

March 31, 2021

Individual Project/ARHI Website SPMP

Joshua Jankiewicz

Revisions Sheet (History):

First Revision:

## **Table of Contents**

- 1) Introduction**
  - a) Project Overview
  - b) Project Deliverables
  - c) Evolution of the SPMP
  - d) Reference Materials
  - e) Definitions and Acronyms
- 2) Project Organization**
  - a) Project Model
  - b) Organizational Structure
  - c) Organizational Interfaces
  - d) Project Responsibilities
- 3) Managerial Process**
  - a) Management Objectives and Priorities
  - b) Assumptions, Dependencies and Constraints
  - c) Risk management
  - d) Monitoring and Controlling Mechanisms
  - e) Staffing Plan
- 4) Technical Process**
  - a) Methods, Tools, and Techniques
  - b) Software Documentation
  - c) Project Support Functions
- 5) Description of Work packages**
  - a) Work Breakdown Structure
  - b) Dependencies Between Tasks

**Preface:** The purpose of this project is, to create a new prototype website based off of an existing website that is used to show off previous work and attract new clients. To complete this objective, the website will utilize social media, allow direct client to owner connection, provide a way to search for specific types of work, and provide before and after pictures to ensure quality of work.

## **(1)Introduction**

### **1.a Project Overview**

The goal of this project is to update, redesign, and maintain a website of a family friend's business. This website will offer information on how to contact the business for work as well as a direct line of contact through a submission form as well as photos of previous jobs, a description, offered services based on commercial and residential projects and a clear display of logo that suits the company. Customers will be able to set up meetings and contact the business in order to find out what work needs to be done. Finally, customers can then be offered average quotes based on what work they are looking to get done. The client will end up with a new updated website that they approve of which will look to propel their business into the future.

### **1.b Project Deliverables**

The following deliverables will be provided.

1. Software Project Management Plan (this document)
2. Software Test Plan (STP)
3. Software Quality Assurance Plan (SQAP)
4. Technical Documents and Software
  - Software Requirements Specification (SRS)
  - Software User Documentation
  - Source Code (including installation and configuration instructions).

### **1.c Evolution of the SPMP**

March 31, 2021

I expect to have a working prototype completed by Mid-May. Unscheduled changes due to a change in clientele needs will be documented and kept on github. Once documented to github each task will be completed in order to accomplish the clienteles needs.

### **1.d Reference Materials**

Will be added when references are utilized.

### **1.e Definitions and Acronyms**

API – Applications Programming Interface

GUI – Computer User Interface

JDK – Java Development Kit

RAD – Requirements Analysis Document

BIOS – Basic Input Output System

COBOL – Common Business Oriented

DBMS – Database Management System

ISP – Internet Service Provider

BEM – Block Element Modifier

CDN – Content Delivery Network

CRUD – Create Read Update Delete

CTA – Call to Action

WYSIWYG – What You See Is What You Get

## **(2) Project Organization**

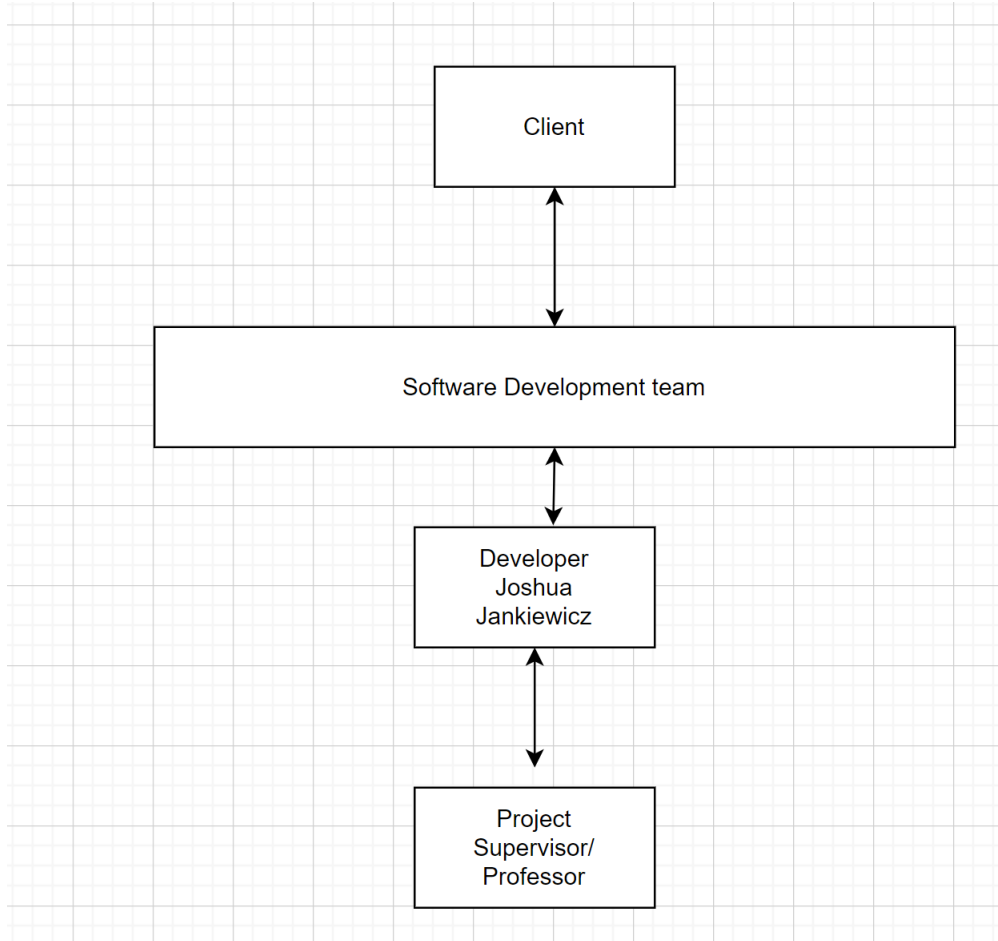
### **2.a Project Model**

March 31, 2021

This project was started on Feb 5<sup>th</sup>, 2021 and will be completed by the end of the semester. Some major milestones are completing the Use cases and Sequence diagrams by March 31, 2021, Design Documents by March 31, 2021, and SPMP document by March 31, 2021.

