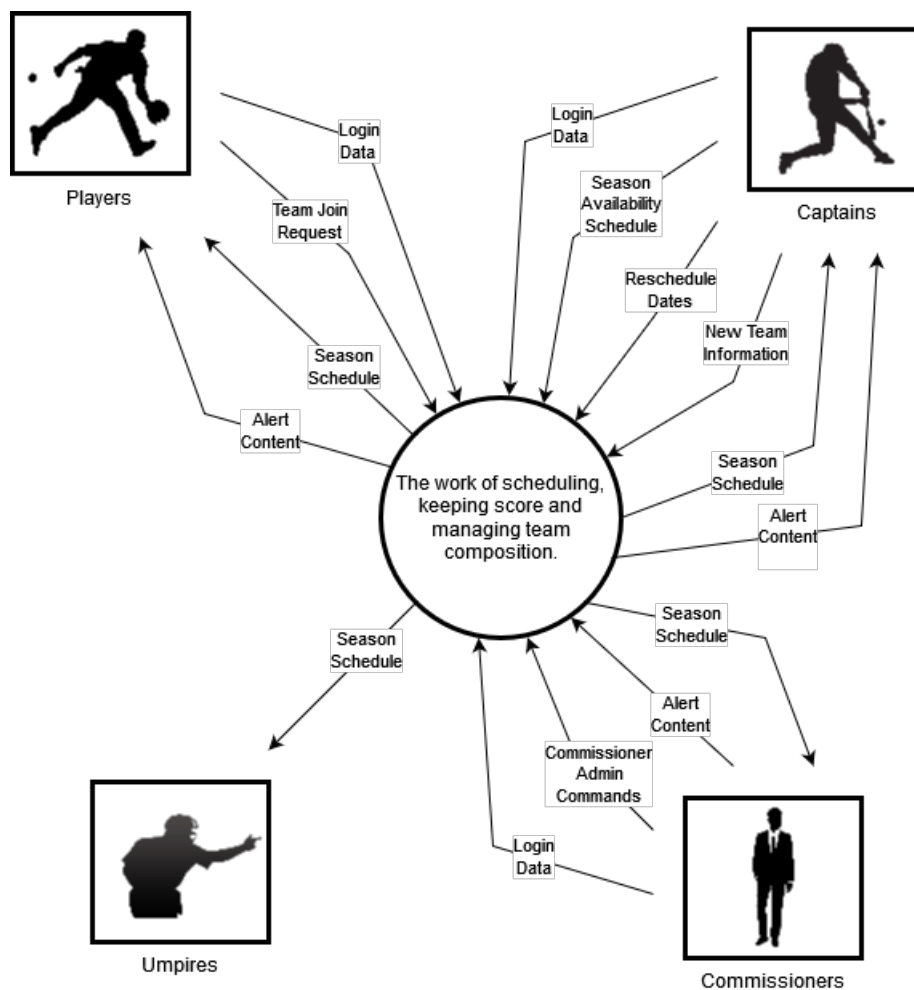
6 The Scope of the Work

6.1 The Current Situation

It is important to note that we will not be using the existing solution other than as a feature guide. The current solution is hosted on the web and is written in PHP. The current login system does not use a username and password.

Only captains can log in, and they are emailed an ASCII code which they use to access the website to schedule games and submit scores. Commissioners can login in the same way as captains and can modify schedules, scores and team compositions as needed. Currently the standings functionality, which would allow users to view the scores of played games, is not working.

