Computer Science and Engineering

Pitch'n

Project Management Plan

Version 1.0

Document Number: SPMP-001

Project Team Number: A10

Project Team Members: Avik Gomes (aag668), Tanya Jain (tj968), Crystal Song (cs5489)

REVIEW AND APPROVALS

Printed Name and Title	Function (Author, Reviewer, Approval)	Date	Signature
Avik Gomes	Author	November 4, 2020	On File
Tanya Jain	Author	November 4, 2020	On File
Crystal Song	Author	November 4, 2020	On File

REVISION LEVEL

Date	Revision Number	Purpose
November 4, 2020	Version 1.0	Initial Release

Table 0f Contents

1. OVERVIEW

1.1 Project Summary

a. The owner of a local shelter wanted to create an online medium for users to be able to see what things shelters need and accept, their operating hours, and their location. Pitch'n is intended to make donating easy and fun and make the jobs for the centers a bit easier.

b. The purpose of this SPMP is to identify the project management plans, the activities, budget, and environment for the project.

c. The intended audience of the SPMP is the client, software quality group, and the development and project management teams.

1.2 Purpose, Scope, and Objectives

The purpose of Pitch'n is to provide a more effective means of donating to shelters or other similar locations. It acts as an online medium for users to be able to see what things shelters need and accept, their operating hours, and their location. Therefore, the Pitch'n system will include the following functionality: information on donation centers, and a system for donors to access this information. The application does not provide delivery services between the users and the shelters. Pitch'n is intended to make donating easy and fun and allow shelters to manage more efficiently the items that they want to receive. It allows the shelters to receive items that they may not usually receive to help their visitors more effectively while also disseminating information to people who may not usually get it.

1.3 Assumptions and Constraints

The Pitch'n system is assuming the donators are able to travel to the donation centers on their own. The system only provides the information of donation centers and will display their information based off the center. Donators will also have to share their location to see what Donation

centers are near, and this may be a problem because not all donators want to share their location. These locations (for both Donators and Donation Centers) will have to be safe. And the Pitch'n system will have to be accessible on all devices, with an easy to use interface.

1.4 Project Deliverables

Project Proposal: September 22, 2020

Software Business Specification (SRS - Business Definition): October 8, 2020

Software Requirement and Analysis Specification (SRS-Requirements): October 20, 2020

Software Project Management Plan (SPMP): November 5, 2020

Software Analysis Specification - Final (SRS - Analysis): November 17, 2020

Project Presentation: December 10, 2020

1.5 Schedule and Budget Summary

Major work activities include:

1. Planning
    a. Software Project Management Plan: Nov 17, 2020
2. Execution
    a. Project Presentation: Dec 10, 2020
3. Closing
    a. Project updates and fixes: Dec 17, 2020

1.6 Evolution of the Plan

As time progresses the Pitch'n system will continue to develop aiding Donation Centers receive items that they are in need of, and as changes happen, they will be handled effective immediately.

2 REFERENCES

Project Proposal, Team A10, September 22nd, 2020

System Requirements Specification, Version 1.0, Team A10, SRS-001, October 8th, 2020

System Requirements Specification, Version 1.1, Team A10, SRS-001, October 22nd, 2020

3 DEFINITIONS

Donators:

Users who are donating to the Donation Centers

Donation Centers:

Clients who want to make known of what they need to be donated

4 PROJECT ORGANIZATION

4.1 External Interfaces

The organizational boundaries exist between the project and the auditing software, along with the organization that is providing the developing environment.

4.2 Internal Structure

The internal structure of the project organization includes interfacing between the development team using applications such as Zoom and Discord. The team is structured where each member of the development team has an equal say in the project organization as well as its development.

4.3 Roles and Responsibilities

- Avik Gomes: Author and submits documents to classes
- Tanya Jain: Author and reviewer
- Crystal Song: Author and reviewer

5 MANAGEMENT PROCESSES

5.1 Start-Up Plan

We started by selecting a two-man team (Avik and Tanya) and bouncing ideas for a project. Then an email was sent out for a third member, where Crystal replied. She came along with an idea for a service to let people know about what to donate where, and we all agreed on that. The Project Team Selection and Proposal was then sent where the name “Pitch’n” was thought of.

5.1.1 Estimation Plan In future versions of the SPMP.

5.1.2 Staffing Plan In future versions of the SPMP.

5.1.3 Resource Acquisition Plan In future versions of the SPMP.

5.1.4 Training Plan If any training needs to be done for any member of the team, resources will be given (i.e. books, articles, etc.), and they will have to display understanding of their newly acquired knowledge with some sort of project.

