

Business Requirements Document

Team Gen ChimpanZ's

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Summary

This business requirements document will outline all the business rules needed to develop Nuclei. Nuclei is a sports training management software that will provide schedule management tools, and user communication tools for sports managers, trainers, and trainees. The goal of this project is to provide an intuitive all-in-one solution for people in the sports training ecosystem, allowing less time spent on management and more on training quality. Some challenges this project will face is first building and deploying the application, and then ensuring our application delivers on its original goal in future feature updates based on user feedback.

Business Objectives

The business objectives that Nuclei will deliver to Team Gen ChimpanZ, superiors, and associates consist of ownership and collaboration experience on a real use system that can be used to reshape the sports training world. Gen ChimpanZ has to gain experience using a large variety of tools, scrum protocol, and team collaboration. Having ownership of Nuclei will give Gen ChimpanZ power in the sports training world and can eventually be used to make profits in the form of advertisements or sponsorship.

Background

Currently in the world of sports training there are many different applications being used to link trainers to trainees, help trainers schedule training sessions with trainees, and help managers manage their business. Currently Managers need to spend a lot of money on systems that manage all their needs. Trainers have a hard time finding quality trainees and struggle with managing all the tools they need to conduct their operations. Trainees have a hard time finding quality trainers

and aren't given the best insight into their training progress. There is a serious business need for a free to use powerful system that handles all user group's sports training needs while providing a high level of reliability through a dual feedback system.

Limitations

In order to construct a realistic business perspective it is important to acknowledge the limitations of Nuclei. Nuclei is restricted in multiple ways which means that there are pain points that need to be considered. Nuclei is restricted financially. Team Gen ChimapanZ has a limited amount of funds towards the development of Nuclei. The cloud service we will need to be using has many free features however as Nuclei plans to become more scalable it will require funding. Nuclei is also restricted by the limitation of the tools that we plan on using. The tools listed in the HLD document are all powerful in their own right however all of them have limitations on what they can do. In the case of scaling and having Nuclei grow dynamically these tools limit what we can do and additional tools may be needed in order to meet all business needs. Nuclei is also limited by the project scope defined in our project proposal. The scope limits what Nuclei is meant to do and must be followed. Finally Nuclei is limited by the business niche we are attempting to fill, as Nuclei is limited to a sports training session.

Business Requirements

Consolidation

The application uses US English and US dollar system. Since our application is focused on sports in Southern California, it will use the imperial system.

App-Wide Impact

Return to last view

Functional

Preconditions

- User(any) is logged in
- On any view except dashboard

Requirements:

<ul style="list-style-type: none"> • User selects Return to last view option. • The view will change from current view to a view where the user was before the current view. 	
Success Outcomes <ol style="list-style-type: none"> 1. User sees the previous view. <p>Outcome is considered a system success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. User stays on the current view. 2. User sees a view not previous view. <p>Any one of these outcomes will be considered a failure and will be logged.</p>
Post-Condition User is on the previous view.	

Non-Functional

<ol style="list-style-type: none"> 1. The user interface switches to their last view from their current view without a jarring transition. 2. User is taken to the previous view in less than 5 seconds

Return to Dashboard

Functional

Preconditions <ul style="list-style-type: none"> • User(any) is logged in • On any view except dashboard 	
Requirements: <ul style="list-style-type: none"> • User selects Return to Dashboard option. • The view will change from current view to dashboard view. 	
Success Outcomes <ol style="list-style-type: none"> 1. User sees the dashboard view. <p>Outcome is considered a system success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. User stays on the current view. 2. User sees a view not dashboard. <p>Any one of these outcomes will be considered a failure and will be logged.</p>
Post-Condition User is on the dashboard of their account	

Non-Functional

1. The user interface switches to their dashboard view from their current view without a jarring transition.
2. User is taken to the dashboard in less than 5 seconds

Display user icon*Functional***Preconditions**

- User(any) is logged in

Requirements:

- User is able to view their icon from any view
- User can select their icon which will provide the user with additional options:
 - Account settings option
 - Manage notification settings
 - View profile(own profile)
 - Log out

Success Outcomes

1. User is able to see their display icon from any view and interact with it
2. When selected the user is presented and can utilize all the following options:
 - a. Account settings option
 - b. Manage notification settings
 - c. View profile(own profile)
 - d. Log out

All 2 outcomes are considered a success and will be logged.

Failure Outcomes

1. User is unable to see their display icon from any view
2. When selected the display profile does not allow the user to see or use any of the following options:
 - a. Account settings option
 - b. Manage notification settings
 - c. View profile(own profile)
 - d. Log out

Any one of these outcomes will be considered a failure and will be logged.

Post-Condition

No matter what view the user is on they will always be able to view and access the functionality of the display icon

Non-Functional

1. User is still able to select to view the entirety of their own profile through view profile functionality
2. User's icon must load in simultaneously along with the rest of the dashboard

3. The time it takes from selecting the profile icon to displaying the options should be less than 3 seconds
4. The options must appear in the same order as mentioned in the requirements

Account settings option

Functional

Preconditions <ul style="list-style-type: none"> ● User(any) is logged in ● User is able to view their profile icon ● User clicks on their own profile icon and selects to view their account settings 	
Requirements: <ul style="list-style-type: none"> ● User is taken to a new view where they are able to see and access all account settings which include: <ul style="list-style-type: none"> ○ Change email ○ Change password ○ Delete account 	
Success Outcomes <ol style="list-style-type: none"> 1. User is able to see the account settings view 2. User has access to change email, change password, and delete their account functionalities <p>All 2 of these outcomes are considered a success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. User is unable to see their account settings 2. User is unable to change/perform any of the account options <p>Any one of these outcomes will be considered a failure and will be logged.</p>
Post-Condition The user sees and is able to have access over their account settings	

Non-Functional

1. User is taken to their account settings in less than 5 seconds
2. View displays title
3. View displays user's account settings in the following order: log out, change email, change password, delete account

Core Features

User Management

Create Account

Functional

Preconditions <ul style="list-style-type: none"> • The user does not have an existing account associated with the same email. • The user must be on the Create Account view. • The user must not be logged in. 	
Requirements <ul style="list-style-type: none"> • System administrators cannot be created by using the Create Account feature. • All user accounts will be stored in a database • The user provides a valid email address • The user provides a password for requesting the OTP <ul style="list-style-type: none"> ◦ Password must have a minimum of 8 characters • After successfully creating an account, the user is assigned a unique username which is their email. • User accepts EULA. 	
Success Outcomes <ol style="list-style-type: none"> 1. User inputs valid credentials, account is created and stored into the database, a system message displays, "Account created successfully." and also provides the username to the user. <p>Outcome is considered a system success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. User inputs valid credentials but account is not created, a system message displays, "Account creation failed. Please try again or contact system admin." 2. User inputs an invalid email, a system message displays, "Invalid email entered. Please try again or contact system admin." 3. User inputs an invalid password, a system message displays, "Invalid password entered. Please try again or contact system admin." 4. User inputs a valid email and password and username is given to user but the entire process took longer than 5 seconds, a system log entry is recorded, account is created. <p>Outcome 1 is considered a system failure and will be logged. Outcome 2 and 3 are considered user failures and will be logged.</p>

Post-Condition

Account is created and added to the database

Non-Functional

1. Username is unique.
2. Email and password must be valid.
3. Valid characters for password:
 - a. a-z
 - b. A-Z
 - c. 0-9
 - d. ., @!-
 - e. Blank space

Delete Account*Functional Requirements***Preconditions:**

- The user must be logged in.
- The user must be in account settings.

Requirements:

- User selects 'Delete Account'.
- User will enter the following credentials.
 - Email of the account they are logged in
 - Password of the account they are logged in
 - OTP
- User will get confirmation prompt (Yes/No) to confirm account deletion.
- If user selects 'Yes', the user is removed from any classes they were a part of.
- If the user has 3 failed attempts within 24 hours, the user will be automatically logged out, and the user's email will be notified
 - A 24 hour timer will begin on the first failed attempt.
 - A successful attempt will stop the timer and reset the failed attempts.
 - The user's account will be disabled for 2 hours.
 - The IP address and account will be logged.

