Software Project Management Plan for Curbid

Version 0.2

Issued: April 13, 2021

Issued by: Ian Smith

Issued for: Rebecca Broadwater

Change History:

Version	Date	Author(s)	Changes		
0.1	April 13, 2021	Ian Smith	Initial Version		
0.2	April 13, 2021	Ian Smith	Updated: Table of Contents Preface Section 1.1, 1.4, 1.5 Section 3.1 Section 4.1, 4.3		

Preface

The Software Project Management Plan (SPMP) that follows is the plan laid out by myself to complete the Curbid project. The purpose of this website is to create a place for students of the university to offer up unwanted items that would normally be thrown out or donated to a local thrift shop to interested individuals in their area. This SPMP's purpose is to showcase the planning and preparations that went into this project. Once this plan is accepted, it will be used as a reference for completing this website on time, and to the best of my ability.

Table of Contents:

Title	Page	•••	ĺ
Cha	nge Hi	story	ii
Pref	ace	•	iii
Tabl	e of C	ontents	iv
List	of Fig	ures	V
1.	Intro	oduction	1
	1.1.	Project Summary	2
	1.2.	Deliverables	2 2 2
	1.3.	SPMP Revisions	2
	1.4.	References and Resources	2-3
	1.5.	Definitions and Acronyms	3
2.	Orga	anizational Processes	4
	2.1.	Process Model	5
	2.2.	Organizational Interfaces	5
3.	Man	nagerial Processes	6
	3.1.	Assumptions, Dependencies and Constraints	7
	3.2.	Risk Management	7
4.	Tech	nnical Process	8
	4.1.	Methods, Tools and Techniques	9
	4.2.	Software Documentation	9
	4.3.	Project Support Functions	9
5.	Desc	cription of Work Packages	10
	5.1.	Work Breakdown Structure	11
6.	App	endices	12

List of Figures

Process Model	App. A
Organizational Interface Diagram	
Work Breakdown Structure	11
Gantt Chart	App. D

Part 1 Introduction

1.1. Project Summary

The purpose of this project is to design and implement a college specific hub for giving away items that would normally be discarded to those that want them, in a similar style to Facebook, Twitter, and reddit.

This document is to serve as a guide for the development team to ensure that the project meets the requirements of the client and to detail the plans and schedule of the team.

The objectives of the project are as follows:

- create a college specific hub for giving away items that would be thrown out to those that want them
- All unregistered users should be able to create an account or sign in
- Verify users using school IDs
- Display posts to verified users

1.2. Deliverables

The development team will produce the following deliverables by the project due date:

- Deployed and Functional Webapp
- Project documentation:
 - o Software Project Management Plan (SPMP)
 - o Software requirements and Use Cases

1.3. SPMP Revisions

This software project management plan is a living document and will be subject to changes as the project moves forward. The updated version of the document will be made available on the group's repository page.

1.4. References and Resources

Document Reference:

IEEE Std 1058-1998, IEEE Standard for Software Project Management Plans, IEEE 1998

Database API: Firebase

Account Auth API: Firebase

User Metrics Tracking: Google Analytics

Hosting: Firebase

Student Verification: ID.me

1.5. Definitions and Acronyms

Term	Definition
SPMP	Software Project Management Plan
WBS	Work Breakdown Structure
API	Application Programming Interface

Part 2 Organizational Processes

2.1. Process Model

In this diagram, we attempted to show the connections between each of the processes/stages of development. In the following diagram, white arrows represent the processes or created products in each stage that need to be completed to move to the next stage. Black arrows represent the outputs of that stage, which may be used by other processes.

See Appendix A for this diagram.

2.2. Organizational Interfaces

The Organizational Interface Diagram illustrates the external, third-party project resources (henceforth, external interfaces) that will be utilized throughout the project. These external interfaces are referenced in References and Resources in the previous section.

See Appendix B for this diagram.

Part 3 Managerial Processes

3.1. Assumptions, Dependencies and Constraints

The website depends on:

- User posts to generate interest and functionality.
- A database to hold user posts
- Student verification to ensure that only the allowed users are able to utilize the site

3.2. Risk Management

The following criteria are some of the risks I've assessed going into this project:

- Funding:
 - This project will most likely be funded by advertising.
- Size of the project:
 - In the case the project gets too large, I will hire more staff to help breakdown the size.
- Complexity of the project:
 - In the case of requirements creep, a new requirements evaluation task will be added to the Kanban board. In addition, an "Update SPMP" task, an "Update Diagrams" task, and a "Refactor" task will be added.

