Software Requirements and Design Document

For

Group <X>

Version 1.0

Authors:
Kevin Nguyen
Carter Reiff
Samuel Childers
Russel Lewis
Tiffany Medina

1. Overview (5 points)

The Anabolix app was inspired by quarantine negatively affecting our physical health, made to aid users in their fitness journey. We plan to use the Android Studio IDE to implement a wide array of tools that the user can take advantage of for multiple use cases on their Android mobile device.

The tools we will be implementing include a Pedometer, An account login feature so users can track their progress, an alarm system for reminders, a calorie counter, and many other things. The system should function as an all in one fitness tool for users' convenience.

2. Functional Requirements (10 points)

1. *Track Movement of the Device(Medium)*
2. *Track Environmental Data ie. Weather, Altitude, Time etc.(Medium)*
3. *Display Media ie. Training videos (Low)*
4. *Verify Account Information to Track Individual User Data (High)*
5. *Allow User to Specify if/when to be Notified by the App ie. for an alarm reminder, workout milestones, etc. (Medium)*
6. *Allow user to input calories to keep a running tally over a period(High)*
7. *Store Data about calorie counts, exercises, and dates(Medium)*
8. *Should be able to record exercise times via a timer(High)*

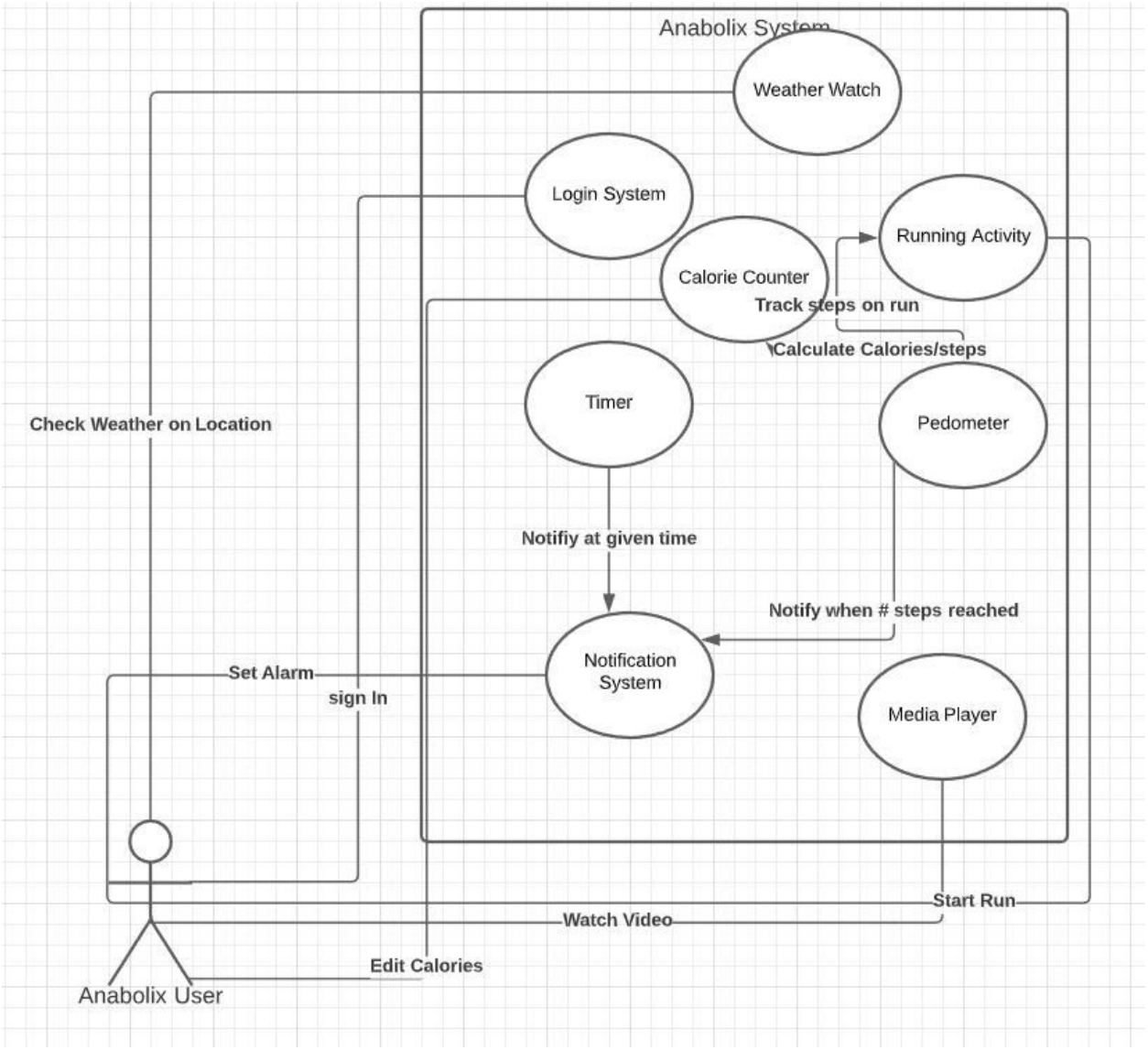
3. Non-functional Requirements (10 points)

