

GymRatTrax Personal Fitness Scheduler Mobile Application



Group #8

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PROJECT SCOPE

- Create an **exercise scheduling and tracking application**
- Exclusively developed for the **Android mobile operating system** using the **Android Studio IDE**
- Allows users to:
 - **Schedule unique workout routines**
 - **Document the completion of the routines**
 - **Monitor progress of the routines** as well as **overall personal body metrics**
 - **Accurately calculate calories burned** (with implementation of either the Katch & McArdle or Harris Benedict Method)

LITERATURE REVIEW

- **Android marketplace is saturated with fitness applications**
- **Scope will focus on unique features**

Set a daily goal	✓	✗	\$	✗	✓	\$	✓	?	✓	✗	✓	✓	✓	✗
Plan a weekly workout routine	✓	✗	\$	✗	\$	\$	✗	?	✓	✗	✓	✓	\$	✗
Edit a weekly workout routine	✓	✗	?	✗	?	\$	✗	?	✗	✗	✗	✓	✗	✗
Input own weekly workout routine	✓	✗	?	✗	✗	\$	✗	?	✗	✗	✗	✗	✗	✗
Log multiple types of exercise	✓	✗	✗	✗	✓	✓	✓	?	✓	✗	✗	✗	✓	✓
Adjustments based on progress	✓	✗	\$	✗	✗	✗	✓	?	✗	✗	✗	✓	✗	✗
Badges based on progress levels	✓	✗	✗	✗	✗	✗	✗	?	✗	✗	✗	✗	✗	✓
Receive workout reminders	✓	✗	✗	✓	✗	✗	✗	?	✓	✓	✓	✓	✗	✓
Customize recurring reminders	✓	✗	✗	✓	✗	✗	✗	?	✗	✓	✓	✓	✗	✗
Search exercises by calories to burn	✓	✗	✗	✗	✗	✗	✗	?	✗	✗	✗	✗	✗	✗

BASE OBJECTIVES

- **User-created schedules** serve as a workout checklist with the freedom to input many different exercises in specific dates and times
- **Track progress** towards personal goals as time progresses
- **Daily overview** of planned workouts
- **Customized reminders** for individual exercises
- **Fitness assessment** that will analyze user's fitness level at first launch and calculate calories as accurately as possible

EXPECTED OBJECTIVES

- **Suggestions based on previous workouts** that offer to intensify or ease routine depending on exercise completion rates
- **Google Calendar** synchronization
- **Search exercise by 'calories burned'** to burn off specific snack
- **Option for persistent reminders** that continuously appear until exercise is logged
- **New user tutorial** to explain best use of the application and all its features
- **Progress reports and graphs** that display clear measurements of success on a week-to-week basis

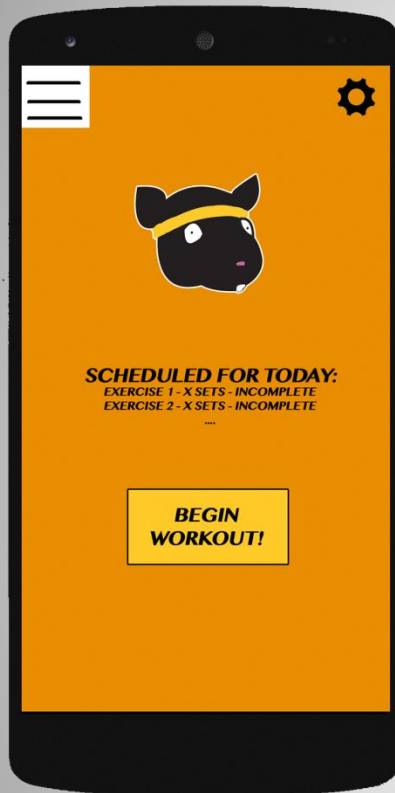
BONUS OBJECTIVES

- **Before and after pictures** stored privately for the user to see personal success for themselves
- **Initial schedule suggestions** in the form of templates for those who need a starting point
- **Individual exercise tutorials** provided in the form of YouTube links for users who need a reminder of proper workout form
- **Google Fit** integration allows users to include GymRatTrax activities in Google Fit reports
- **Achievements** with **Google Play Games** integration to share workout goal completion badges with friends

