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***Process Specification***

***Final Phase II***

**Team T-MIP**

[www.tmip-helpeople.com](http://www.tmip-helpeople.com)

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Revision History

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# Introduction

## Purpose

The purpose of this document is to describe the process that Team T-MIP used to create the deliverables for Project HELPeople.

## Scope

This document describes the process that Team T-MIP used from initial market research to the completion of Phase II deliverables for the Course Requirements.

It explains our vision, goals, organizational structure, process workflow and responsibilities of team members.

## Stakeholders

The Process Requirements Specifications described herein are designed to support the following major stakeholders:

1. Product Management – Responsible for ensuring that product requirements meet user needs and protect investors’ confidence
2. Project Management – Responsible for ensuring that schedules are met and resources are properly allocated
3. Engineering – Responsible for developing and testing the Product according to requirements within the time and budget constraints
4. Technical Support – Responsible for supporting end-user requirements such as User Guide, Install Guide and Product Maintenance.
5. End-Users

## Definitions and Glossary

WRS: World Requirements Specification

SPMP: Software Project Management Plan

NFR: Non Functional Requirements

FR: Functional Requirements
T-MIP: Our group name

## References

**Chung, Dr. Lawrence** Advanced Requirements Engineering [UTD website] http://www.utdallas.edu/~chung/SYSM6309/syllabus.htm

**Process Specifications:** http://www.csc.ncsu.edu/faculty/mpsingh/books/SOC/SOC-Chapter13.pdf

**Team Power Dorid**  *Dr. Chung's Requirements Engineering Site.* Spring, 2011 http://www.utdallas.edu/~chung/SYSM6309/Presentations11S/

# Organizational Structure

## Vision

Develop a simple but effective process to produce the required Deliverables as specified in the Course Syllabus without sacrificing accuracy, functionality or quality.

## Goals

1. Maximize Re-Use
	1. Standard Templates
	2. Previous Documentations
	3. Existing apps on market
2. Minimize Cost
	1. Teleconferencing when possible
	2. Document sharing via Dropbox
	3. Manual version control
3. Optimize Efforts
	1. Assignments match skills
	2. Division of labor w/out overlap
	3. Utilize familiar tools
4. On-time Delivery
	1. Scope Management
	2. Meeting Management
	3. Project Management



**Fig. 1 - Goals Model**

## Team Roles

Since our team only has four people, we decided to divide up the work along these lines, and one person is mainly responsible for each:

* Overall Product Definition, Vision, Presentation
* Functional Requirements
* Non-Functional Requirements
* Mockup/Prototype/Website/User Manual

Furthermore, all members are involved in the reviewing and refinement of all parts of the Product and Project.

**Team Lead/Project Manager**

We rotate the Team Lead responsibility among our team members to provide everyone with the opportunity to practice project management and leadership skills.

The team lead’s primary responsibility is the entire project’s progress during his/ her time as team lead. The team lead provides clear communication to the group, helps develop a plan for the project, assigns tasks and duties to those most suited to perform the work, mediates and makes final decisions on difficult issues and calls meetings to order.

**Reviewer**

Because of our small team size, everyone is involved in reviewing everyone else’s work.

The reviewer’s sole purpose is to provide “new eyes” to a document/deliverable that has been created by another person/group. A reviewer cannot be the same person that created the deliverable and cannot make changes to the deliverable. The reviewer only makes suggestions for the changes of the deliverable to the creator of that deliverable. The reviewer will also ensure that the deliverable under review meets or does not meet requirements.

**Requirement Engineer**

Every member of T-MIP was also involved in developing requirements for various parts of the Product.

The Requirement Engineer(s) will be responsible for the elicitation, analysis, and specification of all the requirements of the product.

**Developer**

The developer(s) is responsible for implementation / design of the prototype and website construction.