1. *Device must secure user data*
2. *Mobile Device must be able to run simple applications.*
3. *Must have an Android Device to use the System*
4. *Device must be capable of connecting to the internet (for google login/maps)*

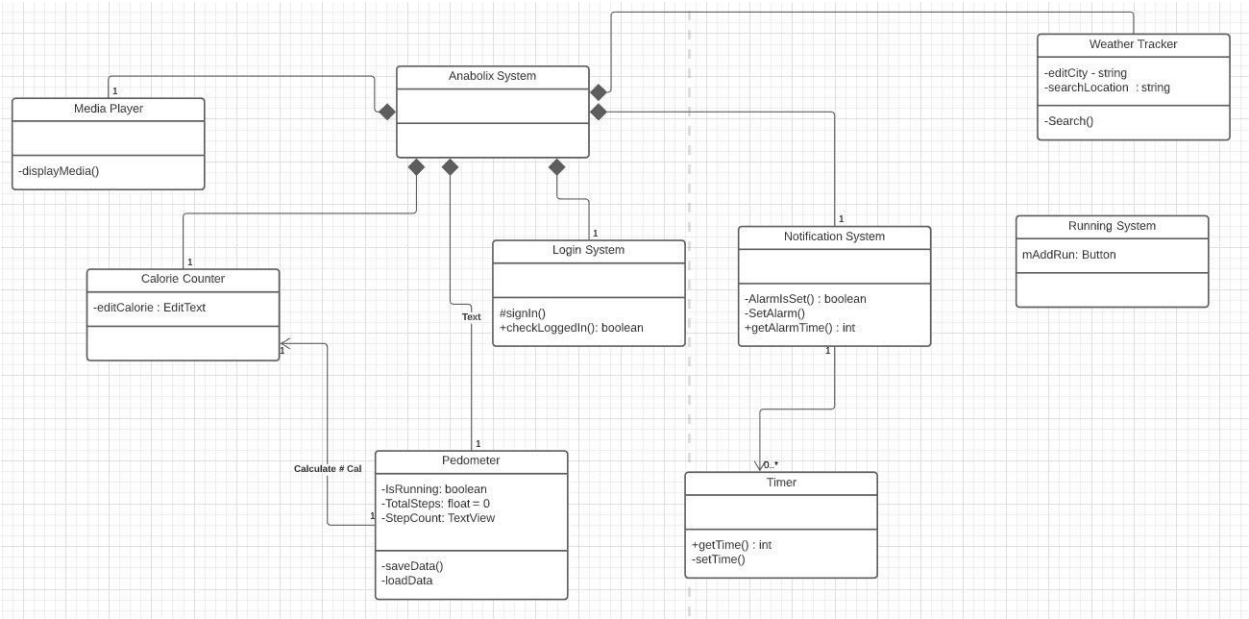
4. Use Case Diagram (10 points)

Use Case Descriptions: *The Login system will allow users to save their progress in things like calories, steps taken, or alarms set. The Calorie counter will allow users to update caloric intake through foods and calories burned through exercise. The pedometer will use the device's sensor to track steps taken. The Notification system will allow users to set alarms, or give other*

notifications to the user based on other things in the app e.g. reaching a certain amount of steps. The media player will allow users to view media like exercise videos.



5. Class Diagram and/or Sequence Diagrams (15 points)



6. Operating Environment (5 points)

This application will be developed using Android Studio 3.6.3 (Android 10 API level 29). This app will only run on devices using Android 10 and up. App testing will take place on an emulator for a Nexus 5X.

7. Assumptions and Dependencies (5 points)

Assuming that users will have android devices with most standard features. ie. Sensors to track movement. Assumes that users have an internet connection available.