Part 4 Technical Process

4.1. Methods, Tools and Techniques

Method: Kanban

Tools:

Task Management: Trello

Hosting: Firebase Database: Firebase

Analytics: Google Analytics (for measuring user engagement)

Ads: Google Adsense Database API: Firebase Student Verification: ID.me

Techniques:

HTML, CSS, and JavaScript

4.2. Software Documentation

All software history documentation will be done through a GitHub Repository, and all code pre-production will contain comments.

4.3. Project Support Functions

Trello: Task Management

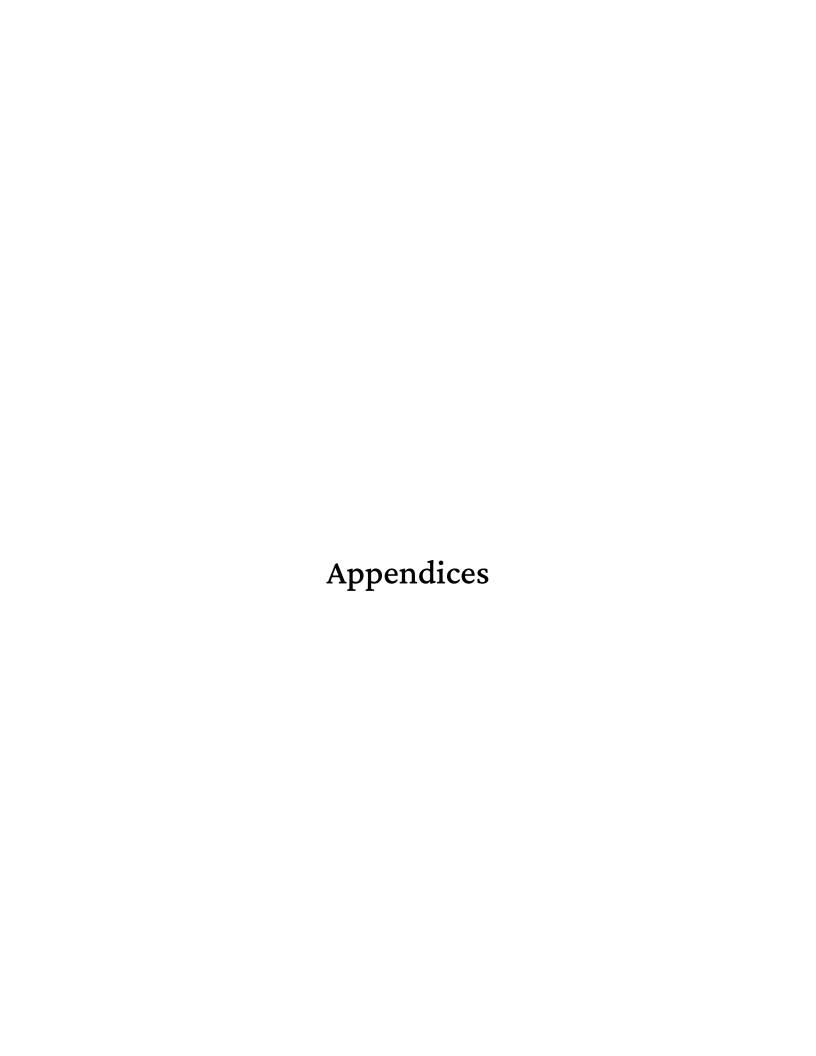
Google Cloud Platform: For API and Database management

