Senior Reminder System Project

Project Plan

SE 4351 – Requirements Engineering, Section 001
Fall 2015

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## Revision History

<table>
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<th>Version</th>
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<td>1.0</td>
<td>August 27, 2015</td>
<td>Initial Version.</td>
<td>Dalton Wooley</td>
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1. Introduction

1.1 Project overview
This document details the software planning activities for Senior Reminder System project. This project shall have two phases. For Phase I, our team is to design and develop an Augmentative and Alternative Communication (AAC) system, which later shall be enhanced in Phase II to meet a new preliminary definition and set of requirements. For this project, our team shall use an Object-Oriented architectural style, and shall build an Android application (or an equivalent). Our application upon completion shall be accessible through our team’s web page and on the Google Play Store (if time permits).

1.2 Project Deliverables

Preliminary Project Plan - Thursday, September 3rd
Team organization, leaders, deliverables, web site URL, tools, etc.

Interim Project I (Phase I) - Tuesday, September 29th
(Preliminary definition) Submission & presentation

Final Project I (Phase II) - Thursday, October 15th
Submission (and also possibly presentation)

Interim Project II (Phase I) - Tuesday, November 10th
Submission (and also possibly presentation)

Final Project II (Phase II) - Tuesday, December 1st
Submission, presentation and demo

1.3 Evolution of this document
All developments, modifications, and improvements shall be documented using the revision history section of the document and signed off by that team member.

1.4 References


1.5 Definitions, acronyms, and abbreviations

CPM
Acronym used for Co-Project Manager

DM
Acronym used for Documentation Manager

AAC
Augmentative and Alternative Communication

HOPE
Helping Our People Easily. The domain is an elderly community and centering around aiding communication for those with diminished senses.

2. Project organization

2.1 Process model
This project shall use the Waterfall model as its process model, except it shall execute in stages. These stages are associated with the two phases of the project, and each phase shall have its own waterfall process. We have chosen the Waterfall model because we know the requirements shall not change in the middle of the phase so it shall be the most efficient process.

2.2 Organizational structure
Our team shall consist of three-four teams with a total of 14 members who shall work in tandem

 Documentation Team
Milton Bland - Documentation Manager
Jeanie Handler - Documentation Manager
Dalton Wooley - Co-Project Manager, Documentation Manager

 Development Team 1
Ridge Frederick - Developer
Grant Freeman - Co-Project Manager, Developer
Brad Gracy - Developer
Maryellen Oltman - Developer

 Development Team 2
Justin Keeling - Co-Project Manager, Developer
Kevin Szwagiel - Developer
Andrew Vaccaro - Webmaster, Developer
Phillip Yellot - Developer

 Development Team 3
Zachary Calman - Developer, Testing Developer
Maria Haney - Developer, Testing Developer
2.3 Organizational boundaries and interfaces
Due to the small team size, one team member shall be delegated to each task. The unused team member shall review and make revisions where necessary.

2.4 Project responsibilities
Both Co-Project Managers shall be involved with all phases of both portions of the project.

Co-Project Manager (CPM)
The CPM shall be responsible for managing the deliverable schedule and ensuring completion by due date.

Documentation Manager (DM)
The DM shall be responsible for all documentation and documentation control.

Developer
The Developer shall be responsible for the entirety of design and implementation of the software system. The developer shall also be responsible for meeting all scheduling as designated by the CPM.

Webmaster
The Webmaster shall be responsible for uploading and managing deliverables onto the team website. The deliverables shall be ready on the team website by the due date.

Testing Developer
The Testing Developer shall work with the DM and CPM to create, document, and save test cases and their results.
3. Managerial process

3.1 Management objectives and priorities
Management, which comprises of the Co-Project Managers, is responsible for getting activities completed efficiently and effectively. The main objective of the management is to organize the meetings for discussions, check the status of the project, and submit the project on time.
The main objectives are:
- Scheduling
- Directing
- Reviewing
- Submitting Deliverables

3.2 Assumptions, dependencies, and constraints

Assumptions
- Any difficulty with an assigned task is to be communicated to the other team member
- The professor/end customer shall not make changes in the requirements or scope
- Professor/end customer shall clarify any doubts, concerns, or uncertainties

Dependencies
- Each CPM is reliant upon the developer to finish their duties on schedule
- Each developer is reliant upon the CPM to clearly delegate their tasks and their schedule
- The Webmaster is reliant on the DM to provide the deliverables to upload to the team website

Constraints
- The time frame of 6 weeks for the project shall make scheduling essential to project completion
- The time frame of 6 weeks for the project shall make understanding of the Android SDK essential to task completion to schedule
- The quality of the project is dependent upon the requirements of the project

3.3 Risk management

Risks and Contingency Plans
- One of the team members is unable to complete his task on schedule
  - The team member shall be responsible for communicating this issue to the other team member so they can complete the task on schedule.
- Loss of project data or progression
  - Project documents shall be hosted in the cloud. Project source code shall be version controlled using Git and hosted on GitHub.
- Lack of experience or skill in a required area
The team members shall be responsible for researching the skill using resources such as the Internet, the professor, on-campus resources.

- Poor quality
  - Each team member shall review the other team member’s work to ensure that it fulfills quality requirements.

- Change in requirements
  - Team members shall adjust the schedule and requirements to meet any changes.

- Failure to complete project
  - Team members shall adhere to the schedule and complete tasks on time to ensure the project is completed.

3.4 Monitoring and controlling mechanisms
Each delivery phase shall be lead by both Co-Project Managers. Project documents and deliverables shall be controlled with online cloud hosting and version control such as Google Drive and GitHub.
4. Technical process

4.1 Methods, tools, and techniques

Tools
The following tools shall be used for development of documentation and code:

- **Java**: The development language for program implementation
- **Google Drive**: The document editor and cloud host for documentation
- **Android Studio**: The IDE used for writing source code and porting to android system
- **Git**: The version control system for source code
- **GitHub**: The cloud host for our git repository
- **SMS**: Our main form of communication

Techniques
Software development shall follow standard Java naming convention and Object-Oriented structure.

4.2 Software documentation
The following documentation shall be written:

- **Project Plan**

Phase I
- **World Requirements Specification**
- **Program Specification**
- **User Manual**

Phase II
- **World Requirements Specification**
- **Program Specification**
- **User Manual**

4.3 Project support functions

- **Version Control**
  - Source code shall be version controlled with Git and GitHub.
- **Quality**
  - The GitHub issue tracker shall be used to keep track of issues and tasks that need to be completed.
- **Documentation**
  - Google Drive shall be used to write all documentation.
5. Work elements, schedule, and budget

5.1 Schedule
Schedule shall follow the deliverable due dates on one, two, and three week turns as needed, completing all deliverables the Sunday before they are due.

Preliminary Project Plan - Thursday, September 3rd
Team organization, leaders, deliverables, website URL, tools, etc.

Interim Project I (Phase I) - Tuesday, September 29th
Submission & presentation.

World Requirements Specification - Sunday, September 13th
Presentation - Sunday, September 20th

Final Project I (Phase II) - Thursday, October 15th
Program Implementation - Sunday, October 4th
User Manual - Sunday, October 11th
Final Deliverable - Sunday, October 11th

Interim Project II (Phase I) - Tuesday, November 10th
Submission & presentation.

World Requirements Specification - Sunday, October 25th
Presentation - Sunday, October 25th
Program Specification - Sunday, November 1st
Program Implementation - Sunday, November 8th

Final Project II (Phase II) - Tuesday, December 1st
User Manual - Sunday, November 15th
Final Deliverable - Sunday, November 22nd