



*THE Ultimate Weight-Loss Adventure*

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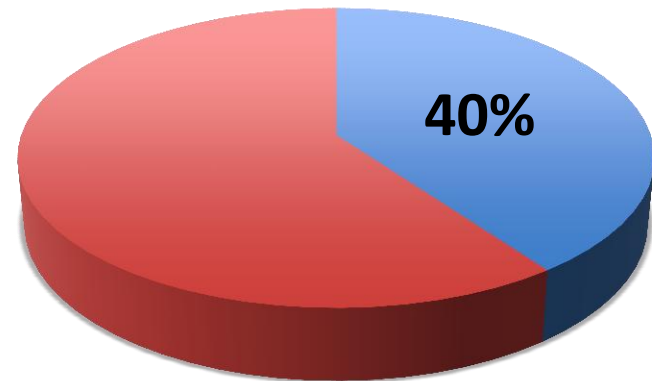
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# Problem Background

- Obesity is rampant and rising
- Working out can be difficult, straining
- This leads to a lack of motivation to work out
- We want to promote an active lifestyle, provide motivation

Percentage of Obese Americans



# Need Statement

- There is a need to promote healthy activity among students in a way that is fun, so that participants are more motivated to continue a workout regimen.

# Goal

- Our goal is to create a mobile, collaborative social game that will encourage users to be active and give them motivation to continue to pursue an active lifestyle while having fun.

# Objectives

- Accessible to large number of people cheaply
- Easy for user to use
- Health feedback to motivate progress
- Fun incentives for being active
- Efficient/fast interface
- Collaborative environment
- Should be FUN!

# Alternative Designs

- Hardware-based
  - Accelerometer-based activity monitoring
- Content-based
  - “Amazing Race” style timed challenges
- Weight lifting instructions
- Calorie monitor (Weight-Watchers)
- Track racing style game

# Design Constraints and Feasibility

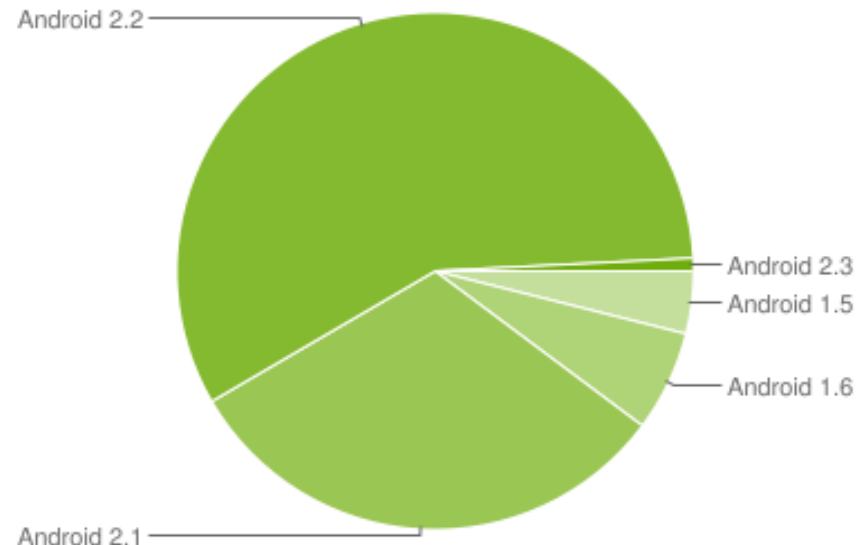
- Use GPS to track user distance
  - Battery life issues
  - Alternative solution using accelerometer
- Physically hold the phone while playing campuSeek
  - User may not want to hold phone while walking/running
  - Phone clip solution



# Design Constraints and Feasibility

- Using a specific Android SDK
  - Compatibility issues
  - Using Android 2.1 because 90% of phones have 2.1 or higher

Platform	API Level	Distribution
Android 1.5	3	3.9%
Android 1.6	4	6.3%
Android 2.1	7	31.4%
Android 2.2	8	57.6%
Android 2.3	9	0.8%