6.2 The Context of the Work



6.3 Work Partitioning

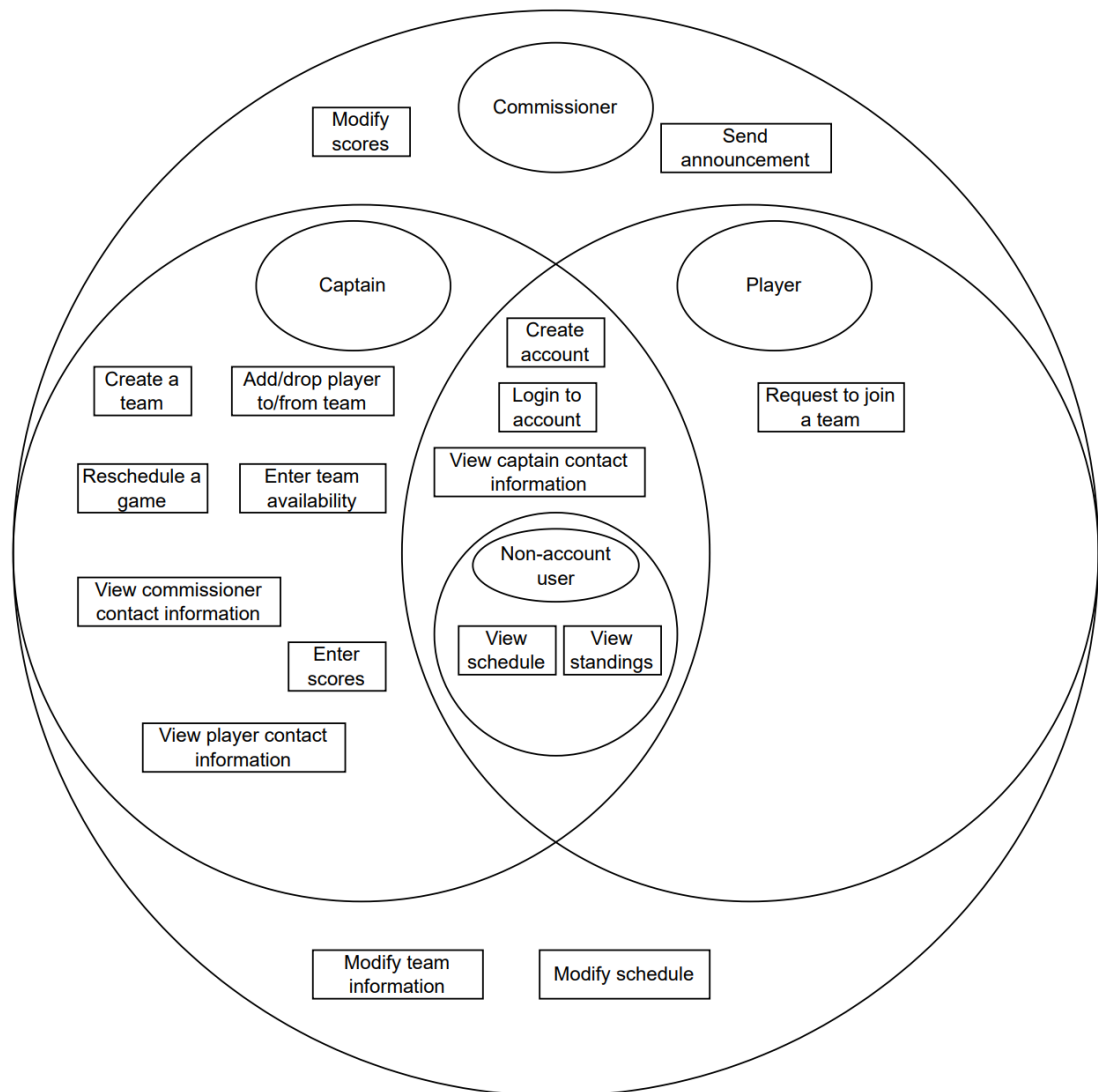
Event Name	Input and Output	Summary of BUC
1. User creates an account	Account Data (in)	A player, captain or commissioner enters in a username and password along with account details including their name, email, phone number, and gender.
2. User logs in	Login Data (in)	A player, captain or commissioner enters their username and password and the system grants them access to their account.
3. Captain creates a team	New Team Information (in)	At the start of the season, captains can enter team information such as a team name. This registers a new team.
4. Player requests to join a team	Team Join Request (in)	At the start of the season, players are not assigned to a team and must request to join one.
5. Season starts and availability entered	Season Availability Schedule (in)	Record the team captain's entered availability schedule. This will be used to generate the league schedule.
6. Reschedule request entered	Reschedule Dates (in)	Record availability dates the requesting captain entered as alternates for the planned date.
7. Reschedule request received	Reschedule Dates (out)	Send the dates the captain who sent the request submit to the other team's captain.
8. User navigates to schedule section	Season Schedule (out)	Display stored season schedule (if available) to site user.
9. User navigates to contact information	Contact Information (out)	Display stored contact information (requires specific access) to site user.
10. User submits alert	Alert Content (in)	Commissioners can submit custom alerts to send to any chosen users.
11. System sends alert	Alert Content (out)	Send the alert to any user the alert must reach.
12. Commissioner inputs admin command	Commissioner Admin Commands (in)	Commissioners have the ability to overwrite team composition and schedule.

