Snappy Workout
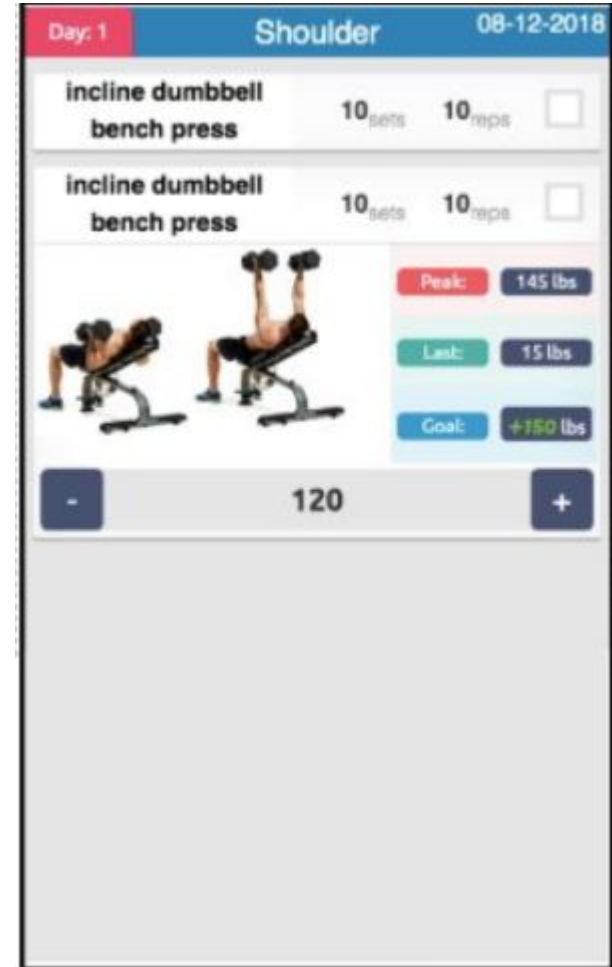
Team Snappy:
- Jianqiang Du
- Peter Bui
- Taylor Bui
- Trung Nguyen

Workout assistance

Benefits:

- Mobile Application
- Assist in Logging work out
- Track progress
- Provide guidance
- User friendly UI
- Customization of Workout Plan

System Functionality

- Login
- Registration
    - Workout Plan
        - View
        - Update
        - Export / Import
        - Add / Remove Exercise
    - View Technique
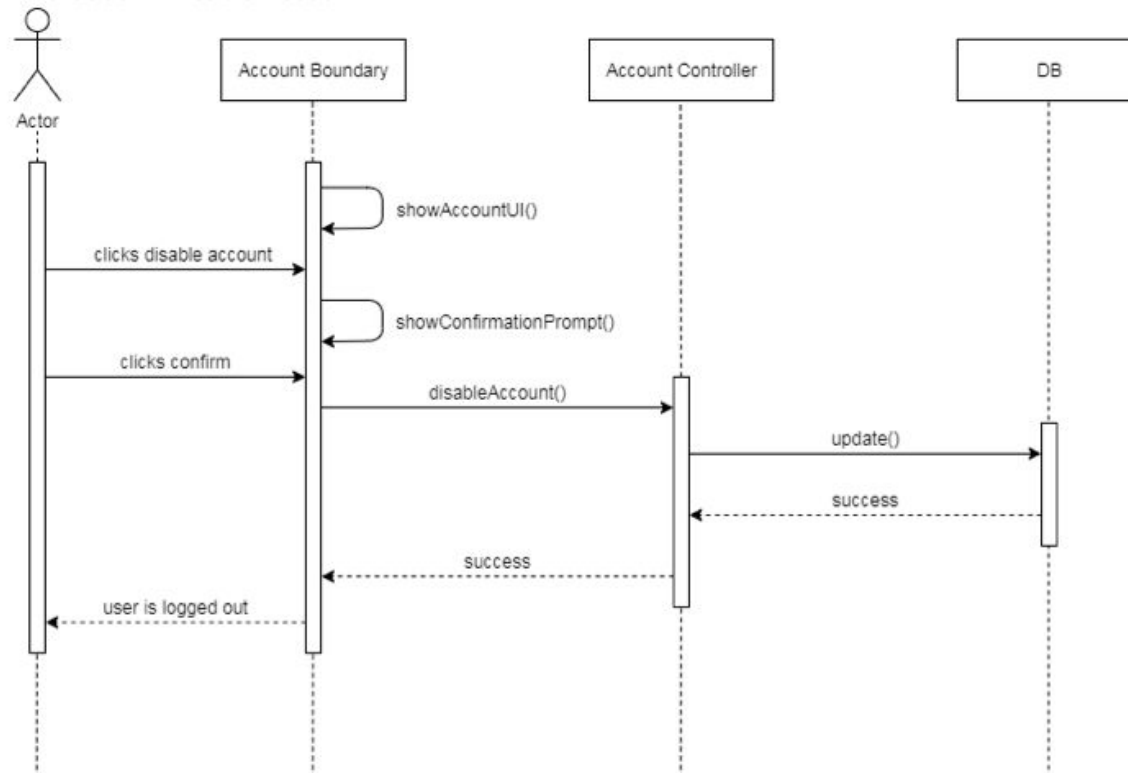   - View Statistics / Progression
        - Export Stats