Success Outcomes:

1. User enters valid credentials and confirms to delete account the user is removed from all groups and from our database.
2. User enters valid credentials and denies, nothing happens, user is taken back to account settings.

Failure Outcomes:

1. User inputs valid credentials and selects yes, but account is not deleted from our database.
2. User inputs valid credentials and selects yes, but user is not removed from all classes.
3. User inputs valid credentials and

3. User enters invalid credentials, is not able to delete account. 4. User enters invalid credentials 3 times within 24 hours, the user will be logged out, and the user's email will be notified Outcome 1 is considered a system success and will be logged.	selects no, but account is deleted. 4. User inputs invalid credentials and is able to delete account. Any outcome is considered a system or user failure and will be logged.
Post-Condition: Account is deleted; Removed from all groups and removed from the database.	

Non-Functional

1. User credentials can no longer be used to sign in after account has been deleted 2. Message is given to the user confirming that the account has been deleted..

Update Account

Functional Requirements

Preconditions: <ul style="list-style-type: none"> • The user must be logged in. • The user must be in account settings view. 	
Requirements: <ul style="list-style-type: none"> • User selects 'Update Account'. • User is taken to a view where the user can change the password <ul style="list-style-type: none"> ◦ User will be required to input current password and new password. ◦ The new password has the requirements <ul style="list-style-type: none"> ■ Password must have a minimum of 8 characters ■ Valid characters: <ul style="list-style-type: none"> • a-z • A-Z • 0-9 • ., @!- • Blank space ■ Password must not be the same password as current password. • User will get confirmation prompt (Yes/No) to confirm the update.. • If user selects 'Yes', the password will be updated in the database. 	
Success Outcomes: <ol style="list-style-type: none"> 1. Password for the account is changed in the database 	Failure Outcomes: <ol style="list-style-type: none"> 1. Password is changed with incorrect requirements.

<p>2. The user sees refreshed accounts settings view</p> <p>Outcome 1 and 2 are required to be considered a system success and will be logged.</p>	<p>2. User correctly inputs requirements but the password does not change.</p> <p>3. User correctly inputs requirements but password is not updated in database</p> <p>4. Wrong password is updated in database.</p> <p>5. Wrong user's password is updated in the database.</p> <p>6. User enters the same password as before and is still given the success message.</p> <p>Any outcome is considered a system failure and will be logged.</p>
<p>Post-Condition:</p> <ul style="list-style-type: none"> Account is updated. The user sees the refreshed account settings view 	

Non-Functional

1. Message is given to the user confirming that the password has been changed.
--

Disable Account

Functional Requirements

<p>Preconditions:</p> <ul style="list-style-type: none"> The account is not disabled. 	
<p>Requirements:</p> <ul style="list-style-type: none"> By system or admin, the account is selected to be disabled. The account becomes inaccessible to users and users cannot be authenticated with this account. Account disable lasts for however long the system says. If any user was logged on in this account, they will be immediately logged out. 	
<p>Success Outcomes:</p> <p>1. Account is disabled for a given time. Outcome is considered system success and will be logged.</p>	<p>Failure Outcomes:</p> <p>1. User can log in through the account Outcome is considered a system failure and will be logged.</p>
<p>Post-Condition:</p> <ul style="list-style-type: none"> The account is disabled. 	

Non-Functional

- | |
|---|
| 1. Message is given to the user while trying to login that their account is disabled and how long it is disabled. |
|---|

Enable Account*Functional Requirements*

Preconditions: <ul style="list-style-type: none"> The account is disabled 	
Requirements: <ul style="list-style-type: none"> By system or admin, the account is selected to be enabled. The account becomes available to users and can be used to be authenticated. 	
Success Outcomes: <ol style="list-style-type: none"> Account is enabled <p>Outcome is considered a system success and will be logged.</p>	Failure Outcomes: <ol style="list-style-type: none"> Account is still disabled <p>Outcome is considered a system failure and will be logged.</p>
Post-Condition: <ul style="list-style-type: none"> Account is enabled 	

Non-Functional

- | |
|---|
| 1. Message is given to the user while trying to login that their account is now enabled |
|---|

Authentication**Login**

Being logged in will be considered a precondition for all standalone feature requirements except for the “Send Notification” function under Notification System.

Functional

Preconditions: <ul style="list-style-type: none"> The user must not already be logged into the application. The user must be on the login view.
Requirements: <ul style="list-style-type: none"> A user enters their account credentials to access the application. The login credentials will consist of a valid username and valid password.

<ul style="list-style-type: none"> ○ Valid usernames are given to user after they registered an account and will consist of: <ul style="list-style-type: none"> ■ Minimum of 8 characters ■ a-z ■ 0-9 ■ .-@ ● When a valid password is entered, a one time password (OTP) is sent to the user via email for access. ● OTP: <ul style="list-style-type: none"> ○ Randomly generated each time ○ Changed upon successful use ○ Expires every 2 minutes ○ Must be a minimum of 8 characters which will consist of the following: <ul style="list-style-type: none"> ■ a-z ■ A-Z ■ 0-9 ● If the user has 3 failed login attempts within 24 hours then the account will be disabled. <ul style="list-style-type: none"> ○ A 24 hour timer will begin on the first failed attempt. ○ A successful login will stop the timer and reset the failed attempts. ○ The user's account will be disabled for 2 hours. ○ The IP address and account will be logged. 	
<p>Success Outcomes:</p> <ol style="list-style-type: none"> 1. User cannot access login if already logged in. 2. User enters credentials correctly and is given access to their account and taken to the dashboard. 3. User enters credentials incorrectly and is denied access. 4. User's account is disabled after 3 failed login attempts, and the IP address will be logged. User's email will be alerted of the issue. <p>Outcomes 1 and 2 are both required to be considered a system success and will be logged.</p>	<p>Failure Outcomes:</p> <ol style="list-style-type: none"> 1. User enters credentials correctly but is denied access to the account. 2. User enters credentials correctly but is taken to a different user's account 3. User enters an invalid username, system message displays "Invalid username or password entered. Please try again or contact system admin." 4. User enters an invalid OTP, system message displays "Invalid username or password entered. Please try again or contact system admin." 5. User enters credentials incorrectly but is given access to an account. 6. User enters credentials correctly into a disabled account, system message displays, "Account is disabled, will be locked for 2 hours from last failed attempt." 7. User enters credentials correctly into a disabled account but is still given access. 8. User enters credentials correctly, the

	<p>login process takes longer than 5 seconds, a system log entry is recorded and the user is logged in.</p> <p>Outcomes 1, 2, 5, or 7 are considered a system failure and will be logged.</p>
<p>Post-Condition: The user is now logged into their account and can access the application, starting the view in their dashboard.</p>	

Non-Functional

<ol style="list-style-type: none"> 1. Authentication and application access processes under 5 seconds after the user submits the login request. 2. The user receives an interface response if they attempt to authenticate with invalid credentials. 3. The user will be timed out for a period of time if they submit too many invalid logins. 4. The user receives a prompt that login was successful if there is a delay between successful authentication and application access.

Logout

Functional

<p>Preconditions:</p> <ul style="list-style-type: none"> • The user must be logged in. • The user selected their user icon. 	
<p>Requirements:</p> <ul style="list-style-type: none"> • The user selects the logout option. 	
<p>Success Outcomes:</p> <ol style="list-style-type: none"> 1. User is logged out and taken to the login view, a system message displays “Successfully logged out.” <p>Outcome is considered a system success and will be logged.</p>	<p>Failure Outcomes:</p> <ol style="list-style-type: none"> 1. User attempts to logout but still has access to the application. 2. User logs out but is not taken back to the login screen, either error message or no message is shown. 3. The logout process takes longer than 5 seconds, a system log entry is recorded, user is successfully logged out. <p>Outcomes 1 or 2 are considered a system failure and will be logged.</p>

Post-Condition

- The user is now logged out of their account.
- The user will be taken to the landing view of the application when successfully logged out.

Non-Functional

1. Users are prompted with confirmation to see if they really want to log out.
2. Application announces to the user that they have logged out after successfully logging out.

Logging

Logging will be considered a non-functional requirement for all standalone features.

