CSC 431

COR

Software Requirements Specification (SRS)

Team 13

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Version History

Version	Date	Author(s)	Change Comments
1.0.0	2.17.22	Julia Eisner, Jeffrey Hudak, TC McCaffrey	First Draft
2.0.0	4.26.22	Julia Eisner, Jeffrey Hudak, TC McCaffrey	Second Draft

Table of Contents

Table of Tables

Table of Figures

1. System Requirements

1.1 Functional Requirements

1.1.1 Login

Title	Login
Description	The user will be prompted to login using some pre-existing login platform such as through Apple, Google, or Facebook.
Priority	0
Precondition(s)	The user will need to have a registered account and profile with COR.
Basic Flow	- The user will enter their username and password into the entry fields. - If the username and password are verified, the user is logged in. - If the username or password is incorrect, the user will receive a red notification below the field to inform them that the entry is incorrect. - If the username is incorrect and they will be that the username is either wrong or does not exist. They will have the option to hit the create user profile button which will take them to the user profile creation page. - If the password is wrong they will be told that it is incorrect and to try again.
Postconditions(s)	If the user successfully logs in they will be taken to the homepage to their dashboard
Use Case Diagram	Graph 3.1.1

1.1.2 Logout

Title	Logout
Description	User will log out from the service with the aid of a logout button

Priority	2
Precondition(s)	The user will have to be logged into a registered account.
Basic Flow	The user will select to logout on their dashboard and will receive a prompt that asks them to confirm that they would like to logout.
Postconditions(s)	Will be directed to the landing page where users can close the app or login again.
Use Case Diagram	Graph 3.1.1

1.1.3 Create User Profile

Title	Create User Profile
Description	Users will be able to provide more information about themselves such as height, weight, a profile picture, location, etc.
Priority	0
Precondition(s)	The user will have to have the app downloaded and to have a fitness watch to connect to the app.
Basic Flow	- One scrollable page that has either text or numerical fields for the user to input information as it is asked - Once the user closes the page, any new information is saved to their account
Postconditions(s)	The user will then be directed to the homepage and will be logged into their new registered account.
Use Case Diagram	Graph 3.1.1

1.1.4 Retrieving Personal Analytics

Title	Retrieving Personal Analytics
Description	The fitness watch will send the user's personal analytics to the app to be stored by the COR cloud database.

Priority	1
Precondition(s)	The user must be logged in and have a connected fitness watch.
Basic Flow	- The user's watch must be connected to the app. - App will initiate data fetch from the watch. - Watch will then send the data to the app. - Back end systems will send the data to be stored in the cloud database.
Postconditions(s)	None
Use Case Diagram	Graph 3.1.1

1.1.5 Join Event

Title	Join Event
Description	The user is able to join events that will be hosted at a time, date, and location. Using the UI the user will search for and choose which event they would like to join and will click a button that says "join" to be added to the list of users that will be attending the event.
Priority	3
Precondition(s)	User is logged in and has an internet connection. Event user is trying to join must already exist.
Basic Flow	- User toggles to the events page - User clicks on the event they would like to join - User clicks the "join" button and is successfully joined to the event. - The event's information will be updated in the database to reflect the new participant.
Postconditions(s)	The user's name will be associated with those who have joined the event and will show up under the list of those who have joined. The user will get notifications and reminders about the upcoming event. The user has joined the event.
Use Case Diagram	Graph 3.1.1

1.1.6 Create Event

Title	Create Event
Description	The user is able to create events that will be hosted at a time, date, and location. Using the UI the user will input that data, along with titles and optional pictures and descriptions, which will be created as an “event” object to be interacted with by other users.
Priority	2
Precondition(s)	User is logged in and has an internet connection.
Basic Flow	- User requests to create an event - A list of fields can be filled out about the date, time, duration, location, workout type, whether it’s private/public, title, and description of the event - Submit button to officially save that information as an event object - The event will then be sent and saved by the database.
Postconditions(s)	The event will be sent to the database to be retrieved by other users when opening and refreshing the app.
Use Case Diagram	Graph 3.1.1

1.1.7 Send Message

Title	Send Message
Description	One user will send a message to another user through the app’s messaging system
Priority	4
Precondition	Both the sender and the recipient will have to be registered users of COR. The sender must be logged into the app and have an active internet connection.
Basic Flow	- The user will select the person they would like to message.

	- They will type the message in the text box. - The user will hit send, and the message will be sent to the other user. - The message will be sent and stored in the database.
Postcondition(s)	Once the message has been sent, the recipient will receive the message once they have an active internet connection. The message will be displayed on the messaging interface for both parties.
Use Case Diagram	Graph 3.1.1

1.1.8 Generate Workouts

Title	Generate Workouts
Description	Pulls workouts saved from the database that have either been saved from the users smartwatch and/or generated by the app by analyzing those workouts.
Priority	3
Precondition(s)	The user must be logged in to view old workouts. If they want to see generated workouts they must have an internet connection. This is automatically run when they either a workout widget is open or the user click the workouts page
Basic Flow	- The database is prompted to send all recently saved workouts - Any workouts saved since the last refresh from the watch is sent - Generated workouts are also created once all workouts are recieved
Postconditions(s)	The workouts are now interactable and its data (type and exercises) are able to be used by other parts of the app such as for display and for being sent as messages.
Use Case Diagram	Graph 3.1.1

1.2 Non-Functional Requirements

1.2.1 Push Notifications

Title	Push Notifications
Description	Users will receive in browser, text, and email notifications notifying them of upcoming tasks, events, health statistics, and messages.
Priority	4
Applicable FR(s)	Send Message, Join Event, Create Event