# Literature and Technical Survey

- Although campuSeek is a unique idea, several other products implement some functionality that is similar
  - NIKE + GPS
  - Endomondo
  - Tourality
  - SCVNGR
  - SportsTracker Pro

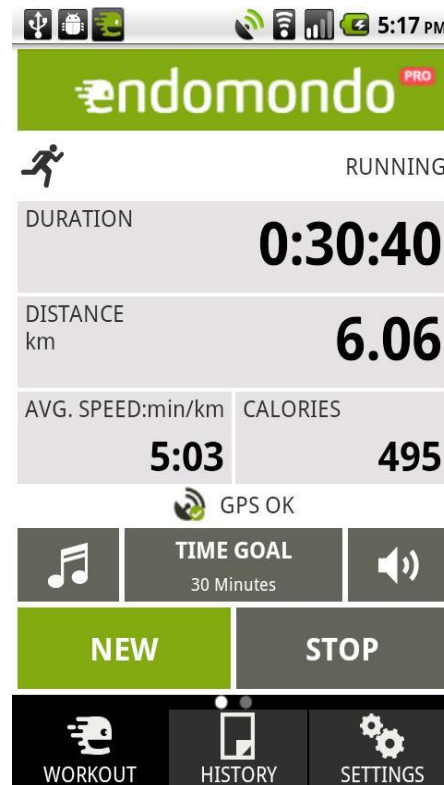
# Literature and Technical Survey

- Nike+ GPS
  - IOS platform
  - Time, track routes, record distance of workouts
  - Target audience different than CampuSeek's



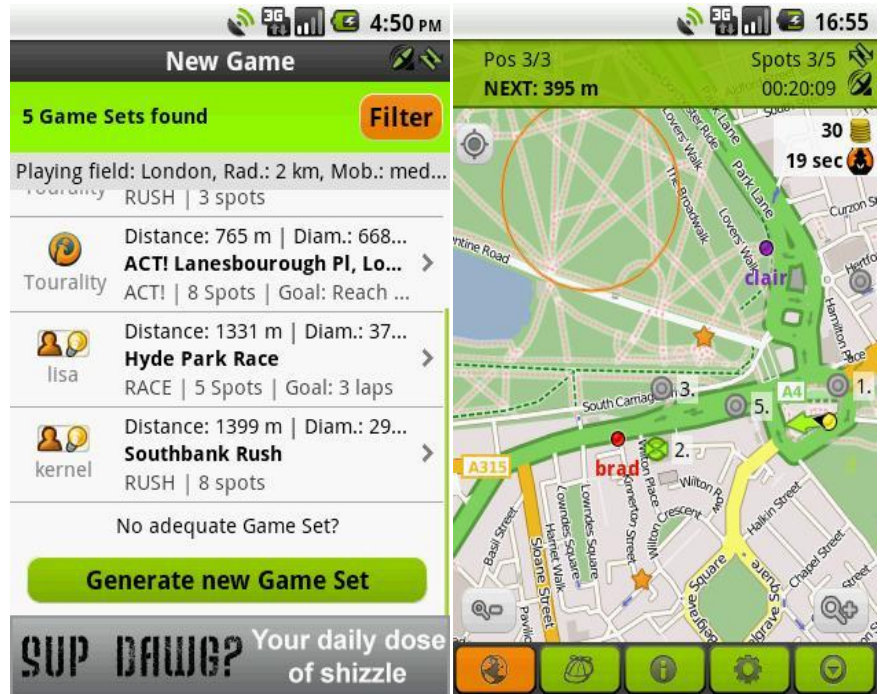
# Literature and Technical Survey

- Endomondo
  - Supports most phone platforms, web
  - Similar to Nike+ GPS
    - Real-time tracking
  - Heart-rate monitor integration
  - Lacks gaming feature of CampuSeek.
  - Audience different



