

Software Project Management Plan for Curbid

Version 0.1

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Issued by: Ian Smith

Issued for: Rebecca Broadwater

Change History:

Version	Date	Author(s)	Changes
0.1	April 13, 2021	Ian Smith	• Initial Version

Preface

The Software Project Management Plan (SPMP) that follows is the plan laid out by our web development team to complete a website for the Computer Science 412 class at Towson University. 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 the team's ability.

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Part 1
Introduction

1.1. Project Summary

The purpose of this project is to analyze the requirements of, 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:

- complete the project by the due date
- submit the deliverables by the project due date
- fulfill all of the requirements of the project

1.2. Deliverables

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

- Software program
- Project documentation:
 - Software Project Management Plan (SPMP)
 - Project software requirements
 - Design documents

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

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

1.5. Definitions and Acronyms

Term	Definition
SPMP	Software Project Management Plan
WBS	Work Breakdown Structure
HLA	High Level Architecture
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

3.2. Assumptions, Dependencies and Constraints

The website depends on:

- User posts to generate interest and functionality.
- A database to hold user posts

3.3. 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:

Hosting: Firebase

Database: Firebase

Analytics: Google Analytics (for measuring user engagement)

Ads: Google AdSense

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: Scheduling

Google Cloud Platform: For API and Database management

Part 5
Description of Work Packages

5.1. Work Breakdown Structure

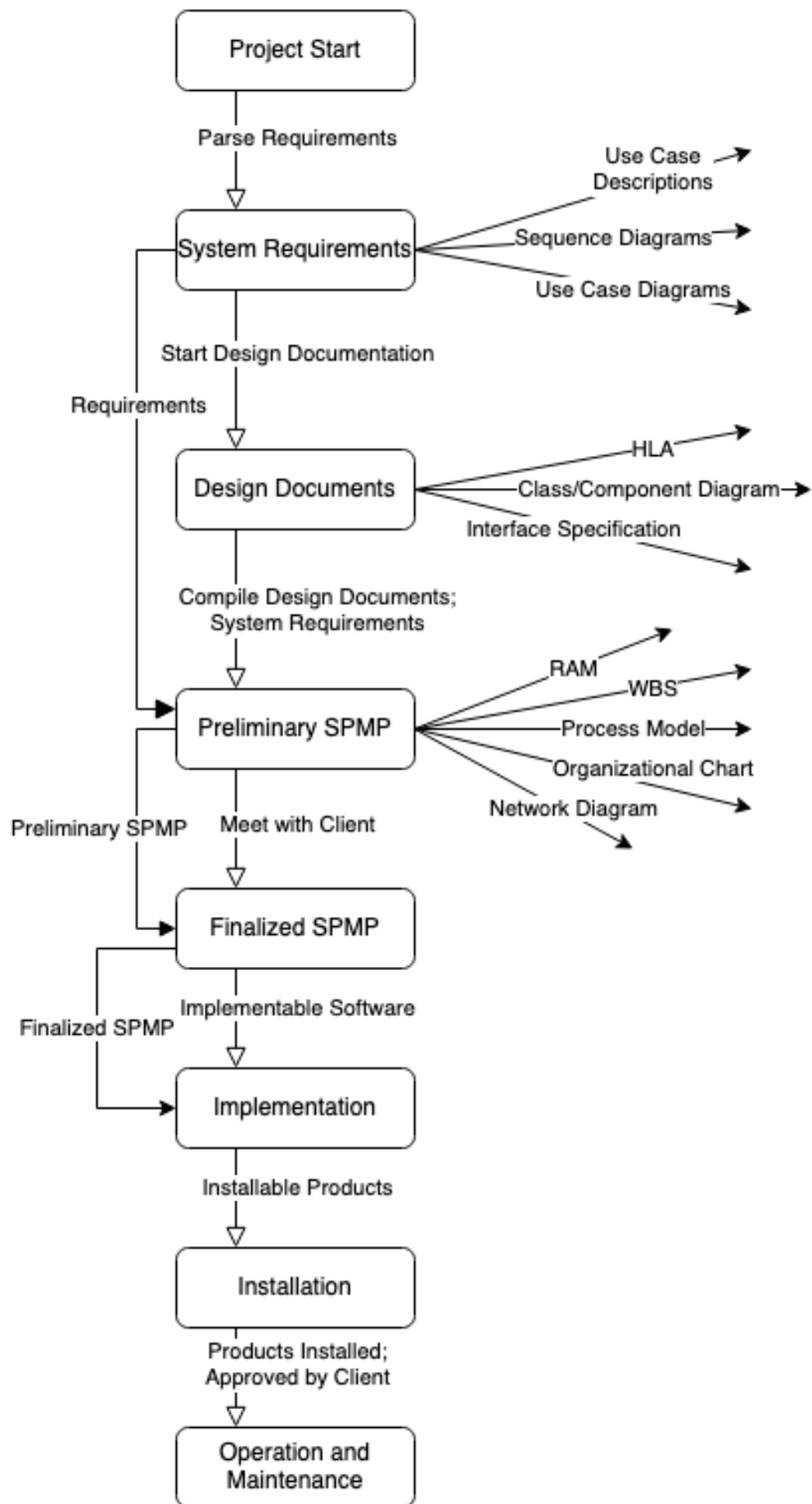
The Work Breakdown Structure divides the weekly deliverables of the project into groups and shows them in order of completion.