Use Cases

Use Case: Disable Account

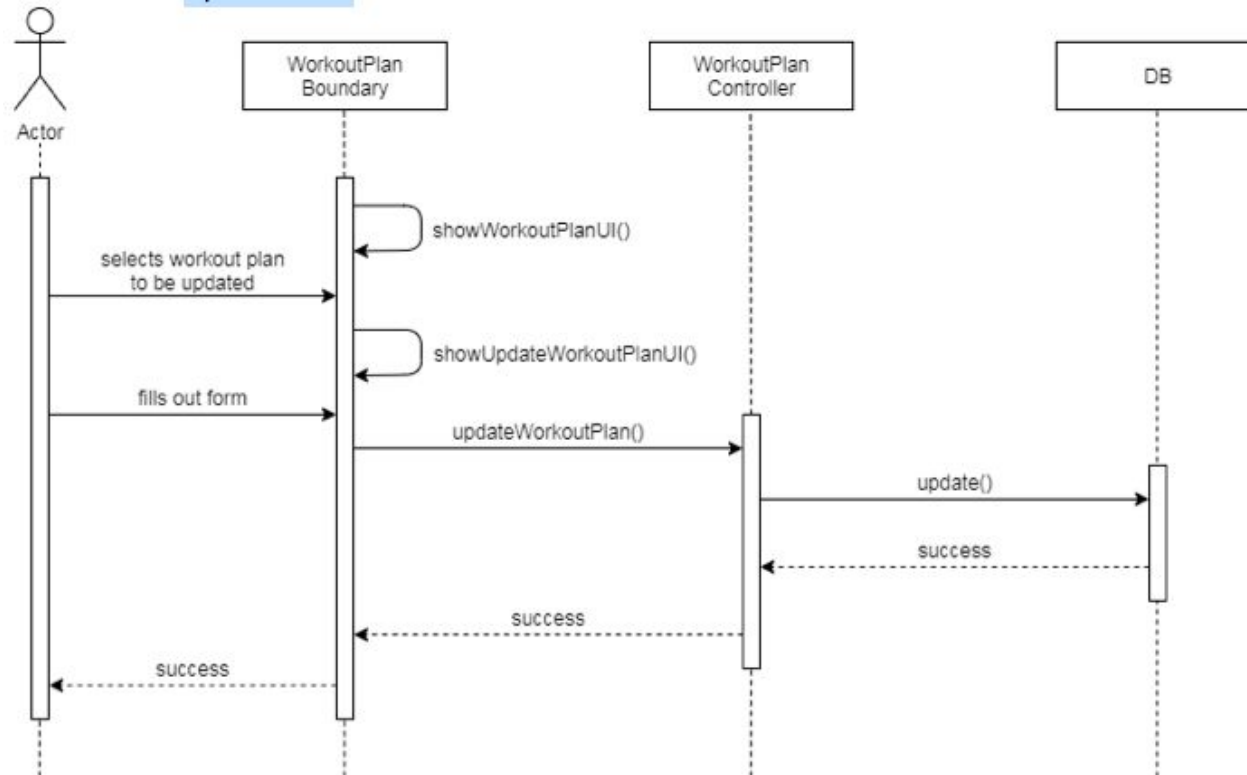| Use Case 2	Disable Account
Actors	User
Pre-Conditions	User must be logged in Must be on the management page Must Have Network Connection
Flow on Control	- Mark the disable action - System prompts for confirmation - User clicks confirm button - System shows user is disabled
Post-Conditions	Account is disabled
Error-Condition	Network connection is lost during the process.

