CMPT 275 – Project Plan
iRemember

Instructor: Dr. Herbert Tsang
TA: Jordon Phillips
Group Number: 11
Group Name: Double One
Due: September 26, 2012

Group Members:

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Table of Revisions

Figure 1

Revision	Status	Revision Date	Revised by
1.0	Created project plan document.	September 22, 2012	Matt Numsen Jake Nagazine Nicholas Pan Charles Shin Steven Tjendana
2.0	Added all sections and combined some tables in the Risk section.	September 23, 2012	Matt Numsen
3.0	Revised by entire group, added Appendix A.	September 24, 2012	Matt Numsen Jake Nagazine Nicholas Pan Charles Shin Steven Tjendana
4.0	Revised Gantt chart and addressed grammatical issues.	September 26, 2012	Matt Numsen Jake Nagazine Nicholas Pan Charles Shin Steven Tjendana

Figure 1 shows the Table of Revisions, which contains a revision number, status (description), date, and author for each revision made to the document.

Project Summary

If you forget, don't worry; iRemember.

iRemember is an iPhone application targeting people of all ages who struggle with memory impairment or learning disabilities of any sort. It will allow the user to use an existing photo, pick a photo from the phone's memory, or take pictures throughout the day, and tag them with notes, descriptions or even drawings. iRemember will then store all the images and information for the user to view at their leisure, either by flipping through recent days or view all pictures with certain tags.

Project Overview

The Problem

The goal of our project is to aid people who have short-term memory loss and other similar memory disorders. Specifically, we will initially aim for those individuals who suffer from amnesia and later broaden the scope to general memory loss. Our approach to the problem of memory-loss is to provide a memory-aid tool for recording daily events and tasks. Strategies such as writing notes and using assistive devices are proven to help patients of memory loss to perform daily tasks as shown by Papanicolaou [1].

Our Approach

Our application will carry out Papanicolaou's suggestions by allowing the user to take pictures of important events, people, locations, or anything else they need to remember. The application then allows the user to tag the photo with particularly descriptive keywords. Additionally, the user can provide a small description so that the information can be easily searched for without requiring too much effort or memory of the picture. By providing this functionality to the user, we hope that having a collection of detailed meta-information for pictures will aid in the day-to-day struggles for individuals suffering from memory loss.

Stakeholders

The only people (as of September 20, 2012) who benefit from the success of this project are family members and for the developers, namely Nicholas Pan, Matt Numsen, Steven Tjendana, Charles Shin, and Jake Nagazine. Even then, the benefit comes only in the form of a good grade in our Software Engineering class and no plans for monetary gain have been discussed.

Users

The intended users of our application include sufferers of short-term memory loss and similar handicaps. The app will be for people of all ages, provided that they can read and write English. There are no assumptions made on the user's expertise, experience, or background. In fact, because the intended users have memory disabilities, the software should be as intuitive as possible because it is unreasonable to assume they will remember specific instructions on how to operate the software if they are too complicated.

Features List

- Ability to take pictures and have them geo-tagged automatically.
- Ability to tag pictures with descriptive keywords, as well as have a list of alphabetically sorted keywords readily available at the time of tagging so that similar-but-different keywords are avoided.
- Ability to search photos by keyword(s), location, date, time, description…
- Ability to search for groups of pictures with a particular tag sorted in chronological order (or alphabetical in situations where people or locations are grouped)

Project Planning

The plan for our project will be followed by five sections:

- Team Organization
- Team Website
- Communication with Stakeholders
- Internal Communication
- Technology Specifications

Team Organization

Our team has a designated lead that coordinates work, establishes bi-weekly/weekly meetings and helps mitigate problems. Currently, our team has agreed to the following weekly meeting schedule:

- Monday stand-up scrum, 3:20 PM – 4:20 PM
- Saturday development meet-up, 10:00 AM – 2:00 PM

In detail, the Monday scrum meeting is a weekly report on each developer's progress from their assigned tasks. This short Monday scrum allows people in the team to raise concerns, address issues, and most importantly ensure that the team follows the assigned schedule on-time. The Saturday meeting is more of a developer-driven meeting to encourage knowledge transfer and for peer-developer work.