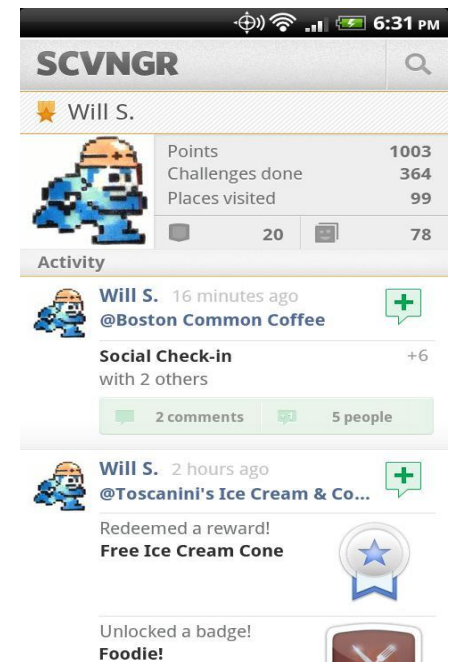
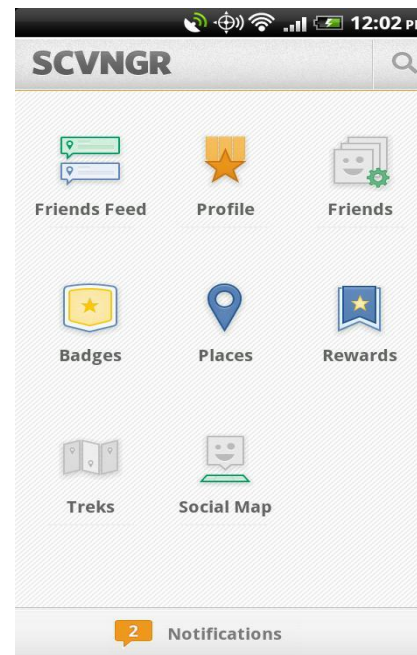
# Literature and Technical Survey

- Tourality
  - Android-based GPS scavenger hunt
  - Challenges posted locally
  - Users compete to find destinations
  - Users encouraged to use vehicles
    - No health focus



# Literature and Technical Survey

- SVNGR
  - Android scavenger hunt
  - Encourages going to businesses, places
  - Main purpose is check-in service
  - CampuSeek has health focus



# Literature and Technical Survey

- SportsTracker Pro
  - Android
  - Similar to Nike+ GPS
  - Geared toward distance travel sports
  - Analyze pace, altitude, speed
  - Lacks gaming, fun focus of CampuSeek