*Functional***Preconditions**

- Database must be active.
- Database must be accessible by the system.
- Database must have the storage capacity for log entry.

Requirements

- All log entries must be immutable
- All log entries must be saved to the database
- All log entries must contain a timestamp, log level, category, message, and user operation.
- Valid log levels:
 - info - for tracking flow of system
 - Debug - for tracking key information crucial to maintainers of the system
 - Warning - for tracking events that may lead to system failures
 - Error - for tracking system errors
- Valid categories:
 - View
 - Business
 - Server
 - Data
 - Datastore
- The logging process must not block the user from interacting with the application.
- Whenever logging occurs, it must be completed within 5 seconds.

Success Outcomes

1. The system logs system success events.
2. The system logs system failure events.
3. The system logs user success events.

Failure Outcomes

1. The logging process took longer than 5 seconds to complete.
2. The logging process blocks a user from interacting with the application.

<p>4. The system logs user failure events.</p> <p>All of these outcomes are required to be considered a system success</p>	<p>3. The logging process completes within 5 seconds, but did not save to the database.</p> <p>4. The logging process completes within 5 seconds, but did not accurately save the event to the database.</p> <p>5. Previously saved log entries are modifiable.</p> <p>Outcomes 2, 3, 4, or 5 are considered a system failure, and logging success/failure will not be logged</p>
<p>Post-Condition</p> <p>The log is saved in the database.</p>	

Non-Functional

<ol style="list-style-type: none"> 1. The log will be listed in reverse chronological order. 2. logging success/failure will not be logged 3. Logs will happen in under 5 seconds
--

Authorization

Functional

<p>Preconditions</p> <ul style="list-style-type: none"> • User must be authenticated. • User account must be active. 	
<p>Requirements</p> <ul style="list-style-type: none"> • Unauthenticated users will only be given access to resources or functionalities that does not require knowledge of the user's identity. • The operation and timestamp of each unauthorized access will be recorded by the system. • The system must prevent unauthorized users from viewing, modifying or deleting any protected data. • The system must prevent unauthorized users from executing any protected functionality. • The system must prevent unauthorized users from viewing or interacting with any protected views. • Any user access modifications should be active upon the next successful authentication by user. 	
<p>Success Outcomes</p> <ol style="list-style-type: none"> 1. User attempts to access a protected 	<p>Failure Outcomes</p> <ol style="list-style-type: none"> 1. Unauthorized access is not recorded

<p>functionality within authorization scope. Access is granted to perform functionality.</p> <ol style="list-style-type: none"> 2. User attempts to access protected data within authorization scope. Access is granted to perform read operations. 3. User attempts to modify protected data within authorization scope. Access is granted to perform write operations. 4. User attempts to access protected views within authorization scope. Access is granted to the view. User is automatically navigated to view. 	<p>by system when authorization fails.</p> <ol style="list-style-type: none"> 2. User attempts to access a protected functionality outside of authorization scope. Access is denied and a system message displays “Unauthorized access”. 3. User attempts to access protected data outside of authorization scope. Access is denied and a system message displays “Unauthorized access to data”. 4. User attempts to modify protected data outside of authorization scope. Access is denied and a system message displays “Unauthorized access to data”. 5. User attempts to access protected views outside of authorization scope. Access is denied and a system message displays “Unauthorized access to view”. 6. User attempts to access protected views within authorization scope, but contains protected data that is not within read scope. Access is granted to the view. Upon completion of automatic navigation to view, a system message displays “Unauthorized access to data” with protected data not visible within the view. 7. User attempts to access protected views within authorization scope, but contains protected data that is not within write scope. Access is granted to the view. Upon completion of automatic navigation to view, protected data is visible within the view. Attempts to modify the data will result in a system message that displays “Unauthorized access to data”
<p>Post-Condition</p> <ul style="list-style-type: none"> • Authorized users are given access to restricted features. 	

Non-Functional

<ol style="list-style-type: none"> 1. Authorized users trying to gain access are given permission to access restricted features. 2. Unauthorized users trying to gain access to restricted features are shown an error message.

Analytics*Functional*

Preconditions <ul style="list-style-type: none"> • A collection of data taken using the logging function. 	
Requirements <ul style="list-style-type: none"> • Track user traffic in the system. • Create user-base demographic with user profile data. • Track what items on the interface are used most often. 	
Success Outcomes <ol style="list-style-type: none"> 1. An accurate trend is determined. 	Failure Outcomes <ol style="list-style-type: none"> 1. An incorrect trend is determined.
Post-Condition <ul style="list-style-type: none"> • Trends and analytics are studied to learn the patterns and behaviors of clients. • Following trends steers development in a direction towards making changes to the application to benefit as many users as possible. 	

Non-Functional

<ol style="list-style-type: none"> 1. Trends are displayed visually as graphs: frequency, heat, line, etc.

Forgot Password*Functional Requirements*

Preconditions: <ul style="list-style-type: none"> • The user must not already be logged into the application. • The user must be on the login view. 	
Requirements: <ul style="list-style-type: none"> • User clicks on 'forgot password'. • User is prompted to enter email and then verify email. • User is redirected to the change password view. 	
Success Outcomes <ol style="list-style-type: none"> 1. User enters and verifies their email 	Failure Outcomes <ol style="list-style-type: none"> 1. User is able to change password

<p>and is sent to a view to input a new password.</p> <ol style="list-style-type: none"> 2. User enters email but does not confirm, user stays on confirmation view. <p>Outcome 1 is considered a system success and will be logged.</p>	<p>without verifying email</p> <ol style="list-style-type: none"> 2. Users password is not changed after entering, verifying, and entering a new password 3. Wrong password is updated in database. 4. Wrong user's password is updated in the database. 5. User does not receive verification email. <p>Any outcome is considered a system failure and will be logged.</p>
<p>Post-Condition:</p> <ul style="list-style-type: none"> • The database is now updated with the new password. • User now has a new password and the database is updated with the new password. 	

Non-Functional Requirements

<ol style="list-style-type: none"> 1. The user can only change password 3 times a week. 2. The user can not have the same password as the current one.
--

Landing view

Functional Requirements

<p>Preconditions:</p> <ul style="list-style-type: none"> • The user is not already logged in. <ul style="list-style-type: none"> ◦ If the user is already logged in, user will be led to dashboard view. • The user accesses the application. 	
<p>Requirements:</p> <ul style="list-style-type: none"> • Landing view contains two options: <ul style="list-style-type: none"> ◦ Log in option ◦ Create account option • Each option leads to the feature functionality. 	
<p>Success Outcomes</p> <ol style="list-style-type: none"> 1. Not logged in user accessing the application lands on this view 2. User can use login option or create account option <p>All of the outcomes are required to be considered a system success and will be logged.</p>	<p>Failure Outcomes</p> <ol style="list-style-type: none"> 1. Logged in user is in landing view 2. User cannot use either the login option or create account option. 3. Not logged in user can access views other than landing view, log in view, or create account view. <p>Any of the outcomes are considered a system</p>

	failure and will be logged.
Post-Condition: <ul style="list-style-type: none"> Not logged in user is in the landing view. 	