2. System Constraints

2.1 Tool Constraints

2.1.1 Mobile Application Framework Constraint

Title	Mobile Application Framework Constraint
Description	We will use Node.js for the frontend and the backend of our application.
Priority	0

2.2 Language Constraints

2.2.1 Backend Framework

Title	Backend Framework
Description	Knowledge of the following languages will be needed for the app: Swift, Java, Javascript, Python, and SQL.
Priority	0

2.3 Platform Constraints

2.3.1 Mobile Application Platform

Title	Mobile Application Platform
Description	This product will be a mobile app on iOS platforms.
Priority	0

2.4 Hardware Constraints

2.4.1 Cell Phone

Title	Cell Phone
Description	To access, users will need a cell phone with internet access. Will be used on iOS platforms.
Priority	0

2.5 Network Constraints

2.5.1 Network Connection

Title	Network Connection
Description	Users cannot use the service without an internet connection.
Priority	0

2.5.2 Bluetooth Connection

Title	Bluetooth Connection
Description	Users must have a bluetooth connection with their fitness watch.

Priority	0

2.6 Deployment Constraints

2.6.1 iOS Constraint

Title	iOS Constraint
Description	The App can only be deployed on cell phone devices that utilize the iOS mobile operating system.
Priority	0

2.8 Budget & Schedule Constraints

2.8.1 Budget

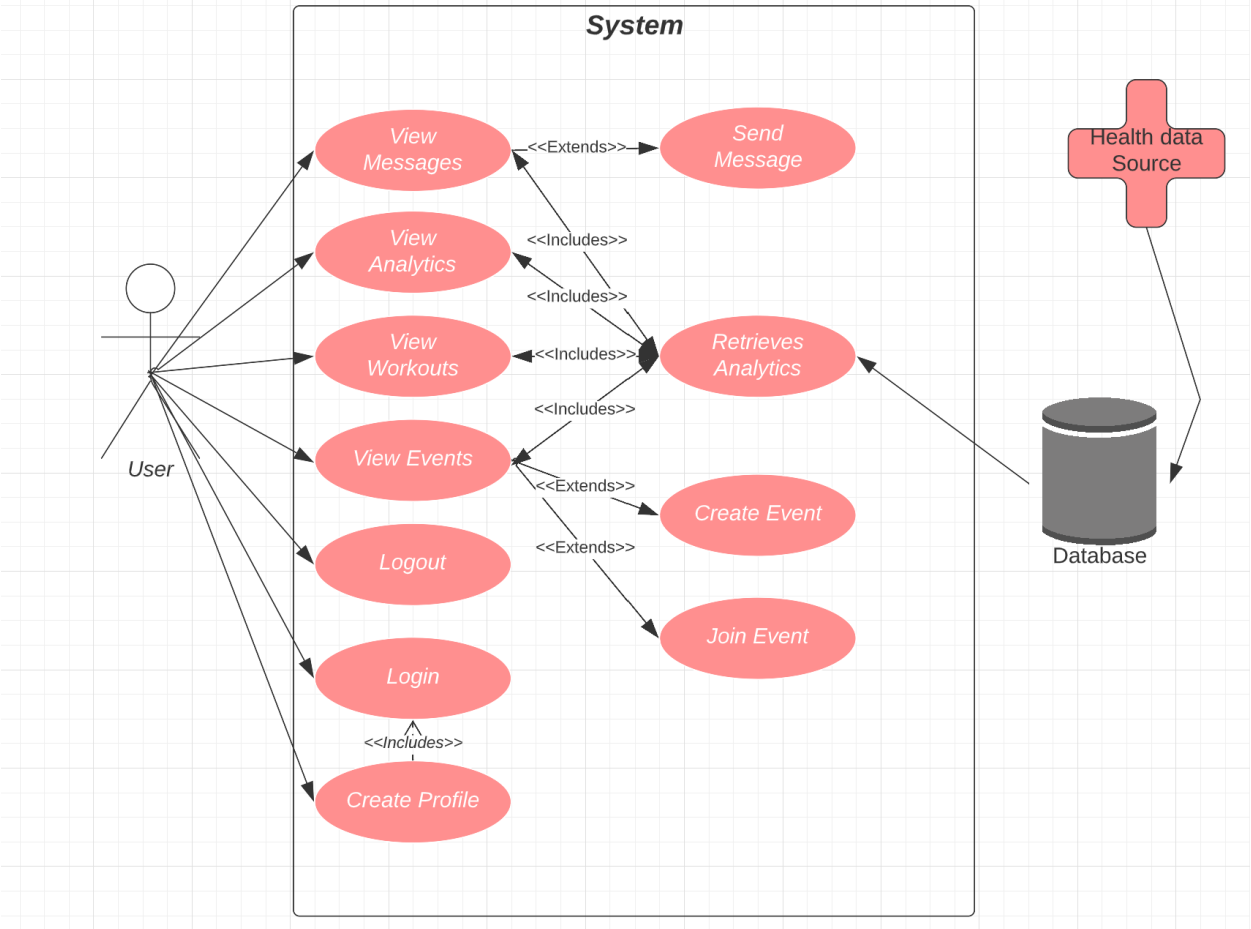
Title	Budget
Description	$0 we are students.
Priority	0

2.8.2 Due Date

Title	Due Date
Description	Needs to be done by the due date for this course.
Priority	0

3. Requirements Modeling

3.1.1 Use Case Diagram



4. Evolutionary Requirements

4.1 System Constraint

4.1.1 Android Compatibility

Title	Android Compatibility
Description	We will add the application to Android platforms to reach a larger user base.
Priority	5
Precondition(s)	Functionality on iOS platforms.
Postconditions(s)	Users with android devices will be able to use the application and its services.
Use Case Diagram	Graph 3.1.1