The system needs to have a mapping system to locate the nearest centers from someone, have an API that allows users to save centers they want to donate to, and allow the centers to display their own data. To hold the donators and the donation centers information a server needs to be purchased and/or made to store the information and talk to the devices using the Pitch'n system.

5.2 Work Plan

5.2.1 Work Activities

For each of the previously listed major work activities, each activity is decomposed into four processes. The first process is a risk assessment where risk factors are explored, and resources are allocated. The second process is executing the

work which includes completing the documentation in time for the deadline. The third process is inspecting the work for any flaws. The fourth process is distributing the work by submitting it.

5.2.2 Schedule Allocation

Refer to the Gantt chart for this information (Section 12.3)

5.2.3 Resource Allocation

Activity	Resources
Project Proposal	Team members: Avik Gomes, Tanya Jain, Crystal Song Other resources: Computers, Google Drive, Microsoft Word, Internet
System Requirements Specification, Project Domain	Team members: Avik Gomes, Tanya Jain, Crystal Song Other resources: Computers, Google Drive, Microsoft Word, Internet
System Requirements Specification, Project Requirements	Team members: Avik Gomes, Tanya Jain, Crystal Song Other resources: Computers, Google Drive, Microsoft Word, Internet

5.2.4 Budget Allocation

In future versions of the SPMP.

5.3 Control Plan

This subsection specifies the metrics, reporting mechanisms, and control procedures necessary to measure, report, and control product requirements. the

	project work schedule, budget, resources, and the quality of development processes and work products
5.3.1 Requirement Control and Traceability	As the Pitch'n system evolves there will be prototypes given to both the Donation Centers and the Donators and based off their responses the system will adapt to make sure they get an application they need.
5.3.2 Schedule Tacking and Adjustment	The system will be made on schedule with the help of the Gantt chart, and even if the actual schedule differs from the planned system the chart will be reevaluated to make sure that the system is done on time.
5.3.3 Budget Tracking and Adjustment	In future versions of the SPMP.
5.3.4 Quality Control	The quality of the work processes and resulting work products will be determined through reviews and assessments done by a third party.
5.3.5 Reporting Mechanisms	In future versions of the SPMP.
5.3.6 Metrics Collection Plan	We will continually try to get donator and donation center experience with the application to make sure that everything is okay. If something is not, we will respond by

correcting any issues they may be having.

5.4 Risk Management Plan

Business Risk: Donation Centers information not available

Description: Some donation centers may not be willing to provide their information

Probability: Very low

How discovered: Hypothesis

Responsible Party Status:

Mitigation Plan: Inform them about the benefits of Pitch'n.

Technology Risk: The google maps API may give errors

Description: Google maps can display wrong locations, or not show updated information.

Probability: Very low

How discovered: Hypothesis

Responsible Party Status:

Mitigation Plan: Update it frequently ourselves

5.5 Post Implementation Plan

In future versions of the SPMP.

6 TECHNICAL PROCESSES

6.1 Process Model

Object oriented programming and the IBM Rational UML modeling is to be used. The waterfall model will be applied as well.

6.2 Methods, Tools, and Techniques

To make the Pitch'n system the Google Maps API will be used as the map interface, to show where the donation centers are. But python will be used to make the distinction between the Donation Centers and the Donators and what they will be able to do in the application.

We are also using Microsoft Word and Microsoft Project to write the required documents and manage the development process.

6.3 Infrastructure Plan

The hardware for development will consist of the computers that the development team is in possession of. During development, the software that will be used is open-source software and programming IDEs. The operational development of the final product will be hosted on a third-party server.

6.4 Product Acceptance and Migration Plan

In future versions of the SPMP.

7 SUPPORTING

PROCESES PLANS

7.1 Configuration Management Plan	Google drive is being used to store and share all documents with each member of the team. The documents are configured in an organized manner, where each document has a unique name or number to help differentiate between them. All changes are agreed upon by the team and then scheduled for update on the next version release.
7.2 Qualification (Verification and Validation) Plan	After executing the work needed for each activity, the verification plan will include milestone reviews and peer reviews. Each activity will be reviewed by a third party for defects. The validation plan for the project will consist of testing and inspection. Each component of the project will be carefully tested for functionality and ease of use.
7.3 Documentation (library) Plan	Every work product and document is given a name and a version number. All deliverables are generated by the team together. The team member assigned to submit the deliverables is responsible for reviewing the documents and ensuring that all specifications are met.
7.4 Quality Assurance Plan	To ensure that the software fulfills its commitment to the plan, the software will be reviewed and inspected. It will be based upon the test cases and requirements, and any defects noted during the tests will be assessed.
7.5 Reviews and	At the completion of each deliverable, there will be testing and a project review. Defects will be reported and tracked with identifying information and a description. Each of

Audits	these defects will be considered by the development team and fixed if necessary.
7.6 Problem Resolution Plans	One of the main problems for the Pitch'n system would be displaying wrong information for whatever reason. It could be information about centers being swapped or just wrong data in the first place. This could be fixed by having a "Report An Issue" functionality on the application which either the donator or the donation center could use to let us know that something was wrong. After a report has been made the information will be fixed hastily.
7.7 Environment Management Plans	In future versions of the SPMP.
7.8 Process Improvement Plan	In future versions of the SPMP.
8. ADDITIONAL PLANS	In future versions of the SPMP.