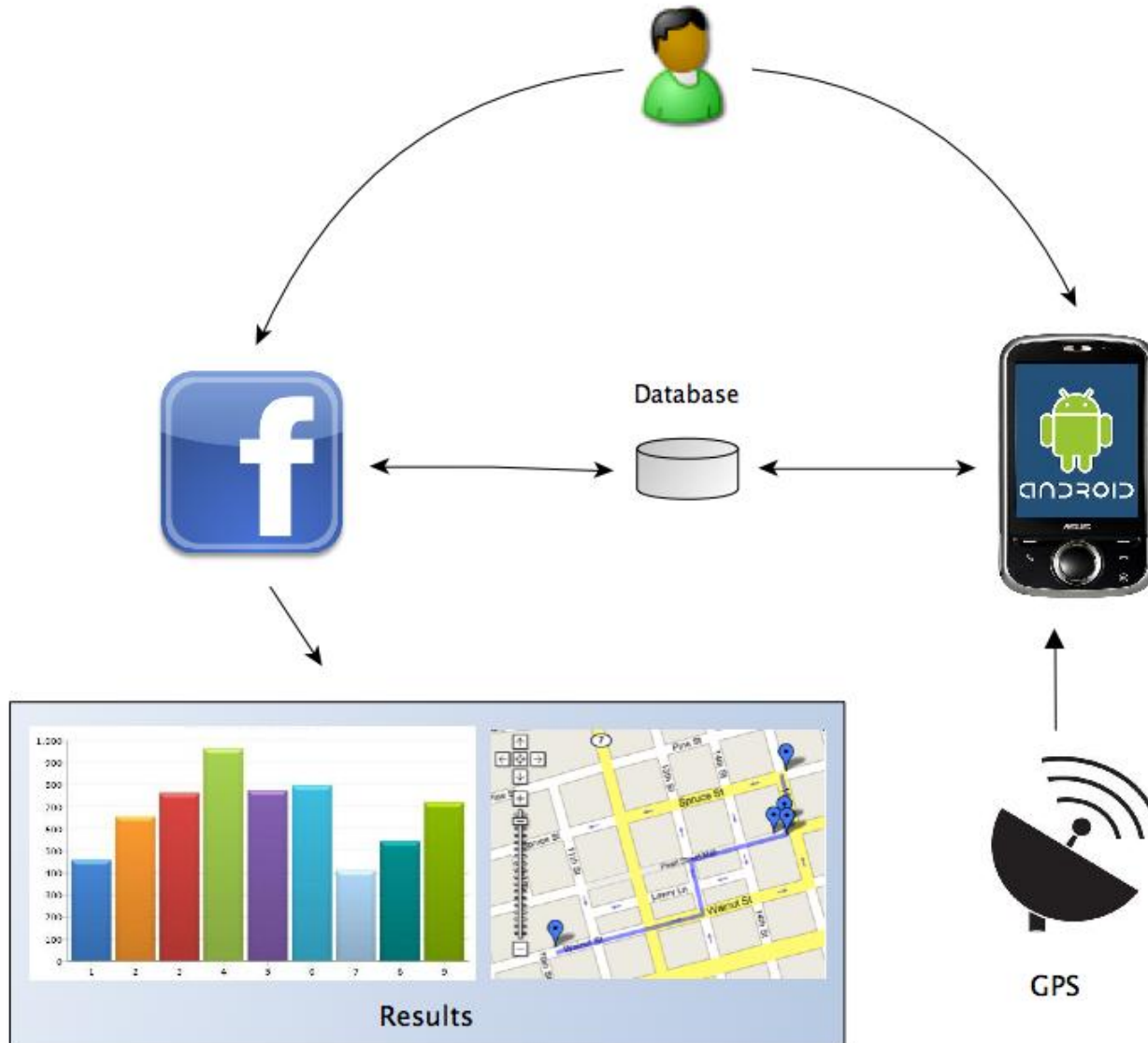


# Proposed Design

- Campus scavenger hunt
  - Facebook and Android interfaces
  - GPS used to determine location
- Health charting
  - View progress, analyze data
- Competition
  - Compete in game and health aspects
- Incentives
  - Unlock incentives by completing aerobic exercises

