CSC 431

LiftX

Software Requirements Specification (SRS)

Team 3

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Version History

Version	Date	Author(s)	Change Comments
1.0.0	2/20/22	Kyle Biggs, Moose Griffth, Christopher Rodriguez, Jerome Fleischman	- First draft created.
1.0.1	4/8/22	Kyle Biggs, Moose Griffth, Christopher Rodriguez, Jerome Fleischman	- Push notifications moved to Non Functional Requirements - Use Case Diagram Updated - System Constraint descriptions edited. - Portability added to NFR. - New Evolutionary Requirements added.
1.0.2	4/30/22	Kyle Biggs, Moose Griffth, Christopher Rodriguez, Jerome Fleischman	- Final Draft

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1. System Requirements

1.1 Functional Requirements

1.1.1 Sign up for an account

Title	Sign up for an account
Description	The user signs up for LiftX by registering with their phone or email. From there, they will input their username and password.
Priority	0
Precondition(s)	-User must access LiftX through a browser. -User must click on the button that reads “Sign up”
Basic Flow	-User clicks on the sign up button -User is asked to input their phone or email -User is then asked to input a unique username and password
Postconditions(s)	-User account is created. -User is brought to their personal homepage.
Use Case Diagram	3.1.1

1.1.2 Log-in to existing account

Title	Log-in to existing account
Description	The user logs into their account on LiftX with their username and password.
Priority	0
Precondition(s)	- User must access LiftX through a browser. - User must click on the button that reads “login”
Basic Flow	-User clicks on the login button. -User is asked to input their username and password.

Postconditions(s)	-User is brought to their homepage if their username and password are correct. -If their username and password are incorrect, the user is given an error and is asked again to input their correct username and password.
Use Case Diagram	3.1.1

1.1.3 Account Settings and Modification

Title	Account Settings and Modification
Description	The user will be able to change and modify the settings on their account through this page. They will be able to turn on/off notifications and change their email, phone number, username, and password if they so wish.
Priority	1
Precondition(s)	-User must login to their LiftX account. -User must click on the button that reads “Settings” on their personal homepage
Basic Flow	-User clicks on the “Settings” button -User is given a list of options that lets them change their email, phone number, username or password, as well as turn on/off notifications.
Postconditions(s)	-Account settings have either been changed or left alone
Use Case Diagram	3.1.1

1.1.4 Data Logging

Title	Data Logging
Description	User inputs the reps, sets, and weight of the particular workout they are doing.
Priority	0
Precondition(s)	-User must login to their LiftX Account.

Basic Flow	-User accesses their personal homepage. -User clicks the button that reads “Log Workout” -User then inputs the reps they do, the amount of sets they do, and the weight that they plan to lift.
Postconditions(s)	-User’s data is logged and recorded on their personal homepage.
Use Case Diagram	3.1.1

1.1.5 Data Visualization

Title	Data Visualization
Description	User’s progress will be recorded in a graph.
Priority	2
Precondition(s)	-User logs into their LiftX account.
Basic Flow	-User accesses their personal homepage. -User clicks the button that reads “Log Workout” -User logs their workout.
Postconditions(s)	-After the user logs their workout, their progress will be displayed in a graph that is on their personal homepage.
Use Case Diagram	3.1.1

1.1.6 Log-Out of Account

Title	Log-out of account
Description	User logs off their account.
Priority	1
Precondition(s)	-User is logged into their Lift account.

Basic Flow	-User is on their personal homepage on LiftX. -User presses the button that reads “Log-out”
Postconditions(s)	-User is then logged out of their account.
Use Case Diagram	3.1.1

1.2 Non-Functional Requirements

1.2.1 Automatic Password Reset

Title	Automatic Password Reset
Description	-If a user is not able to input their correct password after a number of times, they will be sent the option to reset their password through their email.
Priority	1
Applicable FR(s)	1.1.2

1.2.2 Push Notifications

Title	Push Notifications
Description	Notifies users on their progress
Applicable FR(s)	1.1.3

1.2.3 Portability

Title	Portability
Description	A mobile compact version of LiftX will be accessible through a web browser on smartphone thus allowing for users to use the application anywhere that has internet
Applicable FR(s)	1.1.2

2. System Constraints

2.1 Tool Constraints

2.1.1 Code Sandbox

Title	Code Sandbox
Description	We will be using Code Sandbox for our frontend development for ease of use and toggleable preview formats.
Priority	4

2.2 Language Constraints

2.2.1 HTML

Title	HTML
Description	LiftX will use HTML in order to design the overall structure for the different web pages in the application.
Priority	0

2.2.2 CSS

Title	CSS
Description	LiftX will use CSS as well in order to help style the different web pages and build upon the structure of the application
Priority	1

2.2.3 JavaScript

Title	JavaScript

Description	LiftX will use JavaScript in order to build the page interactions, behavior and dynamic content that will make it useful to our customers.
Priority	0

2.2.4 Java

Title	Java
Description	Java will be used for the backend development for its simplicity and multi-threading capabilities.
Priority	0

2.3 Platform Constraints

2.3.1 Web Browser

Title	Web Browser
Description	The user will need a web browser in order to be able to access LiftX. It can be through a computer or a phone.
Priority	0

2.4 Hardware Constraints

2.4.1 Smartphone or Computer

Title	Smartphone, or computer with a web browser needed
Description	To access the LiftX site, users will require either a smartphone device or computer with a web browser.
Priority	0

2.5 Network Constraints

2.5.1 Network Connection

Title	Network Connection
Description	LiftX users must have an internet connection to access the site.
Priority	0

2.6 Deployment Constraints

2.6.1 Code Sandbox

Title	Code Sandbox
Description	We will be using Code Sandbox for our deployment due to its simple features and integrated services for web development.
Priority	1