## Workflow

Before each meeting, the Team Lead will create an agenda in cases where there is old business or a number of items to discuss and decide upon. During meetings, decisions will be made upon task allocation and timelines. All assigned tasks are performed by Groups or individual members and posted on a designated folder on Dropbox.

Reviewers will check the documents and make recommendations for changes. Any major issues can be addressed in meetings as old business. Documents are then placed in a central designated digital location. A designated individual will reproduce those documents for physical turn-in.

# Process Specification

## Requirements Engineering Model

For the HELPeople project, Team T-MIP will use the Spiral Model for the requirements specification. Since there is no Development involved, a Development Process was not used.

We performed 2 Requirements Engineering iterations (1.x & 2.x).

**Fig. 1 – Spiral Model**



**Fig. 2 - Meeting Process Model**

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## Requirements Elicitation

**Phase I**

The first phase elicitation began with the preliminary requirements from Dr. Chung, plus some in class discussions. We gathered other requirements by surveying the current mobile app market, researching on the Internet, and talking to people in our main target User Groups (i.e. the elderly)

**Phase II**

The second phase elicitation consisted of a review of the previous requirements, decisions made by previous teams’ work, and other information discovered as part of Phase I.

## Requirements Analysis and Negotiation

**Phase I**

Once requirements had been elicited, we categorized them as Domain, Functional, or Nonfunctional.

The team then reviewed the requirements and identified the issues (ambiguity, incompleteness, inconsistency, etc...)

For every requirement that had issues, we discussed the nature of the issue, identify the options, and then used the consensus approach, as opposed to voting, to arrive at the final solution.

**Phase II**

We reviewed other teams’ requirements to get ideas on what might be added or deleted from Phase I requirements.

We ensured that our scope remains manageable and that any new requirements would not affect the scheduled delivery.

## Requirements Specification

**Phase I**

Document created from Analysis and Negotiation to provide a clearer understanding of the requirements of the project.

**Phase II**

Document revised and reviewed to reflect work in elicitation and in analysis. Modeling techniques were used in order to help with analysis.

## Requirements Validation

**Phase I**

Requirements are validated by creating preliminary mockups which also serves as our prototype.

**Phase II**

Modified requirements are implemented into the prototype.

# Project Organization

## Project Phases

### Interim Phase I –

In the interim phase we analyzed the preliminary definition document given by Dr. Chung. The preliminary definition was broken down into domain, functional and nonfunctional requirements.

A website was constructed, a prototype developed, and a PowerPoint slideshow was done to present our initial ideas and direction.

**Stakeholders**

Users

 Dr. Lawrence Chung

 Team T-MIP

**Goals**

Preliminary list of Requirements

 Divide and assign requirements to Domain, NFR and FR

 Create mockup & prototype

 Scenario

 Create website

 Create presentation for Interim Phase I

**Inputs**

Initial understanding of the requirements elicitation

 Preliminary WRS and SPMP templates

**Process**

Determine best meeting times

Get to know team members

 Get preliminary understanding of deliverables

 Agree on tools

 Divide work

 Prepare minutes after each meeting

**Activities**

Physical presence team meetings

 Create and Revise deliverables

Prepare for the presentation

**Outputs**

Software Project Management Plan

 Preliminary WRS

 Mockup & Prototype

 Scenarios

 Preliminary User Manual

 Project Presentation

**Roles and Responsibilities**

Software Project Management Plan – Ian, Taraneh, Pooria

 Preliminary WRS – Taraneh, Pooria, Ian

 Mockup & Prototype – Mairon

 User Manual – Mairon

 Website – Mairon

 Scenarios - Mairon

Presentation slides – Ian

 Minutes Summary – Taraneh

### Final Phase I –

During this phase, Team T-MIP revised our requirements based on input from the class, from issues identified, and from new information we learned from the process.

The WRS and SPMP were updated, as well as the User Manual and Website.