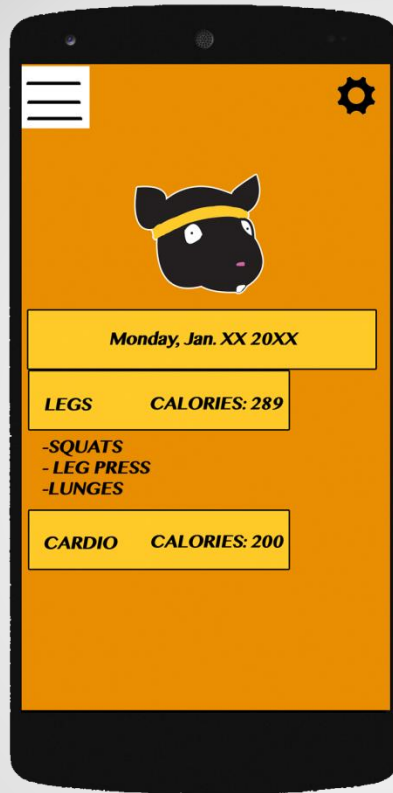
SOCIAL & ETHICAL CONSIDERATIONS

- **User privacy** is essential
 - No data sent **back to developers**
 - No data stored **outside local device** (with the exception of cloud backup tied to Google account if user opts in)
 - No data shared with a **third-party or other applications** unless user chooses to integrate app with Google Calendar, Google Fit, and/or Google Play Games services
- All exercise suggestions are based upon **previous workout data** and **user-defined fitness metrics**; they are not made with consideration of the **user's medical history** or **any current health conditions**
- Exercises will be manually logged by the user **under the assumption they know how to plan safe workouts** and **will consult their doctor prior to beginning an exercise routine**