2.7 Transition & Support Constraints

2.7.1 Version Control

Title	Version Control
Description	As we continue to build and push new features, we will use Github as our code repository.
Priority	0

2.8 Budget & Schedule Constraints

2.8.1 Budget Constraints

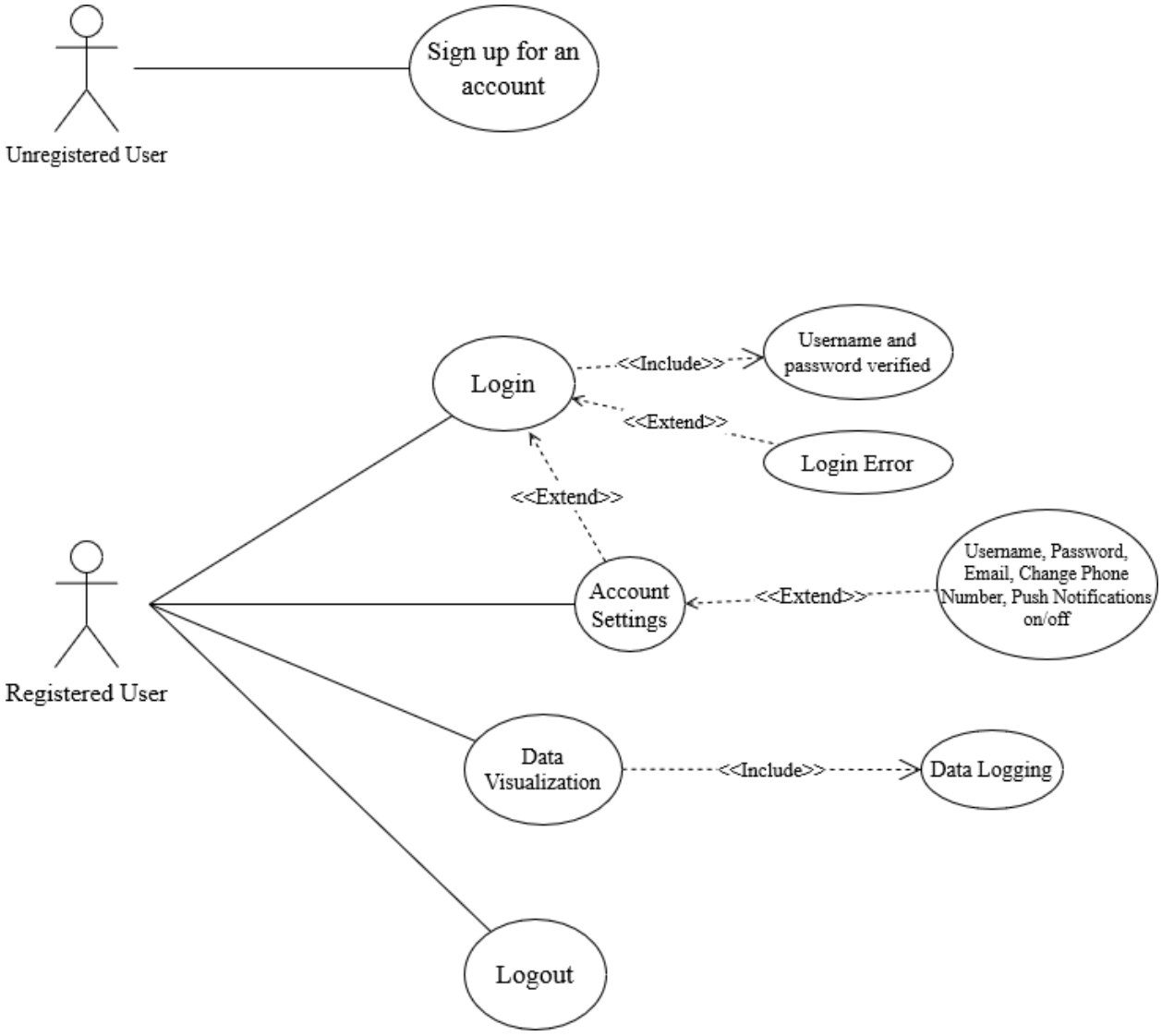
Title	Budget
Description	There is no budget as this is made for a project in class.
Priority	5

2.8.2 Schedule Constraints

Title	Schedule
Description	The entire project must be completed by May 2nd,2022. With a prototype to be completed by April 12th, 2022
Priority	0

3. Requirements Modeling

3.1.1 Use Case Diagram



4. Evolutionary Requirements

4.1 Functional Requirements

4.1.1 Refine Data Logging

Title	Refine Data Logging
Description	Users input the weights they are using to work out to be able to track their progression.
Priority	Mandatory: 0
Precondition(s)	User is logged into an account.
Postconditions(s)	Users will be able to track their weightlifting progression.
Use Case Diagram	3.1.1

4.1.2 Refine Data Visualization

Title	Refine Data Visualization
Description	When users log their data into LiftX, their progress will be recorded on a graph. Refinement will center around having a more accurate graph.
Priority	Mandatory: 0
Precondition(s)	User logs their workout.
Postconditions(s)	User will have their data displayed in a graph.
Use Case Diagram	3.1.1

4.2 Non-Functional Requirements

4.2.1 Speed for loading Data Visualization

Title	Speed for loading data visualization
Description	The user’s progress graph should load in around 3 - 5 seconds.

Priority	1
Applicable FR(s)	4.1.2

4.2.2 Encryption of Account Information

Title	Encryption of Account Information
Description	The user’s password, email, and phone number will be encrypted.
Priority	1
Applicable FR(s)	4.1.1