Team Website

The group has created an HTML5 compliant site at the following URL:

- http://projects.nicholaspan.com/cmpt275/

This location will be a hub to monitor our progress throughout the semester until project completion and deployment. The site contains information such as the two public GitHub source control repositories (site and project), project status, our biographies and contact information.

Communication with Stakeholders

In communicating with stakeholders, we had short talks with Dr. Herbert Tsang and our family members who are directly affected by memory loss. In addition, we do plan to have persona interviews during our information gathering phase. We hope that in conducting these interviews, our team will have a better understanding of this disability.

Internal Communication

The team has decided to utilize multiple forms of technology for communication. Primarily, we will use the following technologies in order to mitigate any communication problems:

- Exchanging emails through SFU Connect
- Using Google Docs for document collaboration
- Having GitHub for code-review
- Using mobile devices for instant communication (I.E., phone call or SMS text)
- Skype and/or Google Hangout for Video-Conferencing

Technology Specifications

Our task to develop a native mobile iOS application to assist those who suffer memory loss will require the use of many technologies. The following will breakdown the uses of technology from development environments to source-control:

Languages: Objective-C, HTML5
Platforms: iPhone and iPad
Version Control: GitHub using Git
Development Environments: 1 OSX Mountain Lion MacBook and SFU iMacs
IDE/Editor: XCode 4.X and VIM

As our project progresses, we will be utilizing more technologies such as other frameworks and libraries.

Project Schedule

The scheduling of the project has been compiled by the team and direction of the project lead. Figure 2 contains each of the tasks to be completed, expected completion time, and start/finish dates. The following diagram, Figure 3, depicts all of the tasks from Figure 2 organized into a Gantt chart.

Figure 2

ID	Task Name	Duration	Start	Finish
1	**CMPT 275 - Group 11 Project**	**57 days?**	**Mon 9/17/12**	**Mon 12/3/12**
2	**Proposal**	**8 days**	**Mon 9/17/12**	**Wed 9/26/12**
3	Determine Project based on theme	1 day	Mon 9/17/12	Mon 9/17/12
4	Flush out and scope	2 days	Mon 9/17/12	Wed 9/19/12
5	Develop proposal	3 days?	Thu 9/20/12	Sat 9/22/12
6	Proposal complete	0 days	Wed 9/26/12	Wed 9/26/12
7	**Analysis Requirements**	**10 days**	**Thu 9/27/12**	**Wed 10/10/1**
8	Conduct needs analysis	2 days	Thu 9/27/12	Fri 9/28/12
9	Draft primary software specs	3 days	Fri 9/28/12	Wed 10/3/12
10	Review software specs with team	3 hrs	Wed 10/3/12	Thu 10/4/12
11	Incorporate feedback on software sp	1 day	Thu 10/4/12	Fri 10/5/12
12	Secure required resources (hardware/software?)	1 day	Fri 10/5/12	Mon 10/8/12
13	Analysis complete	1 day	Mon 10/8/12	Tue 10/9/12
14	Requirement Document Complete	0 days	Tue 10/9/12	Tue 10/9/12
15	**Design + Quality Assurance Plan**	**8 days**	**Wed 10/3/12**	**Fri 10/12/12**
16	Review preliminary software specs	1 day	Wed 10/3/12	Wed 10/3/12
17	Develop functional specs	1 day	Thu 10/4/12	Thu 10/4/12
18	Develop prototypes	3 days	Fri 10/5/12	Tue 10/9/12
19	Review functional specs	1 day	Wed 10/10/1	Wed 10/10/1
20	Incorporate feedback on functional specs	1 day	Thu 10/11/12	Thu 10/11/12
21	Consensus on design plan	1 day	Fri 10/12/12	Fri 10/12/12
22	Design complete	0 days	Fri 10/12/12	Fri 10/12/12
23	**Development**	**26 days**	**Sat 10/6/12**	**Thu 11/8/12**
24	Review functional specs	1 day	Sat 10/6/12	Sat 10/6/12
25	Assign development team	1 day	Sun 10/7/12	Sun 10/7/12
26	Develop code	22 days	Mon 10/8/12	Sat 11/3/12
27	Developer testing	4 days	Sun 11/4/12	Wed 11/7/12
28	Assignment complete	1 day	Thu 11/8/12	Thu 11/8/12
29	**Testing**	**3 days**	**Fri 11/9/12**	**Tue 11/13/12**
30	Develop unit testing	2 days	Fri 11/9/12	Sun 11/11/12
31	Develop integration testing	2 days	Mon 11/12/1	Tue 11/13/12
32	**Documentation**	**2 days**	**Mon 11/12/1**	**Tue 11/13/12**
33	Develop deployment plan	2 days	Mon 11/12/1	Tue 11/13/12
34	Develop user's manual	2 days	Tue 11/13/12	Thu 11/15/12
35	**Post Implementation Review**	**1 day?**	**Sat 11/17/12**	**Sat 11/17/12**
36	Document lessons learned	2 days	Sat 11/17/12	Sun 11/18/12
37	Distribute to team members	1 day	Sun 11/18/12	Mon 11/19/1
38	Post implementation review comple	0 days	Mon 11/19/1	Mon 11/19/1
39	Software project complete	0 days	Mon 12/3/12	Mon 12/3/12