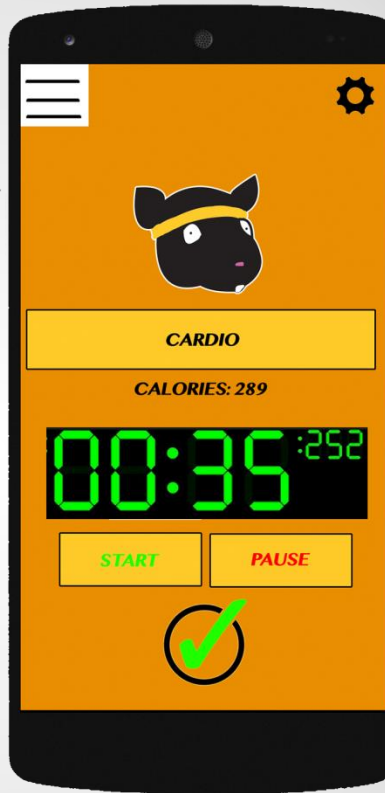
USER INTERFACE MOCKUPS



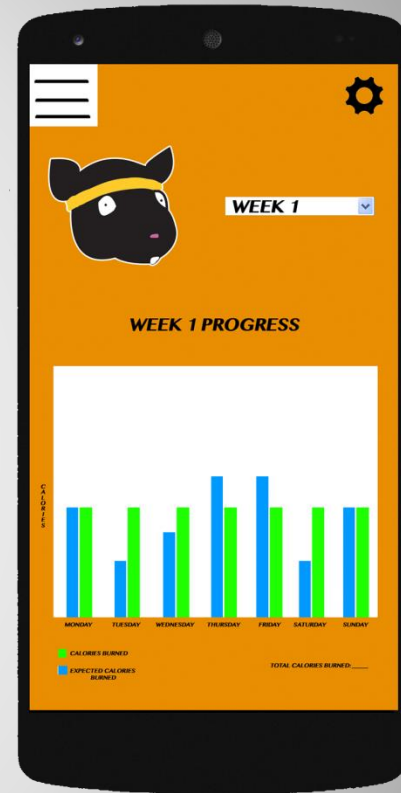
Home
Screen



Today's
Routine

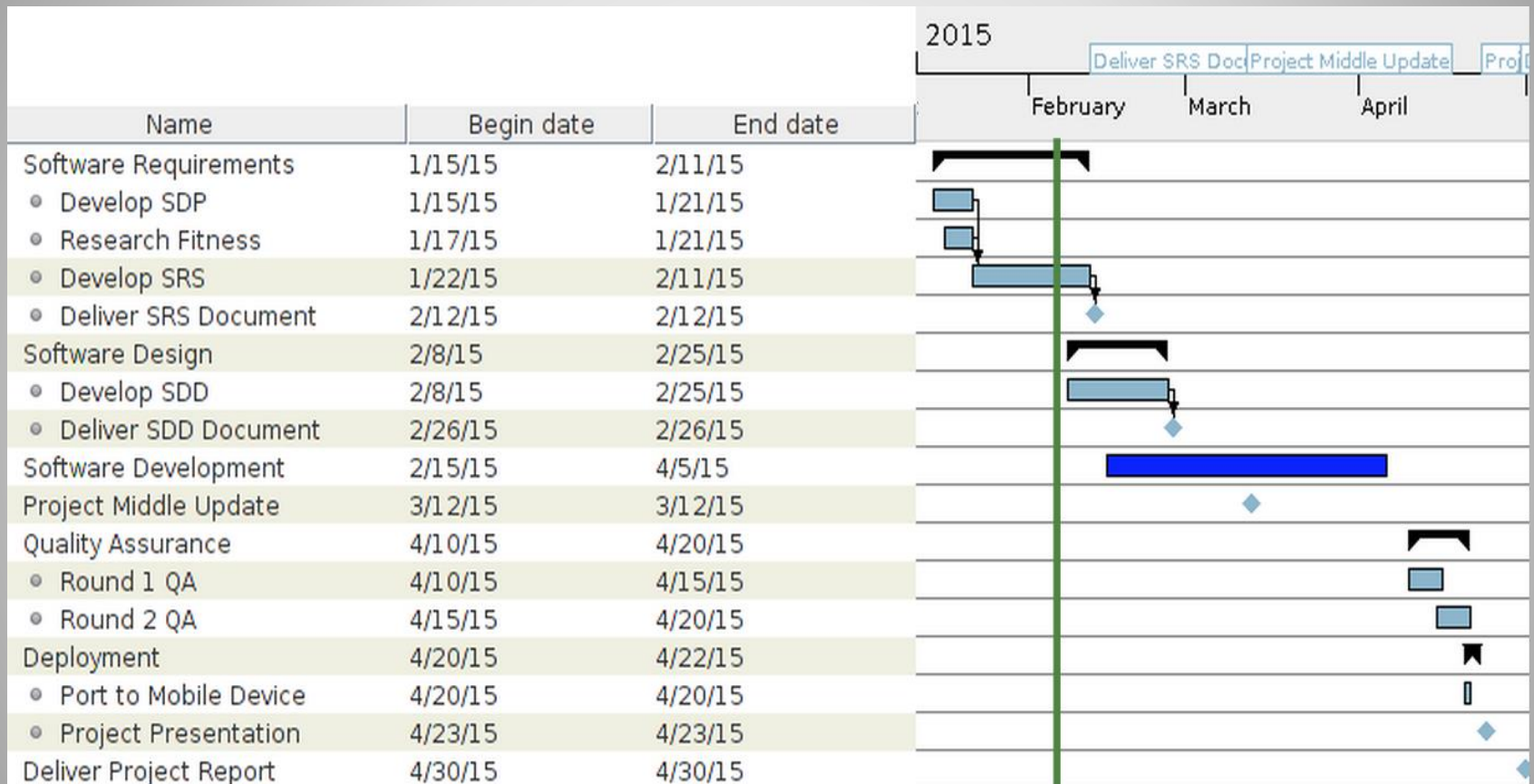


Cardio
Exercise



Progress
Report

PROJECT PLAN/SCHEDULE



CURRENT STATUS

- **Software Requirements Specification** nearing completion and to be published next week
- **Software Design Document** set to begin in next several days
- **Early development** set to begin by next week upon results of research into APIs and database systems

SUMMARY

- **GymRatTrax – Personal Fitness Scheduler** is the ideal solution for people who wish to stay on track with a balanced workout routine
 - **Accurate calorie calculations** across various types of exercise
 - **Customized and persistent notifications** to help stay focused and on track
 - **Measurable progress over time** to monitor health and fitness improvement