**Stakeholders**

Users

 Dr. Lawrence Chung

 Team T-MIP

**Goals**

Finalize documents for Phase I

Develop Traceability Matrix

 Develop clearer requirements

**Inputs**

Software Project Management Plan (1.0)

 Preliminary WRS (1.0)

 Preliminary User Manual (1.0)

 Preliminary Mockup & Prototype

 Preliminary Website

**Process**

Gather input from Professor and other students

Discuss issues, identify options, select best solutions

Assign tasks for next phase of work

Record all meeting minutes

Submit deliverables

**Activities**

Conduct team meetings, both in-person and teleconference

Communication via email, phone

Maintain document changes in Dropbox

**Outputs**

Revised Software Project Management Plan (1.x)

 Revised WRS Document (1.x)

 Revised Prototype & Mockup

 Updated Website

 Updated User manual (1.x)

**Roles and Responsibilities**

Revised Software Project Management Plan – Taraneh

 Revised WRS Document – Taraneh, Pooria, Ian

 Revised Prototype & Mockup – Mairon

 Revised Minutes Summary – Taraneh

 User manual – Mairon

### Interim Phase II –

This phase began with additional requirements elicited from Dr. Lawrence Chung.

We evaluated the suggestions for new requirements and chose only those that made business sense without adding too much to our scope and thereby threaten our schedule. The WRS was revised to reflect these requirement changes.

We modeled our process and created the Process Specification. A Vision document was created to provide a high-level view of the Project and Product.

**Stakeholders**

Users

 Dr. Lawrence Chung

 Team –T-MIP

**Goals**

Revise requirements

 Address new requirements

 Modify Prototype

 Create Process Specification

 Create Vision Document

**Inputs**

SPMP (1.x)

 WRS (1.x)

 User Manual (1.x)

 Prototype from Phase 1

 Changes to the Preliminary Definition

**Process**

Discuss the new requirements

 Address issues about the project

 Agree on deliverables for project phase 2

 Divide work among team members/groups

 Prepare minutes to meetings

 Submit deliverables

**Activities**

Conduct team meetings (in-person and teleconference)

Communication via email

Create Models

Maintain document changes in Dropbox

Revise/Create/Review deliverables

**Outputs**

Revised Software Project Management Plan (2.0)

 Revised WRS Document (2.0)

 Revised Prototype & Mockup

 Vision Document (1.0)

 Process Specification (1.0)

**Roles and Responsibilities**

Revised Software Project Management Plan – Taraneh

 Revised WRS Document – T-MIP

 Revised Prototype & Mockup – Mairon

 Update Minutes Summary – Taraneh

 Process Specification – Ian

 Vision Document – T-MIP

### Final Phase II

**Stakeholders**

Users

 Dr. Lawrence Chung

 Team T-MIP

**Goals**

Create Product Specification w/modeling

 Finalize Vision Document

Finalize WRS

 Finalize User Manual

 Finalize Website

 Create final presentation slide deck

**Inputs**

Revised SPMP

 Process Specification

 Revised WRS

 Vision document

 Phase 1 presentation

 Revised Prototype & Mockup

**Process**

Address issues about the project

 Revise schedule for phase 2 deliverables

 Divide work among team members/groups

 Submit deliverables

**Activities**

Conduct team meetings (in-person or teleconference)

Communication via emails

Maintain document changes in Dropbox

Revise/Create/Review deliverables

Draw IDEF Traceability Matrix with Edraw Max Tool

**Outputs**

All Project Final Deliverables in zip file

**Roles and Responsibilities**

Final Product Specification: T-MIP

Final SPMP – Taraneh

Vision Document – T-MIP

Final Mockups & Prototype– Mairon

Final Minutes Summary – Taraneh

Final Process Specification – Ian & Mairon

Final “Why we are the Best” – Ian

## Traceability

Below is IDEF Standard Diagrams to show HELPeople process modeling:

**IDEF Level 0**



**IDEF Level 1**



**IDEF Level 2 Phase-1**

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**IDEF Level 2 Phase-2**

