

THE Ultimate Weight-Loss Adventure

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Introduction

- Background
 - Obesity is rising and people lack motivation to work out ad be active
- Need
 - Promote fun, active workout so users can be healthy
- Goal
 - create a mobile, collaborative social game that will encourage active lifestyle
- Objectives
 - Fun game, collaborative, users have fun being active, easy to use

Design Alternatives and Final Decision

- Alternatives
 - Use accelerometer to track steps
 - Amazing Race
 - Running race game
 - Various workouts tracking
- Final Decision
 - Originally proposed design
 - Campus scavenger hunt with health charting



• Android Interface



• Android Data Handling



• Facebook Application



• Web language interplay



• MySQL Tables

| Users | | Challenges | | | | |
|---|---|--|---|--|--|--|
| Attributes | Data Types | Attributes | Data Types | | | |
| id name android level challenges completed current challenge calorie goal calories burned weight height distance travelled following (list of ids) | long varchar boolean integer (1,2,3) list integer integer integer integer integer integer list | id level description image URL latitude longitude | long integer varchar varchar double double | | | |

Task Schedule (Gantt)

| | 10000 | 12010 | 1000 C | | | Feb 2 | 011 | 1 | X | War 2011 | | | Apr | 2011 | |
|----|---|-----------|-----------|----------|------------|----------|------|------|-----|----------|------|------|-------|--------|-----|
| ID | Task Name | Start | Finish | Duration | % Complete | 2/6 2/13 | 2/20 | 2/27 | 3/6 | 3/13 | 3/20 | 3/27 | 4/3 4 | /10 4/ | /17 |
| 1 | Android SDK Installation, Testing | 2/9/2011 | 2/21/2011 | 9d | 100% | | | | | | | | | | |
| 2 | SQL database setup | 2/15/2011 | 2/23/2011 | 7d | 100% | | h | | | | | | | | |
| 3 | Android Interface Design | 2/21/2011 | 3/10/2011 | 14d | 90% | | | | | S. | | | | | |
| 4 | Android DB interaction | 2/24/2011 | 3/14/2011 | 13d | 75% | | -0 | | | | | | | | |
| 5 | Android challenge viewing | 3/11/2011 | 3/25/2011 | 11d | 0% | 3 | | | Ч | | | | | | |
| 6 | Android interface completion | 3/10/2011 | 3/29/2011 | 14d | 90% | 3 | | | | | | | | | |
| 7 | GPS Support For Android | 3/2/2011 | 3/24/2011 | 17d | 75% | | | 0. | | | | | | | |
| 8 | GPS Properly Confirms Challenge Completion | 3/15/2011 | 3/25/2011 | 9d | 0% | | - | | | | | | | | |
| 9 | Facebook interface design | 2/9/2011 | 2/28/2011 | 14d | 90% | | | 3 | | | | | | | |
| 10 | Basic Facebook app launched | 2/24/2011 | 2/25/2011 | 2d | 100% | | ч | | | | | | | | |
| 11 | Facebook app uses SQL, accesses users | 2/28/2011 | 3/4/2011 | 5d | 100% | 3 | j. | | | | | | | | |
| 12 | Facebook app collaboration features | 2/22/2011 | 3/4/2011 | 9d | 100% | 9 | 6 | 1 | | | | | | | |
| 13 | Facebook Friend Following Feature | 3/4/2011 | 3/25/2011 | 16d | 75% | 3 | | Ø. | | | | | | | |
| 14 | Facebook health statistics | 3/28/2011 | 4/8/2011 | 10d | 0% | 3 | | | | | | | | _ | |
| 15 | Finalized Facebook app | 3/30/2011 | 4/14/2011 | 12d | 70% | 3 | | | | | | | | | |
| 16 | 9 Challenges created | 2/25/2011 | 4/15/2011 | 36d | 30% | 3 | | | | | | | | | |
| 17 | Testing/Debugging | 4/5/2011 | 4/25/2011 | 15d | 0% | | | | | | | | | | |

Design Validation

- GPS Test
 - accurate location test against car GPS
 - determine margin of error
- Intuitiveness Test
 - ease of use of Android, Facebook applications
 - survey
- Sanity Test
 - ensure users are exercising and not using prohibited modes of transportation
- Health Statistics Test
 - show that users are achieving health goals
 - survey

Team Management

Facebook

- Steve
 - Complete friend-following feature (3/25)
 - Determine final database schema for storing workout info (3/30)
 - Home page finalized with all desired content and styling (4/10)
 - Robust user management and querying. Database cleanup features (4/10)
 - Hotter/Colder and Hints features (extra feature, if time) (4/20)
 - Overseeing teamwork and interaction between the two modules
- Fernando
 - finalize graph and chart formats for displaying health statistics (3/30)
 - Basic charting or graphing of health statistics (4/10)
 - Completion of 5 challenges (4/2)
 - Final completion of challenges (4/15)

Team Management

Android

- Scott
 - Complete minimal UI features and robustness (3/30)
 - Generate challenge selection screen (3/25)
 - Challenge confirmation using GPS (3/30)
 - Complete challenge selection page. Robust (4/15)
 - Make simple health statistics page may just point to Facebook (4/20)
 - Hotter/Colder functionality (this is an extra feature, if time) (4/20
- Prince
 - finalize graph and chart formats for displaying health statistics (3/30)
 - Basic charting or graphing of health statistics (4/10)
 - Completion of 5 challenges (4/2)
 - Final completion of challenges (4/15)

Preliminary Results

Android Application

– Video demo

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|-------------------------------------|--|
| SQL_Test | |
| level:1, ch_com cal_goal:501, ca | 8, name:Steve Hanson, droid:0, ppleted:1,ch_current:0, al_burned:0, weight:182, height:75, owing:8370559,8378669) |
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Preliminary Results

• Facebook Application

– <u>Live demo</u>

Environmental, Social, Political and Ethical Concerns

- Privacy/Social Concerns
 - User data being stored, shared
 - Security when sending data to/from central database
 - PHP scripts that interact with Android are biggest issue
 - To ensure user privacy: user agreement on FB app
- Ethical/Legal Concerns
 - Ensure challenge destinations are accessible, legal
 - Ensure not infringing any policies or user rights
- Environmental Concerns
 - System does not have big environmental impact

Questions