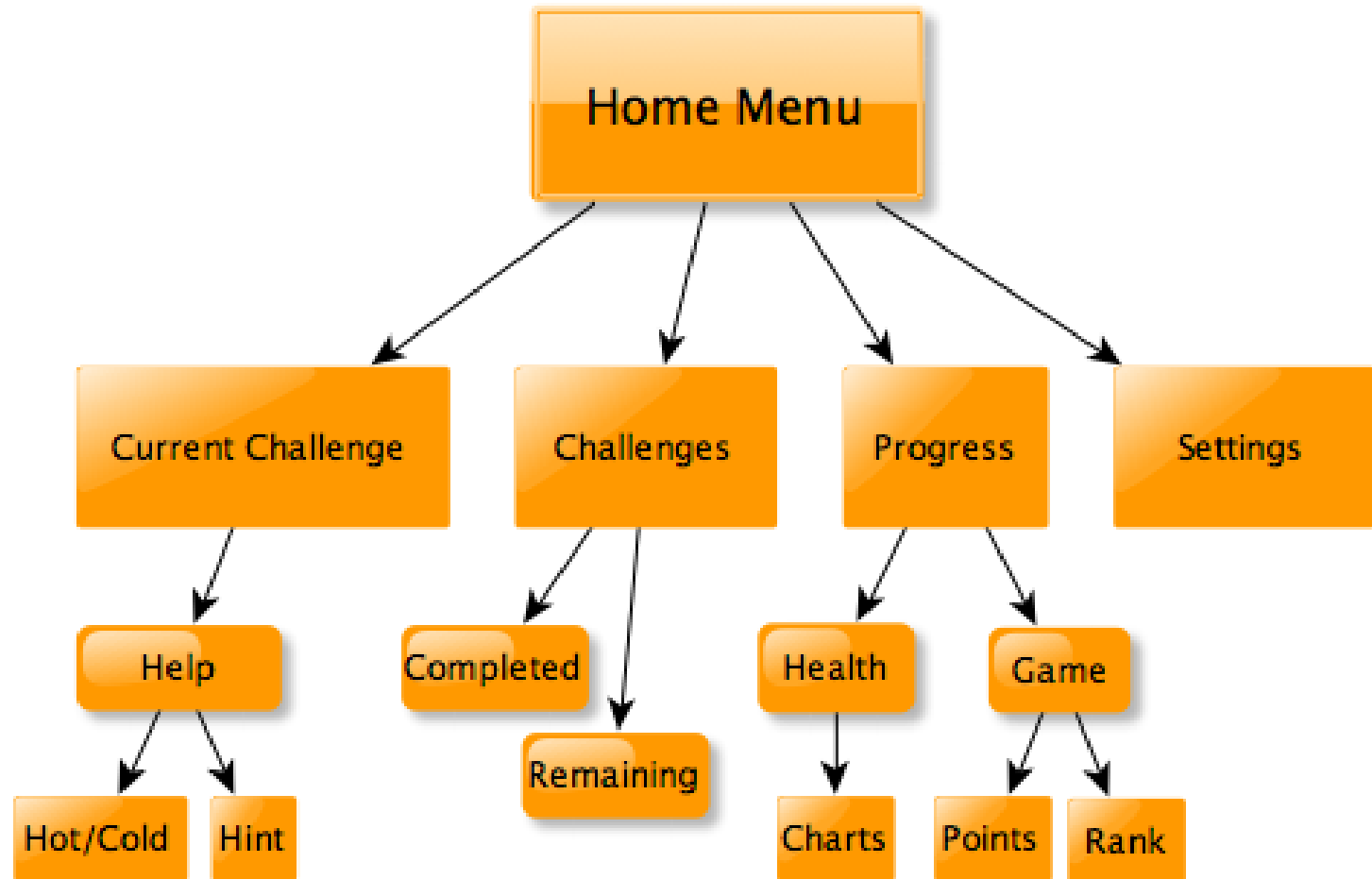


# Proposed Design



# Proposed Design

- Android Interface



# Design Analysis

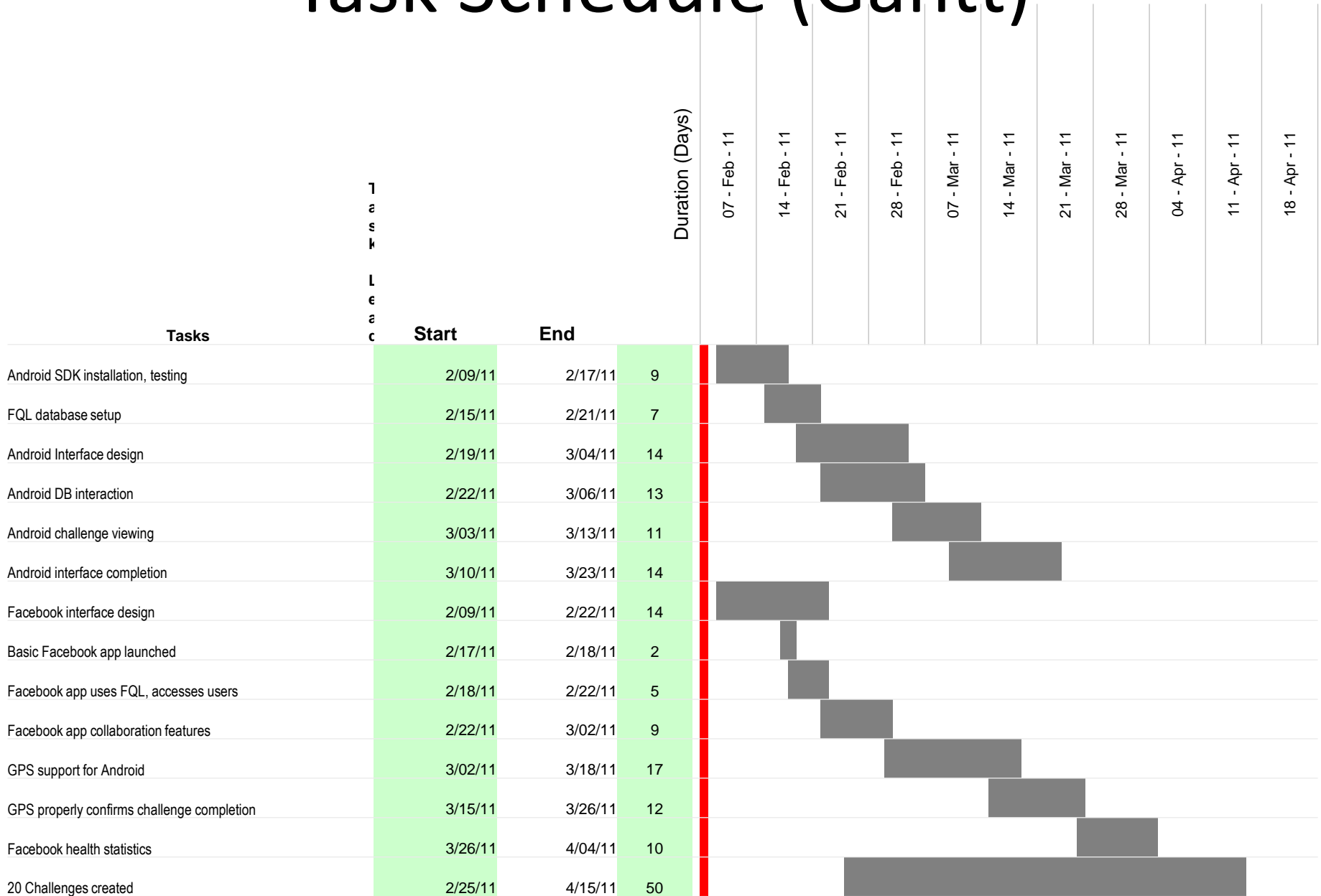
- Each module tested when implemented
  - FB, Android, GPS, DB, health
- Test battery life with GPS throughout dayTest GPS to ensure accuracy
- Test that data is sent correctly to FQL database
- Test Android application interface
- Final debugging and testing will be done on the field.
  - Survey satisfaction, fun factor
  - View calorie statistics

# Economic Analysis and Budget

- Low cost
- Holsters may be required if accelerometer is used, or for safety
- Possibly need to purchase web hosting plan

<b>Item</b>	<b>Estimated Cost</b>
<b>Android Phone (x10)</b>	\$0 (donated)
<b>Phone Holster (x10)</b>	\$150
<b>Possible Web Host Subscription</b>	\$30
<b>Total</b>	<b>\$180</b>

# Task Schedule (Gantt)



# Team Roles and Meetings

- Steve - Team leader, will work on Android App and FQL database integration
- Scott - Will work on GUI interface of Android App and assist in the FQL database and technical writing
- Fernando- Android App, particular focus on obtaining and utilizing GPS data, challenge creation
- Prince - Utilizing data to configure workout statistics for Android App, system interface design
- Will meet during lab times on Tues/Thurs as well as during class when no meetings are scheduled. Additional meetings will be planned as needed

# Societal, Safety and Environmental Analysis

- Societal Analysis
  - Promotes weight loss through a fun interactive game
  - Helps students familiarize themselves with campus, make friends
- Safety
  - Campus is relatively safe, few cars
  - Should be careful where they wander
- Environmental
  - Little foreseeable environmental impact