6.4 Specifying a Business Use Case (BUC)

Not applicable as events are simple and described above in the work partitioning table.

7 Business Data Model and Data Dictionary

7.1 Business Data Model



7.2 Data Dictionary

Insert your content here.

8 The Scope of the Product

8.1 Product Boundary

Insert your content here.

8.2 Product Use Case Table

Insert your content here.

8.3 Individual Product Use Cases (PUC's)

Insert your content here.

9 Functional Requirements

9.1 Functional Requirements

Requirement #: **01** Requirement Type: **0** Event/BUC/PUC #: **7**

Description: **System must display the season schedule and standings to all users without login.**

Rationale: **Users who don't have a login (e.g. spectators and umpires) will still need to access the schedule and standings, so it should be visible to all.**

Originator: **Alex Verity**

Fit Criterion: **The schedule and standings shall be viewable without entering a username and password.**

Customer Satisfaction: **3**

Customer Dissatisfaction: **3**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **02** Requirement Type: **0** Event/BUC/PUC #: **2**

Description: **Captains should be able to create a team which is added to the Sandlot database.**

Rationale: **Teams are defined by captains, in charge of scheduling and recording scores. Captains must be able to define teams at the start of the season.**

Originator: **Alex Verity**

Fit Criterion: **When captains make a team, it should be added to the Sandlot database.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **03** Requirement Type: **0** Event/BUC/PUC #: **2**

Description: **Users should be able to create a new account by providing the necessary information.**

Rationale: **An account structure is necessary to be able to change what a user of the system can see/do based on who they are. For example, a player and captain should not be able to see/do the same things or 2 players from different teams should not be able to see/do the same things.**

Originator: **Casra Ghazanfari**

Fit Criterion: **When a user provides the necessary information, an account should be created from that information**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **04** Requirement Type: **0** Event/BUC/PUC #: **2**

Description: **Users should be able to change their account information by providing the necessary information.**

Rationale: **User information does not stay the same forever, therefore the system should have a way for the user to change their information if it ever changes.**

Originator: **Casra Ghazanfari**

Fit Criterion: **When a user provides the necessary information, their account information should change.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **05** Requirement Type: **0** Event/BUC/PUC #: **2**

Description: **Users should be able delete their account by providing the necessary information.**

Rationale: **If a user wants to quit the league they should be able to delete any of their personal information at any time.**

Originator: **Casra Ghazanfari**

Fit Criterion: **When a user provides the necessary information, their account should be deleted.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **06** Requirement Type: **0** Event/BUC/PUC #: **8,9**

Description: **Commissioners should be able to send alerts with custom information to a specified user or group of user.**

Rationale: **Commissioners have the need to notify league members with any new information relevant to the league.**

Originator: **Alex Verity**

Fit Criterion: **When a commissioner enters information to alert league members, the league members receive a notification with the relevant information.**

Customer Satisfaction: **2**

Customer Dissatisfaction: **3**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **07** Requirement Type: **0** Event/BUC/PUC #: **9**

Description: **Commissioners should be able to update the team information of any team, including player list and scores.**

Rationale: **Commissioners have the need to easily fix any errors made by users.**

Originator: **Alex Verity**

Fit Criterion: **When a commissioner enters team information to be changed, the changes are made in the database.**

Customer Satisfaction: **2**

Customer Dissatisfaction: **2**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **08** Requirement Type: **0** Event/BUC/PUC #: **3**

Description: **Before the season starts, captains must have the option to give a list of days over the season marking their team's availabilty.**

Rationale: **Each team will have members who may only be free on certain days of the season. This availability will inform the season schedule so that teams will have as many people attending each game as possible.**

Originator: **Alex Verity**

Fit Criterion: **Before the seaon starts, captains shall be able to view the option to enter their availability and once entered, it shall be stored by the system.**

Customer Satisfaction: **3**

Customer Dissatisfaction: **3**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **09** Requirement Type: **0** Event/BUC/PUC #: **3**

Description: **Once the season start due date is reached, all captain's availability will be used to generate a season schedule.**