Part 5 Description of Work Packages

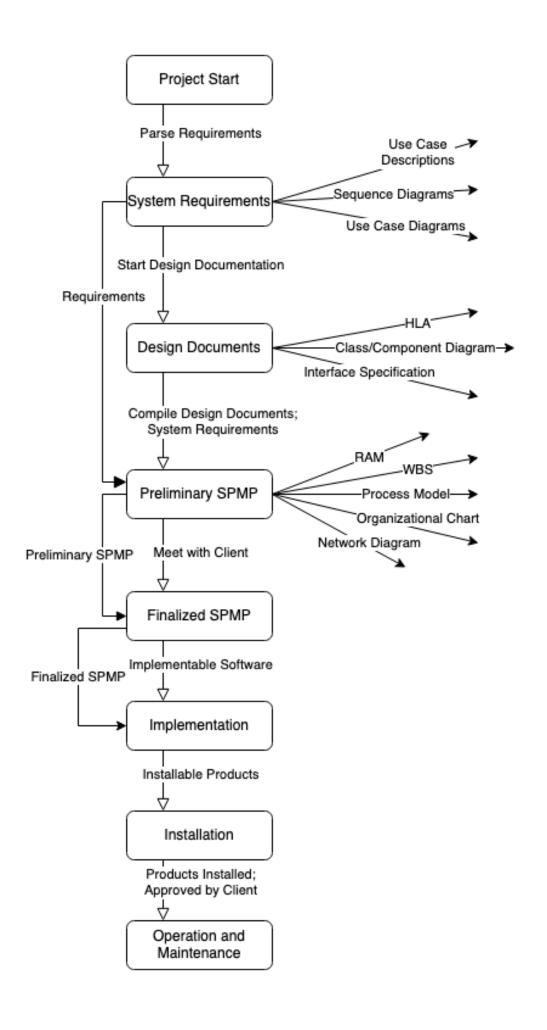
5.1. Work Breakdown Structure

The Work Breakdown Structure divides the weekly deliverables of the project into groups and shows them in order of completion.

See Appendix C for this Diagram.



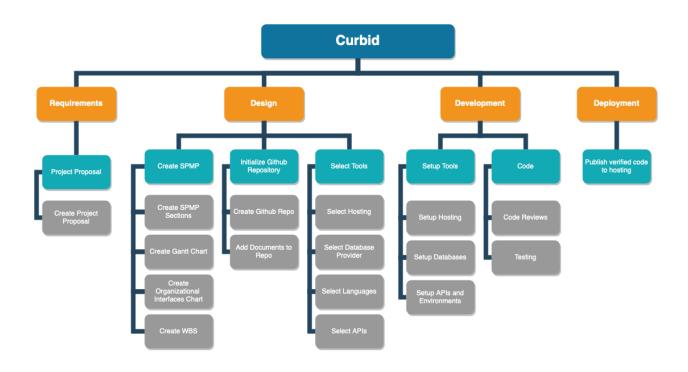
Appendix A Process Model



Appendix B Organizational Interfaces

Organizational Interfaces								
		Firebase Hosting	3	Firebase Authorization	ID.me			
Customer:	Ian Smith	lan Smith	lan Smith	lan Smith	Ian Smith			
Туре:	Storage	Hosting	Analytics	Authorization	Student Verification			

Appendix C Work Breakdown Structure



Appendix D
Gantt Chart

	Task Name	Duration Start		02.01.2021	02.08.2021	02.15.2021	02.22.2021	03.01.2021	
			Start	ETA	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSSMT
1	Complete project execution	75 days	02.02.21	04.24.21					
2	Design Documentation	28 days	02.02.21	03.01.21					
3	Create Requirements	6 days	02.02.21	02.09.21					
4	Create Use Cases	6 days	02.09.21	02.14.21					
5	Create Sequence Diagrams	6 days	02.09.21	02.14.21					
6	Update Requirements	6 days	02.09.21	02.14.21					
7	Create SPMP	14 days	02.15.21	03.01.21					
8	Create Gantt	14 days	02.15.21	03.01.21					
9	Create WBS	14 days	02.15.21	03.01.21					
3	Implementation Phase 1 (Kanban)	21 days	03.01.21	03.29.21					
10	Make Databases	6 days	03.01.21	03.07.21					
11	Make initial layout	6 days	03.08.21	03.15.21					_
12	Make and connect navigation	6 days	03.08.21	03.15.21					_
13	Design user authentication	12 days	03.16.21	03.29.21					
14	Code Review	6 days	03.01.21	03.07.21					
4	Implementation Phase 2 (Kanban)	26 days	03.29.21	04.24.21					
14	Connect databases	14 days	03.29.21	04.12.21					
15	Add post additions and retrievals	12 days	04.12.21	04.24.21					
16	Add post queue	12 days	04.12.21	04.24.21					
17	Code Review	7 days	04.14.21	04.24.21					