Figure 2 shows all of the proposed tasks and estimated time of completion for all steps of the project.

Figure 3

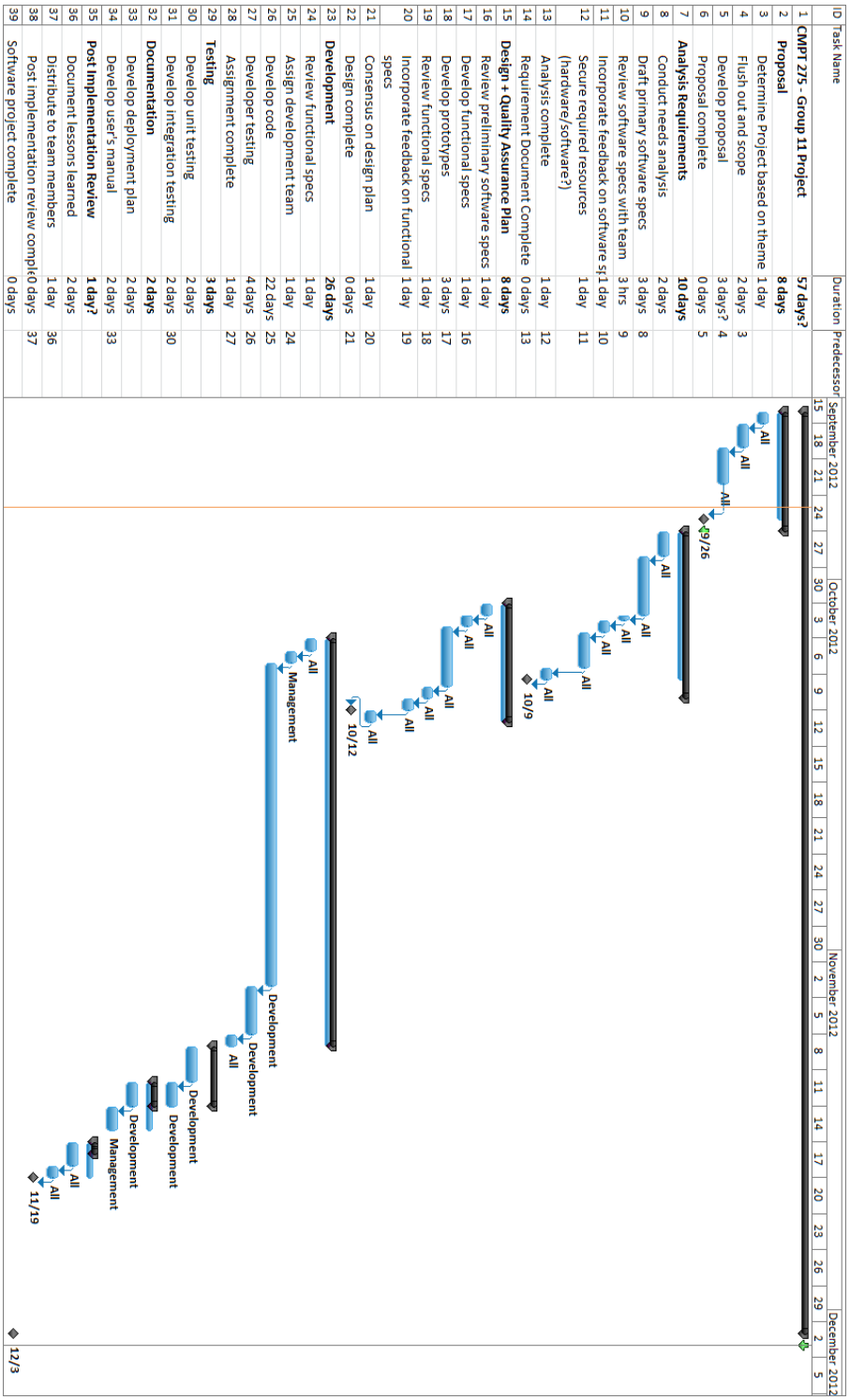

Figure 3 shows the Gantt chart representation of the proposed schedule for the project.

Risk Management

Figure 4

Risk Type	Risk	Probability	Effects
Technology	The server we are using might crash	Moderate	Catastrophic
People	Some members in the group drop out from the class	Moderate	Catastrophic
	Some members suddenly have a serious illness.	Moderate	Serious
	Some members are not available for the team meeting	High	Serious
	Some members are not familiar with the software that is used for this project	High	Serious
Organizational	The organizational role is changed so the members have to adapt with the new role.	High	Serious
Estimation	The time required to develop the software is underestimated	High	Serious
	The complexity of the software is underestimated	Moderate	Serious
Tools	None of the members in the group owns a MacBook.	High	Tolerable
	None of the members in the group uses an iPhone.	High	Tolerable
Requirements	Changes by the professor in the requirements of the project may result in some designs having to be reworked.	Moderate	Serious

Figure 4 lists the types of risks that might occur in the project, along with the associated probability and degree of effects.

Figure 5

Risk Type	Potential Indicators
Technology	Software that is used for this project shows some bugs and errors.
People	Poor relationships amongst the team members
Organizational	Assignment roles in the group is not defined
Tools	Reluctance by team members to voluntarily share their tool for this project purposes.
Requirements	Many requirements changed by the professor
Estimation	Member failed to meet the deadline for each specific assignment

Figure 5 lists potential risk indicators from six category types.

Figure 6

Risk	Strategy
Organization Role Problems	Make sure to assign a specific role to each member and also make sure that each member is comfortable with the role. Avoid reassigning roles to prevent disruption of workflow.
Software problems	For instance, if our Version Control (GitHub) goes down, we can use git's built-in server for sharing git repositories.