Non-Functional Requirements

1. The login and create account options are visible to the user

Standalone Features

Dashboard

Dashboard

Functional

Preconditions <ul style="list-style-type: none"> User(any) is logged in After login user is taken to their dashboard User can be taken to dashboard from return to dashboard functionality 	
Requirements: <ul style="list-style-type: none"> Displays items which takes the user to different views Some items will always be displayed regardless of user type <ul style="list-style-type: none"> Search for user View message model View list of profiles Some items will only be displayed for Managers <ul style="list-style-type: none"> View list of trainers Some items will only be displayed for Trainers and Trainees <ul style="list-style-type: none"> View list of classes 	
Success Outcomes <ol style="list-style-type: none"> User is able to see all the “global” items and all the items that belong to their user type User is able to interact with each item they can see <p>All 2 of these outcomes are required to be considered a success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> User does not see all global items User sees items that belong to user groups that they are not User does not see their user specific items <p>Any one of these outcomes will be considered a failure and will be logged.</p>

Post-Condition

The user sees all the items that are available to them

Non-Functional

1. Items are displayed with appropriate names
2. User sees appropriate title indicating they are on their dashboard
3. Dashboard loads entire content in 5 seconds or less

Profile Feature**View profile***Functional***Preconditions**

- User(any) is logged in
- User has selected to view a profile

Requirements:

- User is taken to a new view in which the user must be able to see the profile that they selected which encompasses all the profile information and all reviews given to the selected profile
- If the user is a manager their profile will have an additional section. That section will display the names of all the trainers that manager has in their trainerlist and provide links to their profile.
- If the user is a trainer their profile will have an additional section. That section will display all the classes that trainer has created
 - The names of each class are listed. User is able to select to request to join the class
- If the user is a trainee their profile will have an additional section. That section will display all the classes that trainee is in.
 - The names of each class are listed.
- If the user is viewing a profile that isn't theirs they are displayed the following options to interact with that profile:
 - Send a direct message
 - Leave a review
- If the user is a trainer that is viewing the profile of a trainee (not theirs) they have the additional option to interact with that profile:
 - Invite to class
 - Call notification system
- If the user is a trainee that is viewing the profile of a trainer (not theirs) they have the additional option to interact with that profile:
 - Each class on trainers profile gives the trainee the option to request to join class

<ul style="list-style-type: none"> <ul style="list-style-type: none"> ■ Call notification system ● If the user is a manager that is viewing the profile of a trainer(not theirs) they have the additional option to interact with that profile <ul style="list-style-type: none"> ○ Invite trainer to trainerlist ■ Call notification system ● 	
<p>Success Outcomes</p> <ol style="list-style-type: none"> 1. User is able to see the correct profile with all correct profile information and see all the reviews that have been given 2. If the profile is a trainer all the names of the classes they have created are shown and link to that classes view 3. If the profile is a trainee all the names of the classes they are in are shown and link to that classes view 4. If the profile is a manager all the names of their trainers from their trainerlist are shown and link to that trainers profile 5. On a profile that isn't theirs users have the following interaction options: <ul style="list-style-type: none"> ● Send a direct message ● Leave a review 6. If a trainer is viewing the profile of a trainee they have the option to invite that trainee to their class 7. If a trainee is viewing the profile of a trainer they have the option to invite that trainee to their class 8. If a manager is viewing the profile of a trainer they have the option to invite them to their trainerlist <p>All 8 of these outcomes are required to be considered a success and will be logged.</p>	<p>Failure Outcomes</p> <ol style="list-style-type: none"> 1. User is taken to a profile that isn't the one that they selected 2. User is unable to see all the reviews given to the profile 3. User is unable to see any of the profile interaction options that they should be able to see based of what profile type they are and what profile type they are viewing 4. Manager profiles dont display the trainers from their trainerlist and provide links to their profiles <p>Any one of these outcomes will be considered a failure and will be logged.</p>
<p>Post-Condition</p> <p>The user sees the profile they selected to its entirety</p>	

Non-Functional

<ol style="list-style-type: none"> 1. Any user can select a profile through links throughout our system 2. The user should be taken to the selected user's profile in less than 5 seconds.
--

- | |
|--|
| 3. Profiles differ based on profile type |
|--|

View list of profiles

Functional

Preconditions

- User is logged in
- User is currently viewing their dashboard and selects to view list of profiles

Requirements:

- User is taken to a new view in which all profiles under their account are shown
- User has the option to create a new profile
- Next to each profile the following options are shown
 - Switch profile
 - Edit profile
 - Delete profile

Success Outcomes

1. User sees all their profile options
2. User sees option for switch to profile next to each profile
3. User sees option for edit profile next to each profile
4. User sees option for delete profile next to each profile
5. User sees option to create a profile

All 5 of these outcomes are required to be considered a success and will be logged.

Failure Outcomes

1. Some profiles that have been created for the account are missing
2. Option for create a new profile is missing
3. Option for switch, edit, delete is missing from any of the profile's

Any one of these outcomes will be considered a failure and will be logged.

Post-Condition

The user sees all their profiles and is able to interact with them how we prescribed

Non-Functional

1. User sees "Your list of profiles" title
2. Profiles are ordered based of when they were created
3. Profiles are displayed vertically with profile options to the right of each profile
4. User is taken to the list of profiles view in less than 3 seconds

Create Profile

Functional

Preconditions <ul style="list-style-type: none"> • User is logged in. • User selects to create a new profile from viewing their list of profiles. 	
Requirements: <ul style="list-style-type: none"> • A user can create a profile which details the type of profile, name, birthdate, gender, location, sports tags, and additional information about themselves. • There are 3 profile types: Manager, Trainer, and Trainee. • An account accessing the application for the first time will automatically be taken to create a new profile. The application will use user account data to fill in name and birthdate, but has the option for the user to enter different information • A single user can have a maximum of 3 profiles. • A single user can not have two of the same profile type. 	
Success Outcomes <ol style="list-style-type: none"> 1. Profile is created using the information entered by the user 2. New profile is stored in the database. <p>All 2 of these outcomes are required to be considered a success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. Profile is not created even though user entered all information correctly and profile type does not already exist 2. Profile is created but has different information than the user input. 3. Profile is not stored in the database. 4. User sets up profile but profile type already exist <p>Any one of these outcomes will be considered a failure and will be logged.</p>
Post-Condition <p>The user now has a new profile associated with their account.</p>	

Non-Functional

<ol style="list-style-type: none"> 1. The application will generate a success message when the user creates a new profile. 2. The application will show an interface graphic to denote different profile types. 3. The user is not switched to the newly created profile 4. The new profile can now be found in list of profiles along with the options to switch, edit, or delete 5. A profile contains sections for trainers and trainees to display their classes and managers to display their training camps. These are added on profile creation or when the user adds those functionalities 6. Gender is limited to male,female, or other 7. Birthday will be formatted as M/D/Y 8. Location is in format city,state

9. Additional information acts as the users bio and is a large textbox that contains a maximum of 1000 characters
10. Additional input box only contains English, numbers, and special characters
- 11.

Delete Profile

Functional

Preconditions <ul style="list-style-type: none"> User has an existing profile. From viewing their list of profiles user selects the delete option next to the profile they want to delete 	
Requirements <ul style="list-style-type: none"> A user can delete a profile which will remove a specific profile type from their account. Any class scheduling related to that profile will be removed from the database and from the user's account. A user can not delete a profile if they only have one profile associated with their account. 	
Success Outcomes <ol style="list-style-type: none"> The profile data is deleted from the database. The user can no longer access the profile. Any scheduling data related to that profile is deleted. <p>All 3 of these outcomes are required to be considered a success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> The profile is not deleted from the database. The profile is not deleted from the user interface. Any scheduling data related to that profile is not deleted. The user can delete a profile when they only have one profile associated with their account. <p>Any one of these outcomes will be considered a failure and will be logged.</p>
Post-Condition The profile is now deleted from the application.	

Non-Functional

- The application generates a confirmation prompt asking if the user wants to delete the profile.
- If the profile is a trainer type and has any classes created or training scheduled, send an additional warning to the user.
- If the profile is a trainee type and is in a class or has training scheduled, send an

additional warning to the user.

4. If the user is a trainer and has classes then delete the class
5. If the user is a manager and has training camps then send an additional warning to the user. If the user still wants to delete the profile delete the training camp.

Edit Profile

Functional

Preconditions:

- User has an existing profile.
- From viewing their list of profiles user selects the edit option next to the profile they want to edit

Requirement

- The user can edit the information of gender, location, sports tags, and additional information about themselves. (needs to follow non functional requirements)
- Can not edit name or birthdate within the profile settings.
- The user saves the information.

Success Outcomes

1. The gender data is updated in the database.
2. The location data is updated in the database.
3. The additional information data is updated in the database.
4. Sport tag is updated in database

All 3 of these outcomes are required to be considered a success and will be logged.

Failure Outcomes

1. The information of gender, location, or additional information about themselves are not changed on the profile.
2. The information of gender, location, or additional information about themselves are not updated in the database
3. The information of gender, location, or additional information about themselves is updated on the wrong user.

Any one of these outcomes will be considered a failure and will be logged.

Post-Condition

Users can see the profile with updated information.