Use Case: Disable Account

Use Case: Update Workout Plan

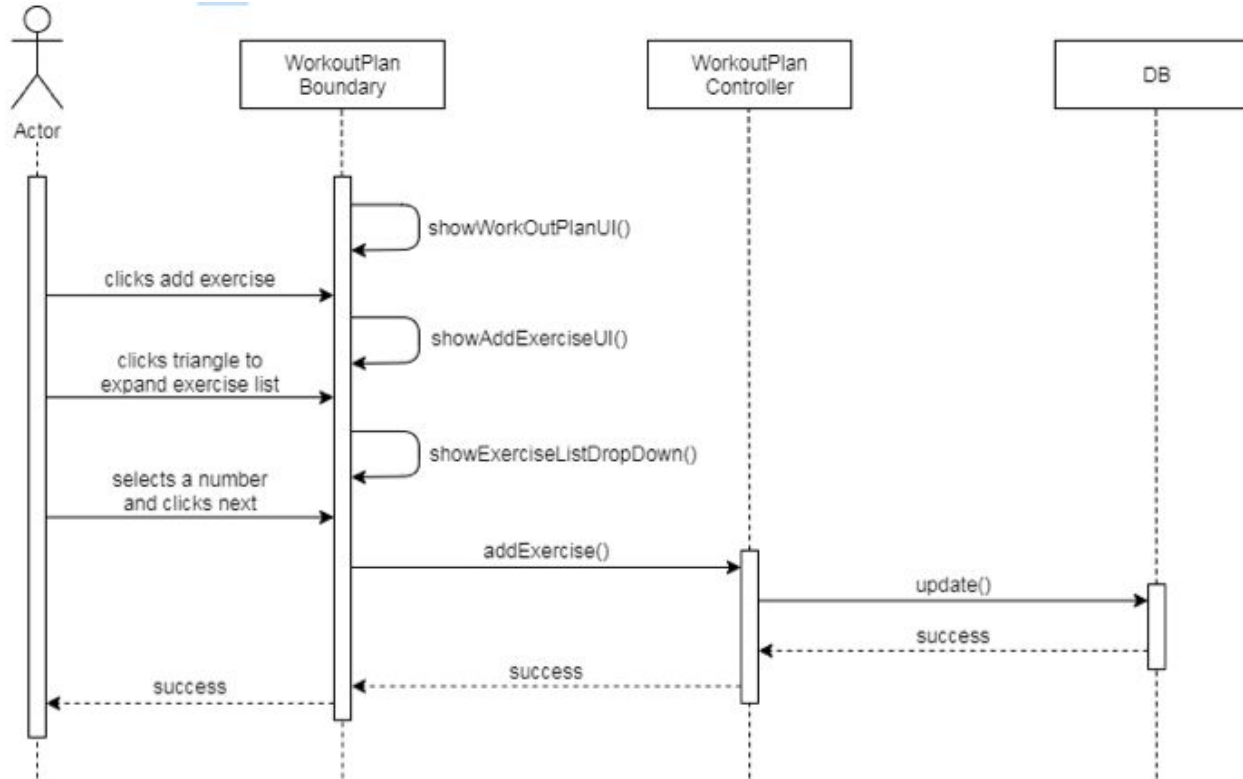| Use Case 6	Update Workout Plan
Actors	User
Pre-Conditions	Must have network connection. Must have at least 1 Workout Plan.
Flow on Control	- User clicks update Workout button - System transfers user to input page - User modifies Workout name and clicks submit - System shows the updated data - User modifies Exercise and clicks submit - System shows the updated data - User modifies Exercise date and clicks submit - System shows the updated data
Post-Conditions	System saves and updates database
Error-Condition	Workout name exceeds 60 characters.
Non-Functional Requirements	System should process the instruction and update the database within 5 seconds.

