Project Overview
Presented by Raven Swartz

- Mobile Application for Android 4.1+
- Groups seniors into CareWheels
- Connects Sen.se and Cyclos functionality
  - Sen.se is a monitoring system that records the status of several small sensors
  - Cyclos is a professional-quality banking server and database system
- Facilitates “time banking” in which users exchange credits generated by time spent helping each other
- Helps users to safely live independently
Team/Project Setup and Organization

Presented by Cuong Ngo

- Ionic & Cordova
  - Multiple-Platform
  - Front end: JavaScript, HTML, CSS
  - Back end: Java

- Google Drive Folder
  - Documents & Researches

- Google Hangout
  - Primary communication

- Email
  - Blog posts
  - Important announcement

- Trello
  - Task management

- Github
Project Plan and Schedule
(Presented by Zack McGinnis)

- **Planning Phase** - 2 weeks
  - Tasks: Gather reqs, define risks, use cases, back-ups

- **Team Phase** - 2 weeks
  - Tasks: Finalize design and architecture

- **Prototype Phase** - 2 weeks
  - Tasks: Mainly UI and back-end components

- **Implementation/Coding Phase** - 5-6 weeks
  - Tasks: Code is produced according to design

- **Testing/Closure Phase** - 2-3 weeks
  - Tasks: Test functionality of CareBank app, servers, sensors
  - Deliver product to sponsor
Important Use Cases
(Presented by Brandon Allen)

- User manually logs into the application
- Authenticated user views the application CareWheel screen
- Authenticated user views a spokes sensor data screen
- Authenticated user calls a spoke using the application
Important Functional Requirements
(Presented by Brandon Allen)

- CareBank server login
- Contacting of CareBank server for user information
- Contacting of CareBank server for group member information
- Contacting of Sen.se and CareBank server for group member sensor data and last sensor detail screen view time
Important Functional Requirements
(Presented by Paul Thompson)

- Analysis of group member sensor data
- Display of group members and sensor summary information
- Crediting of group members and sensor summary information viewings
- Displaying of a group member’s detailed sensor data
Important Functional / Non-Functional Requirements
(Presented by Paul Thompson)

- Calling of a group member
- Transaction between CareBank users for calling a group member

Non functional

- Operating system
High Level Project Architecture
Presented by Chris Asakawa

Front End App
- Navigation Menu
- Display Sensor Data
- Display Group Summary
- User Reminders and Alerts
- Display User Crediting
- Take action on Alert

CareWheels Back End
- Download Sensor Data
- Analyze Sensor Data
- Trigger Alerts and Reminders
- CareBank Data Transfer
- User Crediting transfers
- Native Application Launcher (phone dialer, etc)

Client

Sensors

CareBank Server

Database
Validate and Verify

Presented by Edward Phillips

Sensor Data

- The application needs to read data correctly
- The data needs to be stored in the Cyclos server in a structured, meaningful way

Application Testing

- The application needs to populate correctly
- The flow of the pages and the use of features needs consistency
- Banking transactions need to be properly recorded
- Alerts must be properly generated
Proactive Anticipating and Planning for Probable Risks.

Some serious project risks:

- People’s assignments do not match their strengths.
- Requirements for interfacing with other systems, other complex systems, or other systems that are not under the team’s control result in unforeseen design, implementation, and testing.