Rationale: **Once the season starts all users need to know the schedule to know when and where to go to games.**

Originator: **Alex Verity**

Fit Criterion: **When the season start due date is reached, a season schedule shall be displayed on the website.**

Customer Satisfaction: **4**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **10** Requirement Type: **0** Event/BUC/PUC #: **6**

Description: **Captains must be able to request a reschedule for upcoming games as long as the game is at least 24 hours in the future. Rescheduling involves giving a list of alternate dates which are sent to the opposing team's captain to choose a date and accept.**

Rationale: **Rescheduling is a core feature of the product, and schedule changes less than a day from when they are to occur may be too little warning for players to prepare for.**

Originator: **Alex Verity**

Fit Criterion: **A captain shall have the option to request a reschedule for games only more than 24 hours in the future.**

Customer Satisfaction: **4**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **11** Requirement Type: **0** Event/BUC/PUC #: **3**

Description: **When receiving a reschedule request from another captain, the system should prompt the captain to either accept the reschedule request and choose a date or deny the request.**

Rationale: **Sometimes a captain may not be able to reschedule a game due to prior commitments or some other external factors. Therefore there should be both an option to accept or deny any reschedule request. or deny**

Originator: **Casra Ghazanfari**

Fit Criterion: **A captain shall have the option to either accept or deny any request to reschedule a game.**

Customer Satisfaction: **4**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **12** Requirement Type: **0** Event/BUC/PUC #: **3**

Description: **When a captains reschedule request is either accepted or denied the system should notify them about about the outcome.**

Rationale: **It is important that the sender of the reschedule request is informed about the status of the request quickly**

Originator: **Casra Ghazanfari**

Fit Criterion: **A captain who sent a reschedule request shall be notified on the status of the request when it is responded to.**

Customer Satisfaction: **4**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **13** Requirement Type: **0** Event/BUC/PUC #: **9**

Description: **Captains should be able to update the team information of only their team, including team name, player list and scores.**

Rationale: **Captains are representatives of their teams and should have the ability to control information about their team on a high level. However, they should not have the same power as the commissioner and therefore should only be able to change information related to their team.**

Originator: **Casra Ghazanfari**

Fit Criterion: **A captain shall have the ability to update team information.**

Customer Satisfaction: **4**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **14** Requirement Type: **0** Event/BUC/PUC #: **9**

Description: **Users should not be able to update the team information of any team, including team name, player list and scores.**

Rationale: **Users are generally low level users and should not have the ability to make changes that affect their whole team.**

Originator: **Casra Ghazanfari**

Fit Criterion: **A user shall not have the ability to update team information.**

Customer Satisfaction: **4**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **15** Requirement Type: **0** Event/BUC/PUC #: **9**

Description: **The score of a game should not be able to be updated until after the it is completed.**

Rationale: **The score of a game is unknown until it is completed having the option to update the score of the game before it is completed is useless at best and harmful at worst.**

Originator: **Casra Ghazanfari**

Fit Criterion: **The ability to update the score of a game will only display after the game has been played.**

Customer Satisfaction: **4**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **16** Requirement Type: **0** Event/BUC/PUC #: **2,3**

Description: **Non-commissioner accounts can only be a member of one team.**

Rationale: **To ensure competition is fair and to avoid captains accidentally making extraneous teams, users are limited to one team each.**

Originator: **Alex Verity**

Fit Criterion: **Once a team is created by a captain or a team is joined by a player, they shall not be allowed to use the functionality to create a team or join a team.**

Customer Satisfaction: **2**

Customer Dissatisfaction: **2**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

10 Look and Feel Requirements

10.1 Appearance Requirements

Requirement #: 17 Requirement Type: 0 Event/BUC/PUC #: xx	
Description: All buttons and user input elements should stand out with distinctive colours or borders and have feedback.	
Rationale: User input should be clear to all users so users know where to enter inputs.	
Originator: Alex Verity	
Fit Criterion: Buttons and user input elements shall have a minimum size of 44x44 pixels, maintain at least a 3:1 contrast ratio with the background, and include distinct visual feedback (e.g., color change or shadow) on hover or click for clear visibility and interactivity.	
Customer Satisfaction: 2	Customer Dissatisfaction: 2
Dependencies: None	Conflicts: None
Materials:	
History:	