Non-Functional

1. The application generates a success message if any profile information is modified.

Switch Profile

Functional

Preconditions <ul style="list-style-type: none"> • A user has 2 or more existing profiles. • From viewing their list of profiles user selects the switch option next to the profile they want to switch to. 	
Requirements <ul style="list-style-type: none"> • The user selects the profile that they want to change to. • Can not switch to a profile they are currently using. • Switching a profile will change what items the dashboard interface will display and update the display user profile in the dashboard • All profile types can see: <ul style="list-style-type: none"> ○ Personal Calendar ○ Account Settings ○ View own profile ○ Switch Profile function ○ Search Users function ○ Recent Conversations function • User is a trainee and can see: <ul style="list-style-type: none"> ○ List of classes they are in • User is a trainer and can see: <ul style="list-style-type: none"> ○ List of classes they have created • User is a manager and can see: <ul style="list-style-type: none"> ○ Trainer list ○ Training Camp list 	
Success Outcomes <ol style="list-style-type: none"> 1. The user is now using the new profile they switched to <p>Outcome is considered a system success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. The user stays on the previous profile. 2. The user changes to a different profile than the one specified. 3. The user using a profile type can see dashboard items they are not supposed to see. <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition <p>The user is now using a different profile.</p>	

Non-Functional

<ol style="list-style-type: none"> 1. The application will generate a success message if the user successfully switches
--

profiles. 2. The user is still viewing the profile list
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Search for user

Search bar

Functional

Preconditions <ul style="list-style-type: none"> User is logged in. 	
Requirements <ul style="list-style-type: none"> User can input English, numbers, and special characters into the search bar. User can select search by name, search by email, or search by sports tag after inputting in the search bar. Have option to filter search based on user type 	
Success Outcomes <ol style="list-style-type: none"> Search bar contains user's inputs. Search bar has option for search by name, search by email, or search by sports tag User is able to filter out the user types they do not want to search for <p>All of the outcomes are required to be considered a system success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> User cannot input a-z, 1-9, or .-@ in the search bar Can not search either by name, email, or sports tag User is unable to filter out user types they do not want to search for <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition Search bar contains user's inputs and search return functionality will be issued	

Non-Functional

<ol style="list-style-type: none"> The inputs in the search bar does not reset as long as the view is same The inputs in the search bar resets when view changes Search bar will, by default, have a search by name option. Have a check box(Manager, Trainer, Trainee). Only the checked responses will be shown All boxes will be checked on default

Search Return

Functional

Preconditions <ul style="list-style-type: none"> • User is logged in. • User has made inputs in the search bar • User selects either search by name, search by email, or search by sports tag 	
Requirements <ul style="list-style-type: none"> • Using the inputs in the search bar <ul style="list-style-type: none"> ○ If search by name is selected find profiles whose names match or contain the search bar input ○ If search by email is selected find profiles whose emails match or contain the search bar input ○ If search by sports tag is selected find profiles whose sports tag match or contain the search bar input • Display the names and links to at most 5 of the found profiles • Only show Profiles that fit the filter 	
Success Outcomes <ol style="list-style-type: none"> 1. Display the names of the profiles whose name, email, or sports tag(dependent on which one is chosen to be searched) matches or contains the search bar input 2. Only the names of profiles that fit the filter are shown 3. All the names shown link to their profile <p>All of the outcomes are required to be considered a system success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. More than 5 profile names are displayed 2. Search return does not show all profiles that contains the inputs in the search bar(unless they are cut off to meet the only 5 profile requirement) 3. Search return does not give a view of profile names 4. Any one of the profile names do not link to the correct profile 5. A profile that does not fit the filter is shown <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition <p>The user sees a list of names of profiles that match their search criteria and which contain links to the correct profile</p>	

Non-Functional

<ol style="list-style-type: none"> 1. When searching for a user, additionally show the user's created profile types using interface graphics. 2. The search process must finish in 5 seconds
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3. If multiple users' profiles match, the first five profiles are displayed ordered by how closely they match what the user inputted into the searchbar
4. If no user's profiles match the search then display a message telling the user that there are no profiles to be found.
5. Ignore case sensitivity

Manager System Feature

View list of trainers

Functional

Preconditions <ul style="list-style-type: none"> User is a manager. User selects to view their list of trainers from their dashboard interface. 	
Requirements <ul style="list-style-type: none"> All the names of the trainers that have been added to the trainerlist are shown Each name links to that trainers profile 	
Success Outcomes: <ol style="list-style-type: none"> All trainers names are listed when manager opens list of trainers Managers can go on all of their trainers' profiles <p>All of the outcomes are required to be considered a system success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> Not all of the trainers tht have been added to the trainerlist are shown Manager is unable to access one of their trainers profiles from their name <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition <p>Manager now sees all the trainers in his trainerlist and access their profiles</p>	

Non-Functional

1. Trainers are ordered by Last Name
2. All trainers should be listed within 5 seconds of manager opening the list

Add Trainer to Trainer List

Functional

Preconditions <ul style="list-style-type: none"> User is a manager. User is viewing the profile of a trainer

<ul style="list-style-type: none"> User selects to invite trainer to trainer list 	
Requirements: <ul style="list-style-type: none"> An invitation is sent to the trainer <ul style="list-style-type: none"> If the trainer accepts they will be added to the trainerlist If the trainer denies or hasnt accepted yet than no action occurs 	
Success Outcomes <ol style="list-style-type: none"> Trainer receives the invitation If trainer accepts they are added to the trainer list If the trainer rejects they are not added to the trainer list <p>1 and (2 or 3) are required to be considered a system success and will be logged individually.</p>	Failure Outcomes <ol style="list-style-type: none"> Trainer does not receive invitation Trainer accepts notification but does not get added to the managers trainer list Trainer rejects notification but is added to the trainer list <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition: If the invitation is accepted the manager has a new trainer under them and it is shown in the trainer list.	

Non-Functional

<ol style="list-style-type: none"> It must take less than 5 seconds after a trainer accepts a managers request for our system to establish the trainer as under the manager
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Class System

View List of Classes

Functional

Preconditions <ul style="list-style-type: none"> User is a trainer or trainee. User selects to view their list of classes from the dashboard. 	
Requirements <ul style="list-style-type: none"> Trainer: The name of all the classes the trainer has created are shown Trainee: The name of all the classes the trainee is in are shown Selecting a name links you to the designated class view 	
Success Outcomes <ol style="list-style-type: none"> All the names of the classes a trainee 	Failure Outcomes <ol style="list-style-type: none"> The user can not see names of classes

<p>is enrolled in are shown</p> <ol style="list-style-type: none"> 2. All the names of the classes a trainer has created are shown <p>All 2 are required to be considered a system success and will be logged.</p>	<p>that they are enrolled in(trainee) or that they have created(trainer)</p> <ol style="list-style-type: none"> 2. The user can see their list of classes but the class does not link to the appropriate class view 3. The application returns a list of classes associated with a different user. <p>Any of the outcomes are considered a system failure and will be logged</p>
<p>Post-Condition</p> <p>The user is now accessing the class system view model and can view all the classes they are a part of.</p>	

Non-Functional

<ol style="list-style-type: none"> 1. When no classes are in the list, the application should inform the user that they are not associated with any classes. 2. Order classes based of when they were created

View Class

Functional

<p>Preconditions</p> <ul style="list-style-type: none"> • User(trainer or trainee) is logged in • User has selected to view a specific class • User is a member of the class(owner or enrolled) 	
<p>Requirements</p> <ul style="list-style-type: none"> • Displays all Messages that have been made in the class • Have the option to post a message • Displays all training sessions that have been that the user is apart of <ul style="list-style-type: none"> ◦ Shows date, members of training session, and time range • Both trainers and trainees can make messages • Only the trainer can schedule a training session with a trainee 	
<p>Success Outcomes:</p> <ol style="list-style-type: none"> 1. All message posts are visible 2. User is able to make a post <p>All outcomes are required to be considered a system success and will be logged.</p>	<p>Failure Outcomes</p> <ol style="list-style-type: none"> 1. No class view is shown 2. A class view different from the one selected is shown 3. User is not able to see message posts

	<p>4. User is not able to make a message post</p> <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition The user is now viewing a specific class.	