Use Case: Update Workout Plan

Use Case: Add Exercise

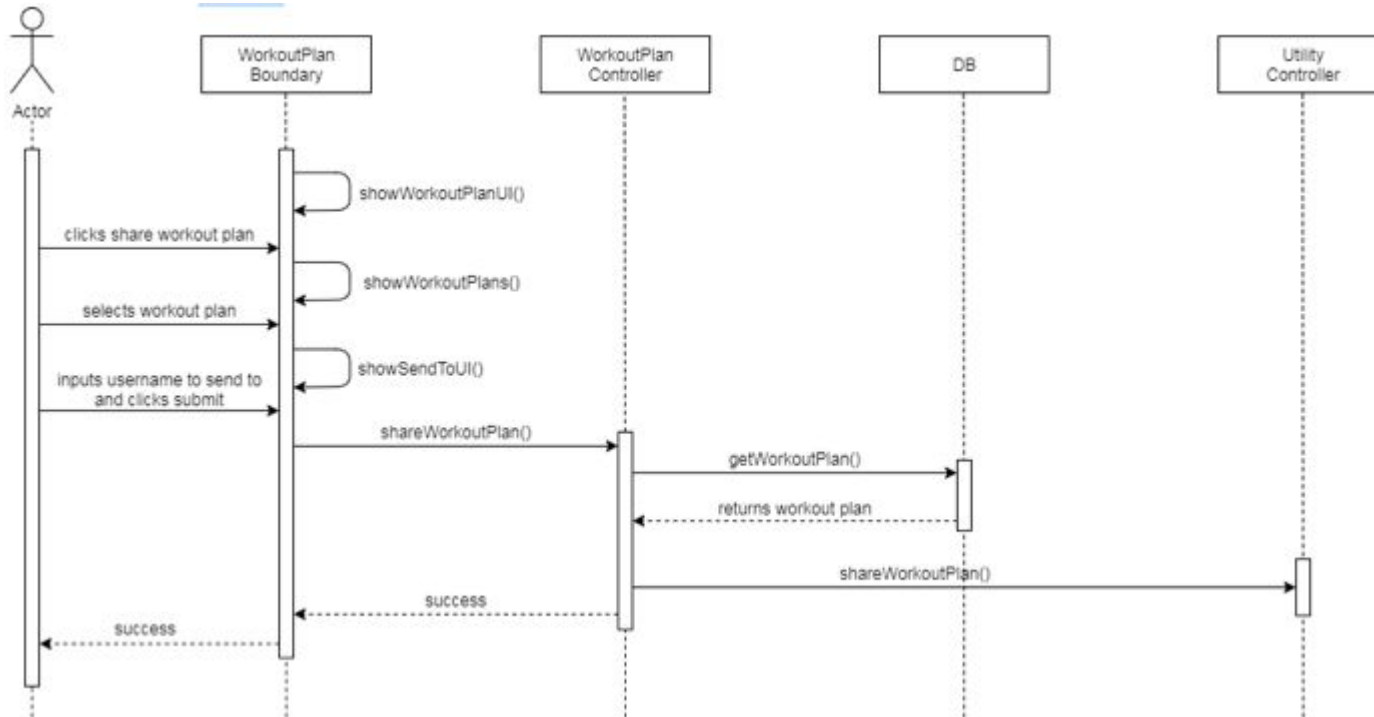| Use Case 13	Add Exercise
Actors	User
Pre-Conditions	Must be logged in. Must have created at least 1 Workout Plan.
Flow on Control	- User selects Add exercise in Workout Plan - System shows list of all exercise - User selects the exercise. - User selects next. - System shows new menu asking how many. - User selects a numeric choice from a dropdown menu. - User clicks next. - System shows that the exercise is added
Post-Conditions	System updates the database and confirms the exercise is added.
Error-Condition	None
Non-Functional Requirements	System should process the instruction and update the database within 5 seconds.

Use Case: Add Exercise

Use Case: Share Workout Plan

Use Case 9	Share Workout Plan
Actors	User
Pre-Conditions	User is logged in User must have at least 1 Workout Plan

Flow on Control	• User clicks Share Workout Plan
	• User selects Workout Plan
	   ○ System asks User for the user ID to send to.
	• User inputs another User's ID
	   ○ System confirms User ID
	• User selects submit.

Post-Conditions	• Another use receives an option to accept or reject the Workout Plan
Error-Condition	• System cannot find the user ID in database
Non-Functional Requirements	Data is processed and save within 5 seconds

Use Case: Share Workout Plan

Choice of Implementation of Technology

IDE and Development Tools.

- Android Software Development Kit
- Android Studio

Language:

- Python
- Kotlin

User Interface:

- Android Jetpack

Server and Database

Database

We will be using mySQL for our database. It will allow us to secure access to our database as well as manage the data. Our team has the most experience with mySQL.

Libraries

For our libraries we will be using Flask-SQLAlchemy, dateTime and bcrypt. Flask_SQLAlchemy, is an extension of Flask that assists in managing and creating databases. The datetime library helps with manipulating dates and times to store the workout data inside our database. Lastly bcrypt is used to secure our software through hashing passwords.

Deployment Platform

Snappy Workout

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