9 INDEX

10 RATIONALE

None

11 NOTES

None

12 APPENDICES

12.1 Schedule Tracking

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference
SRS – Business Domain	Avik Gomes	1.4 hours	0.9 hour	0.5 hour
	Tanya Jain	1.3 hours	0.8 hour	0.5 hour
	Crystal Song	1.3 hours	0.8 hour	0.5 hour
	Summary for entire team	4 hours	2.5 hours	1.5 hours

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference
SRS – Requirements	Avik Gomes	1 hour	0.6 hour	0.4 hour
	Tanya Jain	1 hour	0.6 hour	0.4 hour

	Crystal Song	1 hour	0.6 hour	0.4 hour
	Summary for entire team	3 hours	1.8 hours	1.2 hours

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference
SRS – Analysis - Complete				
	Summary for entire team			

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference
SPMP	Avik Gomes	2 hours	1.5 hours	0.5 hour
	Tanya Jain	2 hours	1.5 hour	0.5 hour
	Crystal Song	2 hours	1.5 hour	0.5 hour
	Summary for entire team	6 hours	4.5 hours	1.5 hours

Cumulative

Who (individual and Team)	Estimated	Actual	Difference
Avik Gomes	4.9 hours	3.5 hours	1.4 hours
Tanya Jain	4.8 hours	3.4 hours	1.4 hours
Crystal Song	4.8 hours	3.4 hours	1.4 hours
Summary for entire team	14.5 hours	10.3 hours	4.2 hours

12.2 Defect Tracking

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference
SRS – Business Domain	Crystal Song, Avik Gomes, Tanya Jain	3	3	0

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference
SRS – Requirements	Crystal Song, Avik Gomes, Tanya Jain	3	3	0

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference
SRS – Analysis - Complete	Crystal Song, Avik Gomes, Tanya Jain	3		

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference

Artifact or Deliverable	Who (individual and team)	Estimated	Actual	Difference
SPMP	Crystal Song,	6		

	Avik Gomes, Tanya Jain			

Cumulative

Who (individual and team)	Estimated	Actual	Difference
Crystal Song, Avik Gomes, Tanya Jain	15		

12.3 Gantt Chart/Microsoft Project/Spreadsheet Schedule

	Project Team Selection Form	2 days	Sun 9/6/20	Mon 9/7/20		Avik,Tanya, Crystal
	Project Team Proposal	3 days	Sun 9/6/20	Tue 9/8/20		Avik,Tanya, Crystal
	Project SRS-Project Domain/Requiremer	**19 days**	**Mon 9/28/20**	**Thu 10/22/20**		
	Project SPMP	**8 days**	**Tue 10/27/2**	**Thu 11/5/20**		
	Overview	1 day	Wed 10/28/2	Wed 10/28/2		Avik
	References	1 day	Wed 10/28/2	Wed 10/28/2		Tanya
	Definitions	1 day	Wed 10/28/2	Wed 10/28/2		Crystal
	Project Organization	1 day	Thu 10/29/20	Thu 10/29/20		Avik
	Management Processes	2 days	Thu 10/29/20	Fri 10/30/20		Tanya
	Technical Processes	2 days	Thu 10/29/20	Fri 10/30/20		Crystal
	Supporting Processes Plan	1 day	Sat 10/31/20	Sat 10/31/20		Avik
	Additional Plans	1 day	Sun 11/1/20	Sun 11/1/20		Tanya
	Index	1 day	Mon 11/2/2(	Mon 11/2/2(		Crystal
	Rationale	1 day	Tue 11/3/20	Tue 11/3/20		Avik
	Notes	1 day	Wed 11/4/2(	Wed 11/4/2(		Tanya
	Index	1 day	Thu 11/5/20	Thu 11/5/20		Avik
	Appendices	1 day	Thu 11/5/20	Thu 11/5/20		Crystal
	SRS-Project Analysis	8 days	Sun 11/8/20	Tue 11/17/20		Avik,Tanya, Crystal
	Final Oral Presentation	4 days	Thu 12/10/20	Tue 12/15/20		Avik,Tanya, Crystal