Non-Functional

<ol style="list-style-type: none"> 1. The user interface switches to the class view from the class list view without a jarring transition. 2. Trainer messages stand out compared to trainee messages

Create Class

Functional

Preconditions <ul style="list-style-type: none"> • User is a trainer. • User selects to create a class from viewing their list of classes. 	
Requirements <ul style="list-style-type: none"> • User is prompted how large the class should be <ul style="list-style-type: none"> ○ Amount of students ○ Cant be more than 99 • A new class is successfully created with the desired size and can be viewed • The new class is empty on creation • The new class can be seen in the trainer's view list of classes 	
Success Outcomes <ol style="list-style-type: none"> 1. A new empty class is created with the correct size 2. The user is taken to view list of classes which now shows the new class <p>All 2 of these outcomes are required to be considered a success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. Class is not created. 2. Class is not stored in database 3. The user is not taken to the view list of classes 4. Class contains other members 5. Class is not empty <p>Any of the outcomes are considered a system failure and will be logged.</p>

Post-Condition

The user is now viewing his list of classes and is able to see and access the view of his new class.

Non-Functional

1. Class creation and user access defined should be created in our database in less than 6 seconds.

Manage Class Settings*Functional***Preconditions**

- The user is a trainer or trainee
- User is viewing a specific class they are a member of
- User selects manage class settings from a specific class view

Requirements

- User is taken to a new view-Manage class settings
- If the user is a trainer they are able to see and change the following about the designated class:
 - Change class size limit
 - Class size limit cannot exceed 99
 - Delete class
- If the user is a trainee they are able to see and access
 - Leave class
- The class size limit can not be changed to be less than the amount of trainees currently in the class.
- The class size limit can not be 0.

Success Outcomes

1. User(trainer) is able to change the class size
2. User(trainer) is able to delete the class
3. User(trainee) is able to leave the class

All 3 of these outcomes are required to be considered a success and will be logged.

Failure Outcomes

1. User(trainer) is not able to see the option to change class size or delete class
2. User(trainee) is not able to see the option to leave class
3. User(trainee) is able to change class size or delete a class
4. User(trainer) is able to leave the class
5. User(trainer) enters a new class size but class size does not get changed
6. User(trainer) is able to set the class size to lower than the amount of students already in the class, less than

	0, or greater than 99 Any of the outcomes are considered a system failure and will be logged.
Post-Condition Trainer or trainee were able to access and modify the class settings for a specific class.	

Non-Functional

1. The application shows a success message if changes to the class settings were made. 2. When deleting a class or leaving a class an additional confirmation message is given

Join Class

Functional

Preconditions <ul style="list-style-type: none"> The user is a trainee. 	
Requirements <ul style="list-style-type: none"> Trainee is viewing the profile of a trainer and selects to join class <ul style="list-style-type: none"> unique selection available for each class Class can take at least one more trainee. Trainee is not already in the class the trainee is trying to join. If there is room a request is made to the trainer who created the class <ul style="list-style-type: none"> Request asks trainer if trainee can join class Request is done through notification system If the request gets accepted by the trainer the trainee is enrolled to the class <ul style="list-style-type: none"> Trainee can view class Trainee can see class under view list of classes Trainer can access manage class settings Trainee can comment on posts in the class from the view class If trainee joins the class the class count for that class is increased by 1 	
Success Outcomes <ol style="list-style-type: none"> Trainee is able to select to join class from a specific class that is displayed from a trainers profile Trainee is unable to to join class if class does not have room or if his request is denied If request is accepted trainee is enrolled to the class and all privileges are bestowed 	Failure Outcomes <ol style="list-style-type: none"> Trainee is added to class even though class cannot take another member Class trainee count does not increase by 1. Trainee is accepted to class but does not get enrolled Trainee gets rejected but does get enrolled

All of the outcomes are required to be considered a system success and will be logged.	Any of the outcomes are considered a system failure and will be logged.
Post-Condition If trainer gets accepted to class they are enrolled and taken to the class view	

Non-Functional

<ol style="list-style-type: none"> 1. If trainee attempts to join a full class they are notified that they can't join because the class is full 2. If the trainee attempts to join a class they are already enrolled in they will receive a notification that explains they can't join because they are already enrolled
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Invite to Classroom

Functional

Preconditions <ul style="list-style-type: none"> • The user(trainer) is logged in • The user is viewing the profile of a trainee and selects the invite to class option 	
Requirements <ul style="list-style-type: none"> • Trainer is shown a list of all his classes and asked to select which class they would like to add the trainee to • The selected class must have room for one more trainee • The trainee cant already be enrolled in the selected class • If there is room an invitation is sent to the trainee to join the class • If the trainee accepts they are enrolled to the class <ul style="list-style-type: none"> ○ Trainee can view class ○ Trainee can see class under view list of classes ○ Trainer can access manage class settings ○ Trainee can comment on posts in the class from the view class • If trainee joins the class the class count for that class is increased by 1 	
Success Outcomes <ol style="list-style-type: none"> 1. Trainer is able to select to invite a trainee from the trainees profile and all the trainees classes will be displayed 2. Trainer is able to select the class he wants to invite the trainer to 3. Trainer is only able to select a class that is not full and that the trainee is not already in 	Failure Outcomes <ol style="list-style-type: none"> 1. Trainer selects to invite a trainee from the trainees profile however their classes are not displayed 2. The classes are displayed but trainer cannot select desired class 3. Trainer is able to select a class that is full or the trainer is already enrolled in 4. Trainee gets enrolled in a class that is

<ol style="list-style-type: none"> If trainee is eligible to join they are enrolled in the class and receive all associated permissions If trainee is enrolled class count goes up by 1 <p>All of the outcomes are required to be considered a system success and will be logged.</p>	<ol style="list-style-type: none"> full or they are already enrolled in Trainee rejects invitation but is enrolled anyway Trainee accepts invitation but does not get enrolled <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition The designated trainee is added to the class	

Non-Functional

<ol style="list-style-type: none"> If trainee attempts to join a full class they are notified that they cant join because the class is full If the trainee attempts to join a class they are already enrolled in they will receive a notification that explains they cannot join because they are already enrolled
--

Post Message to Class

Functional

Preconditions <ul style="list-style-type: none"> User(trainer or trainee) is logged in The user has selected to make a message post from viewing a specific class. 	
Requirements <ul style="list-style-type: none"> The user is able to write a message inside a textbox Message will consist of user text input consisting of English, numbers, and special characters Message is restricted to 500 characters A message containing no characters is not allowed to be posted. A filled textbox can be posted <ul style="list-style-type: none"> When posted the message is visible to every member in the class 	
Success Outcomes <ol style="list-style-type: none"> A valid message based on the requirements can be posted to the class. Message is viewable by all users who are in the class after posting. 	Failure Outcomes <ol style="list-style-type: none"> The database is not updated to hold the message in the class A message with over 500 characters is posted. A valid message is not posted to the class.

<ol style="list-style-type: none"> When attempting to post a message with over 500 characters the message can not be posted The database is updated to hold the message in the class <p>All 4 of these outcomes are required to be considered a success and will be logged.</p>	<ol style="list-style-type: none"> A message containing no text characters can be posted A user who has access to the class can not view the post. <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition The message is now posted to the class for all authorized users to view.	

Non-Functional

<ol style="list-style-type: none"> The message includes a timestamp of when it was sent for the users to see. Trainers messages are displayed differently from trainees When attempting to post a message with over 500 characters the user is told it cannot be posted because message is to long

Leave Classroom

Functional Requirements

Preconditions <ul style="list-style-type: none"> User(trainee) is logged in User is enrolled in a class. User selected to leave classroom from viewing the class settings of a specific class 	
Requirements <ul style="list-style-type: none"> The trainee should no longer be able to view the class in their class list after leaving. The database should be updated with the new class list. The class size should decrease by 1 The trainee can not continue to be on this view or the class view for the class they left 	
Success Outcomes <ol style="list-style-type: none"> The correct class data is updated in the database. The class disappears from the class view for the trainee who left. Class size of the class is decreased by 1 <p>All 3 of these outcomes are required to be</p>	Failure Outcomes <ol style="list-style-type: none"> Trainee is not removed from the class The wrong trainee is removed from the class The database is not updated with the modified class list. A different class in the database than the one selected is updated.

considered a success and will be logged.	<p>5. The user leaves the class but the class is still shown in the view list of classes.</p> <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition The trainee has left the class and the class is updated to reflect the new list of users.	