Requirement #: **18** Requirement Type: **0** Event/BUC/PUC #: **xx**

Description: **All images and visuals made for/by Sandlot should be high quality.**

Rationale: **Low quality images and visuals are unprofessional, and the solution should appear professional when possible. Only images made for/by Sandlot are included in this requirement as older photos or other visuals may need to be displayed that don't meet this standard.**

Originator: **Alex Verity**

Fit Criterion: **All images made for/by Sandlot shall be free of pixelation or blurring at their displayed size.**

Customer Satisfaction: **2**

Customer Dissatisfaction: **2**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

Requirement #: **19** Requirement Type: **0** Event/BUC/PUC #: **xx**

Description: **Navigation should be straightforward, with menus and links easily accessible and readable.**

Rationale: **Users should know what section of the site they will be accessing when they click on a navigation option so they don't get lost or confused.**

Originator: **Alex Verity**

Fit Criterion: **Navigation options shall be consistently placed across pages and their destination should be visibly written.**

Customer Satisfaction: **2**

Customer Dissatisfaction: **2**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

10.2 Style Requirements

Requirement #: **20** Requirement Type: **0** Event/BUC/PUC #: **xx**

Description: **The solution should use a consistent style across the entire user interface.**

Rationale: **To ensure the professionalism of the solution, the style should feel unified and consistent to all users.**

Originator: **Alex Verity**

Fit Criterion: **All interface elements shall use consistent fonts, colors, layout grids, and spacing, ensuring a cohesive visual style and branding.**

Customer Satisfaction: **2**

Customer Dissatisfaction: **2**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

11 Usability and Humanity Requirements

11.1 Ease of Use Requirements

Requirement #:	21	Requirement Type:	0	Event/BUC/PUC #:	7
Description:	All users must be able to easily find the season schedule.				
Rationale:	Many users of Sandlot will not be using it often, and the schedule will be one of the most frequented parts of Sandlot. It must be easy to find and access.				
Originator:	Alex Verity				
Fit Criterion:	On average, a new user shall not take more than one minute to find the schedule, and it should not take more than 2 clicks to access.				
Customer Satisfaction:	3	Customer Dissatisfaction:	5		
Dependencies:	None	Conflicts:	None		
Materials:					
History:					

11.2 Personalization and Internationalization Requirements

Insert your content here.

11.3 Learning Requirements

Insert your content here.

11.4 Understandability and Politeness Requirements

Insert your content here.

11.5 Accessibility Requirements

Requirement #: **22** Requirement Type: **0** Event/BUC/PUC #: **xx**

Description: **The fonts used should be readable by all users.**

Rationale: **Sandlot will have a wide variety of users, and we must make sure the font is an appropriate size for those with reduced vision.**

Originator: **Alex Verity**

Fit Criterion: **Body text shall have a minimum font size of 16 pixels, a contrast ratio of at least 4.5:1, and a line length between 45 and 75 characters for optimal readability across all devices.**

Customer Satisfaction: **3**

Customer Dissatisfaction: **3**

Dependencies: **None**

Conflicts: **None**

Materials:

History:

12 Performance Requirements

12.1 Speed and Latency Requirements

Requirement #:	23	Requirement Type:	0	Event/BUC/PUC #:	xx
Description:	Solution must load quickly and provide smooth user interactions, ensuring minimal delays when accessing content.				
Rationale:	Sandlot will need to be a solution users are not frustrated by to encourage use, and long load times are frustrating.				
Originator:	Alex Verity				
Fit Criterion:	The website shall load in under 3 seconds on a stable internet connection.				
Customer Satisfaction:	3	Customer Dissatisfaction:	3		
Dependencies:	None	Conflicts:	None		
Materials:					
History:					

12.2 Safety-Critical Requirements

Insert your content here.

12.3 Precision or Accuracy Requirements

Insert your content here.

12.4 Robustness or Fault-Tolerance Requirements

Insert your content here.

12.5 Capacity Requirements

Insert your content here.

12.6 Scalability or Extensibility Requirements

Insert your content here.

12.7 Longevity Requirements

Insert your content here.

13 Operational and Environmental Requirements

13.1 Expected Physical Environment

Insert your content here.

13.2 Wider Environment Requirements

Insert your content here.

13.3 Requirements for Interfacing with Adjacent Systems

Insert your content here.

13.4 Productization Requirements

Insert your content here.