See Appendix C for this Diagram.

Appendices

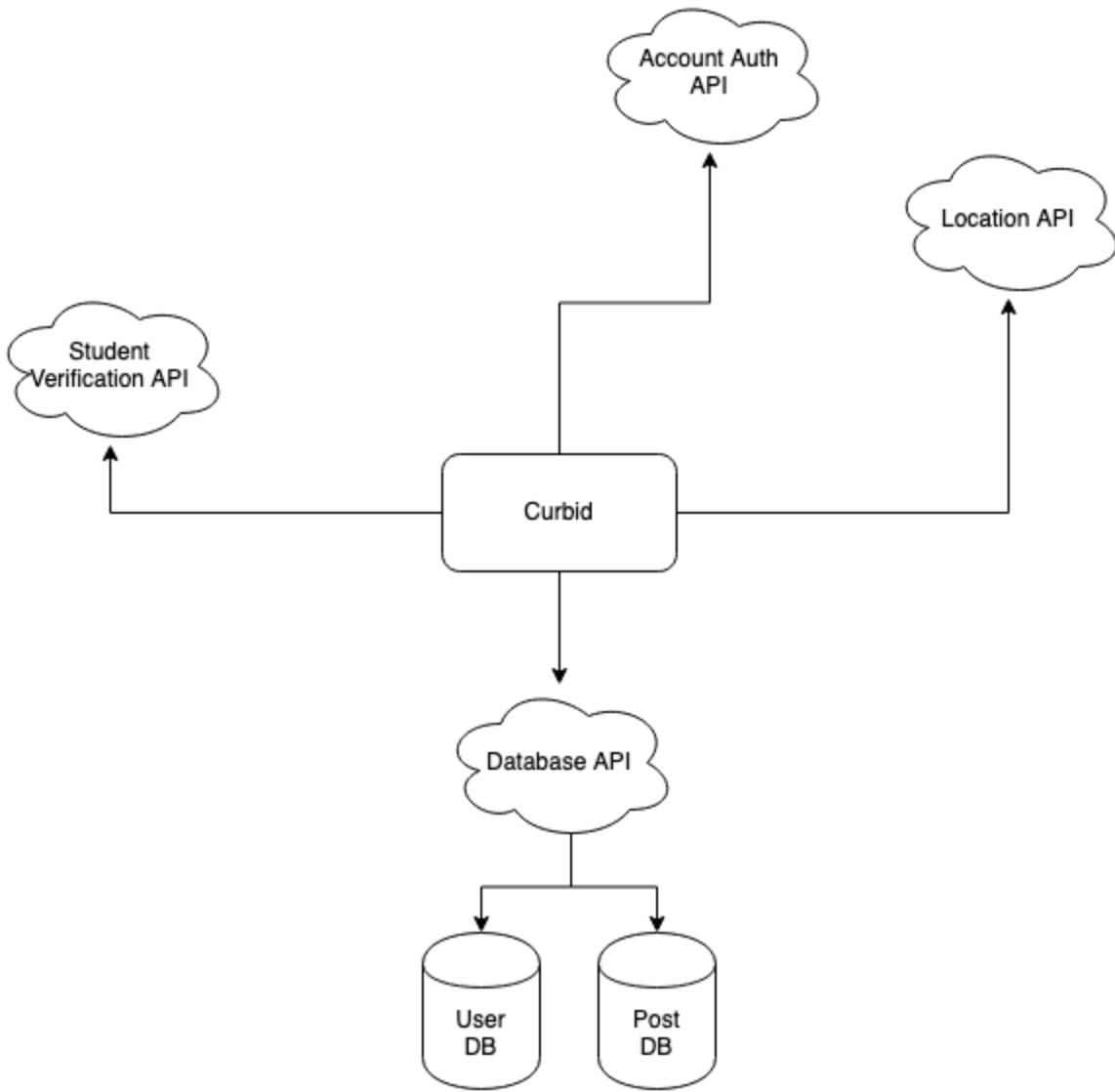
Appendix A

Process Model