Non-Functional

<ol style="list-style-type: none"> 1. The user interface generates a confirmation prompt to confirm class leave or to return to the class list view model with no changes. 2. The database request, database response, and user interface should finish in under 5 seconds.

Delete Classroom

Functional

Preconditions <ul style="list-style-type: none"> • User(trainer) is logged in • User selected and confirmed to delete class from viewing the class settings 	
Requirements <ul style="list-style-type: none"> • All members are removed from the class(leave class) • Class data should be deleted from the database. • Update view list of classes for all members of the class to no longer show class for all users 	
Success Outcomes <ol style="list-style-type: none"> 1. The correct class is deleted from the database. 2. The class should no longer be available to view for all associated users 3. The class loses all functionality <p>All 2 of these outcomes are required to be considered a success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. The class is not deleted from the database. 2. A different class is deleted from the database. 3. The class still appears on the user interface after deletion. <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition The class was successfully deleted from the application.	

Non-Functional

1. The user interface generates a confirmation prompt to confirm class deletion or to return to the class system view model with no changes.
2. The system will delete a class automatically after 3 weeks of inactivity (no posts or schedule training).
3. The database request, database response, and user interface should finish in under 5 seconds.
4. All members of the class are informed of the class deletion

Schedule Training Session

Functional

Preconditions

- User(trainer) is logged in
- The user is viewing a class with at least one trainee in it and selects to schedule a training session

Requirements

- A list of all the trainees in the class is generated and displayed
- Trainer can select trainees from the list or select all trainees option which selects all the trainees
- Once the trainee(s) are selected the trainer needs to schedule the training session
 - Pick date and time range for a training session
- The training session is created
 - Trainer and selected trainees can view the training session from the view class
 - Training session consists of date, time range, and participating members

Success Outcomes

1. List contains all the trainees in the class and any amount of them are able to be selected
2. Select all option selects all the trainees to be selected
3. Trainer is able to set a day and time range for the training session
4. The training session is created and all trainees selected and the trainer are able to view the training session in the class view
5. Training session consists of date, time range, and participating members

Failure Outcomes

1. List does not contain all trainees
2. Not all trainees can be selected
3. Select all option does not select all trainees
4. Trainer is not able to pick a date or time range
5. The scheduled training session is not created.
6. The scheduled training session is created without a date and time.
7. The scheduled training session is created but not viewable to participating members
8. The schedule training is created but is

Any of the outcomes are required to be considered a system success and will be logged.	viewable to non participating members 9. Training session in class view doesnt display any of the training session information Any of the outcomes are considered a system failure and will be logged.
Post-Condition: Trainers are able to schedule training sessions with trainees in the class setting a specific date and time range	

Non-Functional

<ol style="list-style-type: none"> 1. The trainer user receives a confirmation prompt to ensure the right date and time were selected. 2. The trainer user receives a success message after scheduling a training session. 3. Trainees receive a notification that a training session was created
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Notification System

Notification settings

Functional

Preconditions <ul style="list-style-type: none"> • The user(any) is logged in. • User select to manage their notification settings from their account settings.
Requirements <ul style="list-style-type: none"> • User can have ability to turn off all notifications • A user can specify whether to receive notifications for specific feature actions • Class System <ul style="list-style-type: none"> ○ Invite accepted from a trainee ○ Class post created ○ Class deleted ○ Training scheduled for class • Manager System <ul style="list-style-type: none"> ○ Invitation accepted from a trainer • Dual Feedback System <ul style="list-style-type: none"> ○ Review was left on user profile • Direct Messaging System <ul style="list-style-type: none"> ○ User was sent a message • A user is able to specify whether to receive invitation notifications • All notifications are enabled by default

Success Outcomes <ol style="list-style-type: none"> 1. User is able to change their notification settings 2. Future notifications reflect the new user settings. 3. When user selects to turn off all notifications the user will not receive any notifications 4. When a specific notification is disabled the user will not receive a notification regarding that action <p>All 2 of these outcomes are required to be considered a success.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. The notification settings are not updated. 2. The user receives a notification from an action they specified not to send notifications. 3. Notifications are not enabled by default 4. User is unable to specify if they want to receive invitations 5. User receives an invitations even though they specified they do not want to receive invitations <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition Notification sending will now be based on the user specified setting.	

Non-Functional

<ol style="list-style-type: none"> 1. The application should generate an interface message to confirm that notification settings were changed.

Send Notification

Functional

Preconditions <ul style="list-style-type: none"> • An action specified in the user's notification settings occurred <ul style="list-style-type: none"> ◦ No accessing or viewing functions from any feature is included in this 	
Requirements <ul style="list-style-type: none"> • Send notification as an email to user's third-party email address inbox • Generate notification message using following format <ul style="list-style-type: none"> ◦ Timestamp of when action occurred ◦ Action 	
Success Outcomes <ol style="list-style-type: none"> 1. Notification sent to correct email inbox 2. Notification content contains the timestamp of when the specified action occurred and a message of the 	Failure Outcomes <ol style="list-style-type: none"> 1. Notification message not sent to user's third-party email address inbox 2. Notification message sent to different user's third-party email address inbox

<p>action</p> <p>All 2 of these outcomes are required to be considered a success and will be logged.</p>	<p>3. Message content is not related to the action that occurred.</p> <p>4. Message timestamp is incorrect</p> <p>Any of the outcomes are considered a system failure and will be logged.</p>
<p>Post-Condition</p> <p>Notification sent to third-party email address associated with user's account</p>	

Non-Functional

<p>1. Send a notification within 5 minutes of the action occurring if the third party email service is functional.</p>
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Send Invitation

Functional

<p>Preconditions</p> <ul style="list-style-type: none"> • A user has requested to send an invitation • Invitations are enabled in the users notification settings 	
<p>Requirements</p> <ul style="list-style-type: none"> • User1(sender) sends an invitation to User2(receiver) • Send notification as an email to user2's third-party email address inbox • Generate notification message using following format <ul style="list-style-type: none"> ○ Timestamp of when User1 sent the invitation ○ The actual invitation in message format <ul style="list-style-type: none"> ■ Ex: join my trainer list ○ A yes/no optionality • If user2 selects yes that answer is sent back to user1 in our system and actions may be performed • If user2 selects no that answer is sent back to user1 in our system actions will not be performed 	
<p>Success Outcomes</p> <ol style="list-style-type: none"> 1. Invitation is sent sent to correct email inbox and the content contains the timestamp of when the specified action occurred, the invitation message, and the yes/no optionality 2. If user selects yes that response is sent back in our system and an action is performed 	<p>Failure Outcomes</p> <ol style="list-style-type: none"> 1. Notification message not sent to user's third-party email address inbox 2. Notification message sent to different user's third-party email address inbox 3. Message timestamp is incorrect 4. Message invitation is incorrect

<p>3. If user selects no that response is sent back in our system and an action is not performed</p> <p>All 3 of these outcomes are required to be considered a success and will be logged.</p>	<p>5. Message does not provide a working yes/no functionality that is able to send back an answer into our system</p> <p>6. User selects either yes or no however the opposite occurs</p> <p>Any of the outcomes are considered a system failure and will be logged.</p>
<p>Post-Condition Notification invitation sent to third-party email address associated with user's account</p>	

Non-Functional

<p>1. Send a notification invitation within 5 minutes of the action occurring if the third party email service is functional.</p> <p>2. If user selected "yes" then a certain action will be completed, such as adding them to a class.</p>

Dual Feedback System

View Reviews List

Functional

<p>Preconditions</p> <ul style="list-style-type: none"> User is logged in. User is viewing a user profile, either their own or a different user. 	
<p>Requirements</p> <ul style="list-style-type: none"> Must show all reviews left for a user profile 	
<p>Success Outcomes</p> <p>1. The user can view the review list for the specified user.</p> <p>Outcome is considered a system success and will be logged.</p>	<p>Failure Outcomes</p> <p>1. The user can not see the review list.</p> <p>2. The user sees the review list for a user different than the one specified.</p> <p>Any of the outcomes are considered a system failure and will be logged.</p>
<p>Post-Condition The user is now viewing reviews created by the dual feedback system.</p>	

Non-Functional

<p>1. The data request, data request response, and user interface update to get the list of</p>

reviews should take less than 5 seconds.