13.5 Release Requirements

Insert your content here.

14 Maintainability and Support Requirements

14.1 Maintenance Requirements

Insert your content here.

14.2 Supportability Requirements

Insert your content here.

14.3 Adaptability Requirements

Insert your content here.

15 Security Requirements

15.1 Access Requirements

Requirement #:	24	Requirement Type:	15	Event/BUC/PUC #:	4
Description:	Only players can join a team.				
Rationale:	Users not logged in as a player should not be able to join a team.				
Originator:	Nicholas Fabugais-Inaba				
Fit Criterion:	Player is able to request to join the team their captain created.				
Customer Satisfaction:	5	Customer Dissatisfaction:	5		
Dependencies:	None	Conflicts:	None		
Materials:	None				
History:	Created October 10, 2024				

Requirement #: **25** Requirement Type: **15** Event/BUC/PUC #: **3**

Description: **Only captains can create their own teams.**

Rationale: **Users not logged in as a captain should not be able to create their own team.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Captains are able to create their own teams.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

Requirement #: **26** Requirement Type: **15** Event/BUC/PUC #: **6**

Description: **Only captains can reschedule games for their team.**

Rationale: **Users not logged in as a captain should not be able to reschedule games.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Captains are able to request a reschedule for their upcoming game.**

Customer Satisfaction: **5** Customer Dissatisfaction: **5**

Dependencies: **None** Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

Requirement #: **27** Requirement Type: **15** Event/BUC/PUC #: **10**

Description: **Only commissioners can send a league-wide alert.**

Rationale: **Users not logged in as a commissioner should not be able to send a league-wide alert.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Commissioners are able to send an alert to the entire league.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

Requirement #: **28** Requirement Type: **15** Event/BUC/PUC #: **12**

Description: **Only commissioners can assign teams to a division.**

Rationale: **Users not logged in as a commissioner should not be able to assign teams to a division.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Commissioners are able to assign a team to a division.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

Requirement #: **29** Requirement Type: **15** Event/BUC/PUC #: **12**

Description: **Only commissioners can change any team's composition.**

Rationale: **Users not logged in as a commissioner should not be able to change a team's composition.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Commissioners are able to change any team's composition.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

Requirement #: **30** Requirement Type: **15** Event/BUC/PUC #: **12**

Description: **Only captains can change their own team's composition.**

Rationale: **Users not logged in as a captain should not be able to change a team's composition.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Captains are able to change their own team's composition.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials: **None**

History: **Created October 11, 2024**

Requirement #: **31** Requirement Type: **15** Event/BUC/PUC #: **12**

Description: **Only commissioners can change the season schedule.**

Rationale: **Users not logged in as a commissioner should not be able to change the season's schedule.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Commissioners are able to change the season's schedule.**

Customer Satisfaction: **5** Customer Dissatisfaction: **5**

Dependencies: **None** Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

Requirement #: **32** Requirement Type: **15** Event/BUC/PUC #: **9**

Description: **Only players can see the contact information of their own captain.**

Rationale: **A player's email and phone number shall remain anonymous to individuals outside the league and everyone else but their captain.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Contact information for players can only be seen by their own captain.**

Customer Satisfaction: **5** Customer Dissatisfaction: **5**

Dependencies: **None** Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

Requirement #: **33** Requirement Type: **15** Event/BUC/PUC #: **9**

Description: **Captains can see the contact information of players on their own team and other captains on other teams.**

Rationale: **A captain's email and phone number shall remain anonymous to individuals outside the league or to players on other teams.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Contact information for captains can only be seen by the players on their own team or other captains from other teams.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

Requirement #: **34** Requirement Type: **15** Event/BUC/PUC #: **9**

Description: **Only commissioners can see the contact information of everyone in the league.**

Rationale: **Player and captains shall remain anonymous to individuals outside the league or to players on other teams.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **Commissioners are the only individuals in the league that can see everyone's contact information.**

Customer Satisfaction: **5** Customer Dissatisfaction: **5**

Dependencies: **None** Conflicts: **None**

Materials: **None**

History: **Created October 10, 2024**

15.2 Integrity Requirements

Requirement #: **35** Requirement Type: **15** Event/BUC/PUC #: **5**

Description: **Website must not create conflicts when scheduling games.**

Rationale: **The system shall create a schedule for all the teams in the league, without scheduling conflicts. Rescheduled games must also not conflict with the season schedule.**