Staff illness	Make sure each member knows all the works, not only the work that is assigned to that person. So when a member is ill, other member can help to continue his work.
Requirement Changes	Make sure to consult the professor as often as possible.
Underestimated Development Time	Use provided time wisely (I.E., being organized well).

Figure 6 lists potential risks to our project and our strategies in approaching these issues.

Project Organization and Staffing Plan

Nicholas Pan
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301165780

Role: Project Manager/Software Developer

Charles Shin
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Role: Software Developer/UI Developer

Matt Numsen
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Role: Software Developer/Documentation

Jake Nagazine
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Role: Software Developer

Steven Tjendana
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Role: Software Developer

Appendices

Appendix A – Meeting Minutes

Group # and name: Group 11
Purpose of Meeting: First time meeting each other
Date/Time: 2012-09-17, 3:30 PM – 4:20 PM
Chair: Nicholas Pan
Attendee: Matt Numsen, Steven Tjendana, Jake Nagazine, Charles Shin
Absent: None

Topic	**Discussion**	**Action/Decision**	**Person responsible/ Due date**	**Minutes spend**
1. Hello Group 11	Brief introduction of skills and biography.	Each member talks about himself.	All / 2012-09-17, 4:00PM	30 minutes.
2. Meeting time	Decide future meeting time which works best for every members	Using doodle.com every member polls for time available for them.	All / 2012-09-18, 11:59PM	Less than 10 minutes per members
3. Project Idea	Discuss the general idea of our project	Each member presents their idea and we decide to make app for people with memory problem.	All/ 2012-09-17, 4:20 PM	20 minutes
4. Roles	Decide role(s) of each member	Every member participates in one or more role for the project.	Charles Shin/ 2012-09-20, 2:20 PM	20 minutes
5. Personal biography	Every member sends one's picture and brief biography for project site.	Via email, every member sends picture and biography to Nicholas Pan	Nicholas Pan/ 2012-09-21, 11:59 PM	10 – 15 minutes per members