Leave Review for User

Functional Requirements

Preconditions

- User is logged in.
- User is viewing a different user's profile and selects to leave a review

Requirements

- Can only leave a review on a different user that a user has performed scheduled training with.
 - A single user can only create one review per training session.
- Only trainer profiles can leave reviews on trainee profiles.
- Only trainee profiles can leave reviews on trainer profiles.
- Numerical rating categories depending on whether the user being reviewed is a trainer or trainee.
- Ratings range from 1 to 10.
 - Trainer: coaching ability, skill, and training
 - Trainee: training summary and training satisfaction
- Both review types will have an additional feedback textbox that can have at most 500 characters
- Required to fill in all categories except for the additional feedback input
- Can only submit review after required sections are filled in.
- Once submitting a review for a profile that profiles review list is updated

Success Outcomes

1. The user is able to give ratings on all available attributes
2. The user is able to provide additional text feedback
3. The review is viewable by all users on the specified user's profile.
4. The review is saved to the database.

All 2 of these outcomes are required to be considered a success and will be logged.

Failure Outcomes

1. The review was not created.
2. The review is not viewable on the specified user's profile.
3. A review can be submitted without filling in all required sections.

Any of the outcomes are considered a system failure and will be logged.

Post-Condition

A review is now viewable on a user's profile.

Non-Functional

1. The review includes the date of the training session.
2. Reviews have a maximum character count of 500.
3. User can input English, numbers, and special characters into the textbox
4. If the user is unable to leave a review they are presented an appropriate message explaining why
 - a. Ex: trainer tries to leave review for another trainer. Message “Sorry can not review other trainers”

Rate Reviews

Functional Requirements

Preconditions <ul style="list-style-type: none"> • User is logged in. • User is viewing a different user’s profile and selects rate review on a review 	
Requirements <ul style="list-style-type: none"> • Trainer profiles can rate reviews on other trainer profiles. • Trainee profiles can rate reviews on other trainee profiles. • Rating a review has two options: <ul style="list-style-type: none"> ○ Review was helpful ○ Review was not helpful • A rater can only choose one of the two options • The rating of the review will be displayed on the profile 	
Success Outcomes <ol style="list-style-type: none"> 1. The review has been updated to reflect the new rating 2. The rating/review has been saved to the database <p>All 2 of these outcomes are required to be considered a success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. The wrong rating is displayed 2. The review was not rated 3. The review received multiple answer choices 4. The review was not saved to the database <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition <p>The user is now able to rate reviews which will be viewable on a user’s profile.</p>	

Non-Functional

1. Rating will be easily visible to everyone viewing the profile

Direct Messaging System

View Message Model

Functional Requirements

Preconditions <ul style="list-style-type: none"> • User(any) is logged in. • User selects view messages from the dashboard interface. 	
Requirements <ul style="list-style-type: none"> • All the names of profiles that the user has ever messaged or have messaged the user are displayed • Names can be selected to go to the message exchange between the two users • Only the names of the 50 most recent profiles that have been messaged by the user are displayed 	
Success Outcomes <ol style="list-style-type: none"> 1. User is able to see the names of all(at most 50) the profiles they have ever messaged or been messaged by 2. User is able to select any of the names and go to the message exchange between themselves and that other profile <p>All 2 of these outcomes are required to be considered a success and will be logged.</p>	Failure Outcomes <ol style="list-style-type: none"> 1. User is not able to see the names of the profiles they have messaged 2. A name is not able to be selected to go to the message exchange between profiles 3. A name is selected however it does not go to the correct message exchange 4. More than 50 names are displayed <p>Any of the outcomes are considered a system failure and will be logged.</p>
Post-Condition <p>User is in view messages model and is able to see all the names of the profiles they have messaged before and are able to access each ones message exchange</p>	

Non-Functional Requirements

<ol style="list-style-type: none"> 1. It takes less than or equal to 5 seconds for the application to access the direct message system. 2. Names are ordered by which message exchange was most recently used

Direct message through Profile

Functional

Preconditions <ul style="list-style-type: none"> • User(any) is logged in • User is on a different user's profile and selects direct message

Requirements <ul style="list-style-type: none"> • If a message exchange between the the profile of the user(user1) and the profile which was selected(user2) exists then go to that message exchange view • If no message exchange exists between user1 and user2 create a new message exchange between user1 and user2 	
Success Outcomes <ol style="list-style-type: none"> 1. If there exists a message exchange between user1 and user2 got to that 2. If there does not already exist a message exchange then create a new message exchange between user1 and user2 <p>Outcome is considered a system success and will be logged</p>	Failure Outcomes <ol style="list-style-type: none"> 1. A message exchange already exists between user1 and user2 however a new one is create 2. A message exchange between user1 and user2 does not already exist however a new one is not created 3. A message exchange exists between user1 and user2 however user is not directed to the message exchange view 4. The message exchange view of the incorrect pairing of users is accessed 5. A new message exchange is created with the wrong users 6. A message exchange view already exist for the users however messages are missing or has been altered <p>Any of the outcomes are considered a system success and will be logged.</p>
Post-Condition User is now viewing the message exchange view between themselves and the selected profile	

Non-Functional

<ol style="list-style-type: none"> 1. It takes less than 5 seconds for the application to access the direct message system. 2. Messages have a maximum character count of 500.
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Message exchange view

Functional

Preconditions <ul style="list-style-type: none"> • User(any) is logged in • User is viewing the message exchange between themselves and another profile
Requirements <ul style="list-style-type: none"> • A user is able to see all messages that have been sent between the two users

<ul style="list-style-type: none"> • A user should be able to input text content and send that message to the other user. • 200 text character limit. • Can not send an empty text field. 	
<p>Success Outcomes</p> <ol style="list-style-type: none"> 1. User is able to see all the messages that exist between them and the other user(max 1000) 2. The message is sent to the correct user. 3. Both sender and receiver users can see the message. <p>All 3 of these outcomes are required to be considered a success and will be logged.</p>	<p>Failure Outcomes</p> <ol style="list-style-type: none"> 1. The user can send an empty text field as a message. 2. The message does not get sent. 3. Either the sender or receiver user can not see the message after it is sent. <p>Any of the outcomes are considered a system failure and will be logged.</p>
<p>Post-Condition</p> <p>Both users are able to send messages and see previous messages</p>	

Non-Functional

<ol style="list-style-type: none"> 1. The message includes a timestamp of when it was sent for the users to see. 2. User can input only English, numbers, and special characters in a message 3. Message exchange only remembers at most 1000 messages <ol style="list-style-type: none"> a. If messages view is full and a new message is added delete the oldest message to make room
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Glossary

Term	Definition
End-User License Agreement (EULA)	An agreement between the user of the product and software producer that lets the user know what the product is allowed to do with their data.
View's Model	The data an application displays on a view.

References

1. <https://cutewallpaper.org/24/sports-png/view-page-24.html>
2. Vong, Vatanak. Core Components Requirements, 17 Oct. 2022.

Version Changelog

Version	Submission Date	Changelog
1	10/03/22	Initial Draft Version
2	10/05/22	Initial Submission <ul style="list-style-type: none"> ● Reformat Business Requirements ● Remove the following sections: <ul style="list-style-type: none"> ○ Scope ○ Features ○ Personnel Requirements ○ Delivery Schedule ○ Reporting and Quality Assurance ○ Risks ● Update Glossary section
3	12/07/22	Final Draft Submission <ul style="list-style-type: none"> ● Added Core Features ● Updated the Standalone Features

		<ul style="list-style-type: none">○ Removed Documents○ Added Search○ Revamped Existing Features● Made search for use and profiles their own features● Added App-wide Features● Added Consolidation
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