Originator: **Nicholas Fabugais-Inaba**

Fit Criterion: **There exists no conflicts in the season schedule when the season begins or throughout the season when games are rescheduled.**

Customer Satisfaction: **5**

Customer Dissatisfaction: **5**

Dependencies: **None**

Conflicts: **None**

Materials: **None**

History: **Created October 7, 2024**

15.3 Privacy Requirements

Requirement #:	36	Requirement Type:	15	Event/BUC/PUC #:	1		
Description:	The product shall not reveal contact information to any parties without the necessary access.						
Rationale:	Contact information must be kept private within the league.						
Originator:	Nicholas Fabugais-Inaba						
Fit Criterion:	Contact information cannot be accessed by users that do not have an account registered in the league.						
Customer Satisfaction:	5	Customer Dissatisfaction:	5				
Dependencies:	None	Conflicts:	None				
Materials:	None						
History:	Created October 11, 2024						

15.4 Audit Requirements

Not applicable.

15.5 Immunity Requirements

Not applicable.

16 Cultural Requirements

16.1 Cultural Requirements

Requirement #: 37 Requirement Type: 16 Event/BUC/PUC #: 1	
Description: The product shall provide an option to not specify gender.	
Rationale: Users may not associate themselves as male or female.	
Originator: Nicholas Fabugais-Inaba	
Fit Criterion: A user must be able to choose an option to not specify their gender.	
Customer Satisfaction: 5	Customer Dissatisfaction: 5
Dependencies: None	Conflicts: None
Materials: None	
History: Created October 11, 2024	

17 Compliance Requirements

17.1 Legal Requirements

Not applicable.

17.2 Standards Compliance Requirements

Not applicable.

18 Open Issues

- There are no open issues

19 Off-the-Shelf Solutions

19.1 Ready-Made Products

Not applicable.

19.2 Reusable Components

Not applicable.

19.3 Products That Can Be Copied

Not applicable.

20 New Problems

20.1 Effects on the Current Environment

Not applicable.

20.2 Effects on the Installed Systems

Not applicable.

20.3 Potential User Problems

Existing users of the current platform may suffer from the migration to the new platform as they may not be familiar with how to navigate the new system and utilize certain functions/features. This could be concerning considering the age group and lack of technical literacy for some users. One precaution that can be taken is to create a user guide to aid users in interacting with the new system and the various features it has to offer.

20.4 Limitations in the Anticipated Implementation Environment That May Inhibit the New Product

Insert your content here.

20.5 Follow-Up Problems

Insert your content here.

21 Tasks

21.1 Project Planning

Insert your content here.

21.2 Planning of the Development Phases

Insert your content here.

22 Migration to the New Product

22.1 Requirements for Migration to the New Product

Insert your content here.

22.2 Data That Has to be Modified or Translated for the New System

Insert your content here.

23 Costs

Insert your content here.

24 User Documentation and Training

24.1 User Documentation Requirements

Requirement #: xx Requirement Type: 0 Event/BUC/PUC #: xx	
Description: There must exist a user guide that informs users of the previous system and new users how to use the features of the new system.	
Rationale: There will be many new users of the system who might not be familiar with how to use the features of our solution, and will require guidance.	
Originator: Alex Verity	
Fit Criterion: There shall exist a user guide that explains all major features of the system.	
Customer Satisfaction: 3	Customer Dissatisfaction: 1
Dependencies: None	Conflicts: None
Materials:	
History:	

24.2 Training Requirements

Insert your content here.

25 Waiting Room

Insert your content here.

26 Ideas for Solution

Insert your content here.

Appendix — Reflection

The information in this section will be used to evaluate the team members on the graduate attribute of Lifelong Learning. Please answer the following questions:

1. What knowledge and skills will the team collectively need to acquire to successfully complete this capstone project? Examples of possible knowledge to acquire include domain specific knowledge from the domain of your application, or software engineering knowledge, mechatronics knowledge or computer science knowledge. Skills may be related to technology, or writing, or presentation, or team management, etc. You should look to identify at least one item for each team member.
2. For each of the knowledge areas and skills identified in the previous question, what are at least two approaches to acquiring the knowledge or mastering the skill? Of the identified approaches, which will each team member pursue, and why did they make this choice?