Group # and name: Group 11
Purpose of Meeting: Deciding roles for the project
Date/Time: 2012-09-20, 1:30 PM – 2:20 PM
Chair: Nicholas Pan
Attendee: Steven Tjendana, Jake Nagazine, Charles Shin
Absent: Matt Numsen

Topic	**Discussion**	**Action/Decision**	**Person responsible/ Due date**	**Minutes spend**
1. Roles and parts	Finalize roles of each member for assignment 1	Nicholas Pan: Project planning and schedule. Matt Numsen: Table of contents, revision history, and project summary. Jake Nagazine: Project overview. Steven Tjendana: Risk management. Charles Shin: Project organization and staff plan.	Charles Shin/ 2012-09-20, 2:20 PM	20 minutes
2. Introduction of Git and GitHub	Nicholas gives a brief introduction of Git and GitHub	Every member creates GitHub account and we are added to project repository.	Nicholas Pan/ 2012-09-20, 2:20 PM	15minutes
3. Group and app name	Name our group and application.	Come up with few names but we have not decided yet.	All/ 2012-09-26, 11:00 PM	10 minutes
4. Next meeting	Discuss next meeting date	Next meeting is on 2012-09-22, 10:00 AM	Nicholas Pan/ 2012-09-20, 2:20 PM	5 minutes

Group # and name: Group 11, Double One Purpose of Meeting: Work on the proposal Date/Time: 2012-09-22, 10:00 AM – 12:10 PM Chair: Nicholas Pan Attendee: Matt Numsen, Steven Tjendana, Jake Nagazine, Charles Shin Absent: None				
Topic	**Discussion**	**Action/Decision**	**Person responsible/ Due date**	**Minutes spend**
1. Work on draft	Write a draft version of the proposal	Every member works on one's own parts and uploads parts on Google drive to share.	All/ 2012-09-22, 12:10 PM	80 minutes
2. Group and app name	Finalize group and application name.	Search the name we choose to avoid existing names. / Team name: Double One Application name: iRemember	All/ 2012-09-22, 12:10 PM	10 minutes
3. Features	Discuss possible features for the application	Every member comes up with ideas on possible features, and from the list, we choose essential and applicable features.	Jake Nagazine/ 2012-09-22, 12:10 PM	30 minutes
4. Next meeting	Discuss next meeting date	Next meeting is on 2012-09-23, 3:30 PM	Nicholas Pan/ 2012-09-23, 3:30 PM	10 minutes

Group # and name: Group 11, Double One
Purpose of Meeting: Finalizing submission for Assignment 1
Date/Time: 2012-09-23, 3:30 PM – 4:20 PM
Chair: Nicholas Pan
Attendee: Matt Numsen, Steven Tjendana, Jake Nagazine, Charles Shin
Absent: None

Topic	**Discussion**	**Action/Decision**	**Person responsible/ Due date**
1. Review draft and finalize body content.	Go over each section and read through thoroughly.	After the meeting, each member does a pass through of the entire document.	All/ 2012-09-23, 3:30 PM 30 minutes
2. Finalize the website content.	Reviewed by everyone, feedback accepted.	None.	All/ 2012-09-23, 3:45 PM 15 minutes
3. Next Meeting	Hands-on with Macs (getting set up)	Next meeting probably Thursday or sometime in the next few days.	All/ 2012-09-23, 4:00 PM 15 minutes

Appendix B – References

[1] A. Papanicolaou, Amnesias, The: A Clinical Textbook of Memory Disorders, Edition of book: Oxford University Press USA, 2006, p. 152.

[2] C. Erkelens, J. Snoek, 1st Initial. , "What doctors should not forget about transient global amnesia. ," The European Journal Of General Practice, Vol. 16, no. , 182-5., Sep 2010.