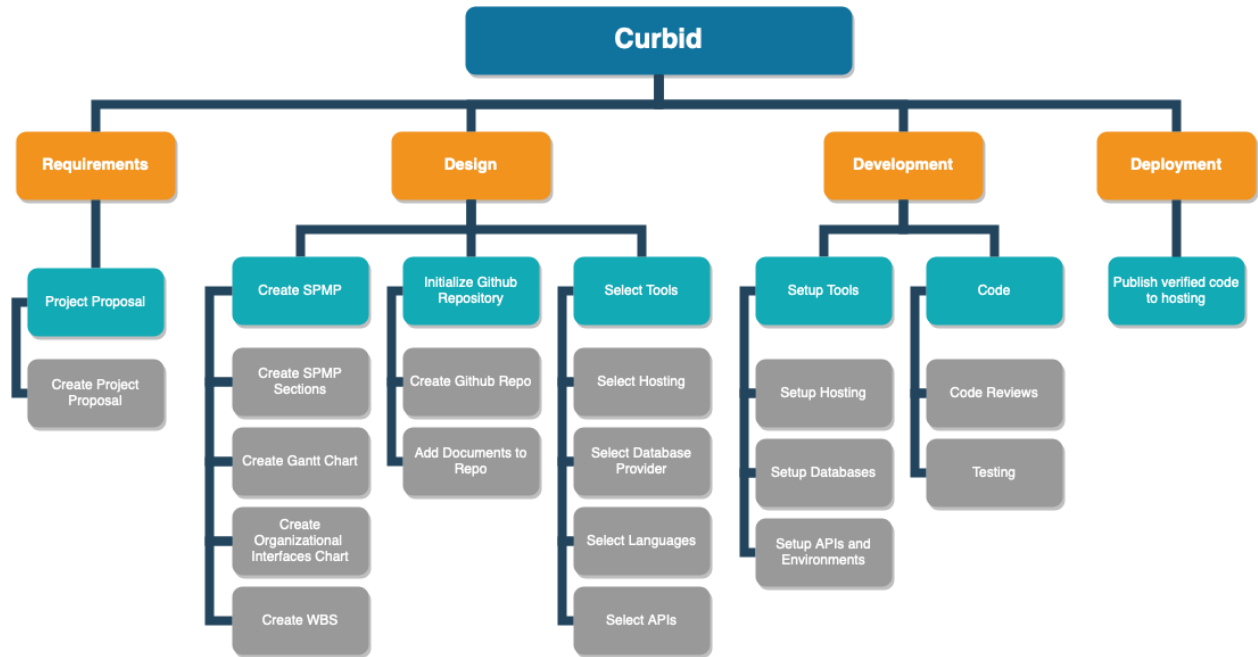
Appendix B

Organizational Interfaces



Appendix C

Work Breakdown Structure



Appendix D

Gantt Chart