The project will use object-oriented code and outside resources for development. The project will require several organized groups of work to avoid mistakes. There will be a certain number of goals to complete on github that may be changed each week. After each goal is completed it will be either uploaded or pushed to github. The smaller tasks will be completed along side other small tasks and not done one at a time. The group files and documents will all be uploaded using github and coded in Javascript, HTML, SCSS, or whichever language is fit and decided at a later date. There will be properly named repositories for each corresponding file and document.

## 2.b Organizational Structure



c) Figure X Organizational Structure

## 2.c Organizational Interfaces

There will be minimal communication between any other entity besides the client and the developers in this current assignment. This is due to the lack of foreseeable need for a client base until the project is done. However, the team will be attempting to connect the databases to other forms of frontend and backend software.

## 2.d Project Responsibilities

The following table identifies and states the nature of each major project function and activity, and identifies the individuals who are responsible for those functions and activities. For this project there is only one individual that will be responsible for every task which is Joshua Jankiewicz.

<b>Role</b>	<b>Description</b>	<b>Individual(s)</b>
Project Manager	Manage system development. Chair management reviews and project reviews.	Joshua Jankiewicz
Hardware Manager	Oversee system engineering and hardware.	Joshua Jankiewicz
System Engineering Team	Develop SRD, UDD.	Joshua Jankiewicz
Hardware Acquisition Team	Acquire/develop hardware and equipment.	Joshua Jankiewicz
Software Project Manager	Oversee software development activities. Develop and maintain SDP.	Joshua Jankiewicz
Software Development Team	Code, integrate, and unit test the software. Support testing and delivery.	Joshua Jankiewicz
Configuration Management Team	Prepare and execute SCMP	Joshua Jankiewicz

March 31, 2021

Quality Assurance Team	Prepare and execute SQAP	Joshua Jankiewicz
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### **(3) Managerial Process**

#### **3.a Management Objectives and Priorities**

The main goal is to create fully functional software that will accurately meet our client's needs. A strict weekly schedule will be kept to ensure tasks are completed in a timely manner; once a week tasks will be set for completion for the following week. As Joshua Jankiewicz is a student, costs will be kept as minimal as possible, preferably under \$200. Third party software may be included in a holistic fashion and/or in a modified way. Most of the third party software will likely be open source.

#### **3.b Assumptions, Dependencies and Constraints**

Assumptions: It is assumed that this team has very little experience in development, therefore, patience is key and outside resources may need to be referenced to understand how to move forward.

Dependencies: I am dependent on the client's needs; making sure that our team and the client are up to date with each other. In addition, our team is dependent on the guidance of professor Broadwater to help guide and teach how to develop a finalized result.

Constraints: I am constrained by classes our team is taking, as a student our budget is extremely limited, and the lack of help will slow the project down.

#### **3.c Risk management**



March 31, 2021

Risks will be accessed by each team member, which for in this instance is only Joshua Jankiewicz. I will check over work to ensure that there is minimal to no risk. Once a risk is identified it will be recorded in a separate risk list document and sought to be solved by the end of the week. If it is not resolved, meaning there is still a minimal risk, then it will be transferred to the permanent watch list which will have to take that risk into consideration when proceeding there on in.

### **3.d Monitoring and Controlling Mechanisms**

Joshua Jankiewicz will be reminded when tasks need to be done via pre-set reminders as well as personal keeping up to date by watching due dates. If through my monitoring I start to fall behind, timelines will be readjusted in accordance to the client and a larger work load may be required for future weeks. I will set hard deadlines and are always willing to change them if extra time is needed to finish a project that I am working on.

### **3.e Staffing Plan**

There will be one student managing . Availability is a concern during the trying times of the COVID-19 and global pandemic times, along with the fact that there is only one person managing every task so it should be known that if something personal pops up to be understood. That is not to be taken as “I can get away with not doing my work,” but we are all humans with a normal amount of needs, full-time students, and working regularly on top of that. Each member will have to bring new ideas to the table whether it is web design, code, etc. There is no likelihood that someone drops the course so it is of no concern and can guarantee that the best effort possible will be given.

#### **(4) Technical Process**

##### **4.a Methods, Tools, and Techniques**

Some methods I will try using are individual coding methods and possibly peer review techniques with other students in the course or professor Broadwater as fresh eyes to check our work and make sure all code is correct and me and the client all have the same ideology of where the project is headed. I will be using tools such as clubhouse, github and gitlab to store information. A technique I will be using are surveying our clients to ensure we are together and achieving what the client is looking for in our prototype.

##### **4.b Software Documentation**

Our group will be working consistently on the task assigned to us by the client over the next 6 weeks. In the process of doing so, it is important that I keep up on the documentation of our goals, steps completed, and coding processes. I will keep track of who is completing a specific task through a document on clubhouse.

Through clubhouse, it will make it very easy to choose tasks to complete, and look back on tasks if need be completed soon. Also, I plan to efficiently use GitHub's branching capabilities to allow for us to keep track of, and version our code. Finally, a log of communications between the development team and the professor through email and a detailed "post meeting" log. I believe that in using these forms of documentation it will allow the group to efficiently work.

March 31, 2021

#### **4.c Project Support Functions**

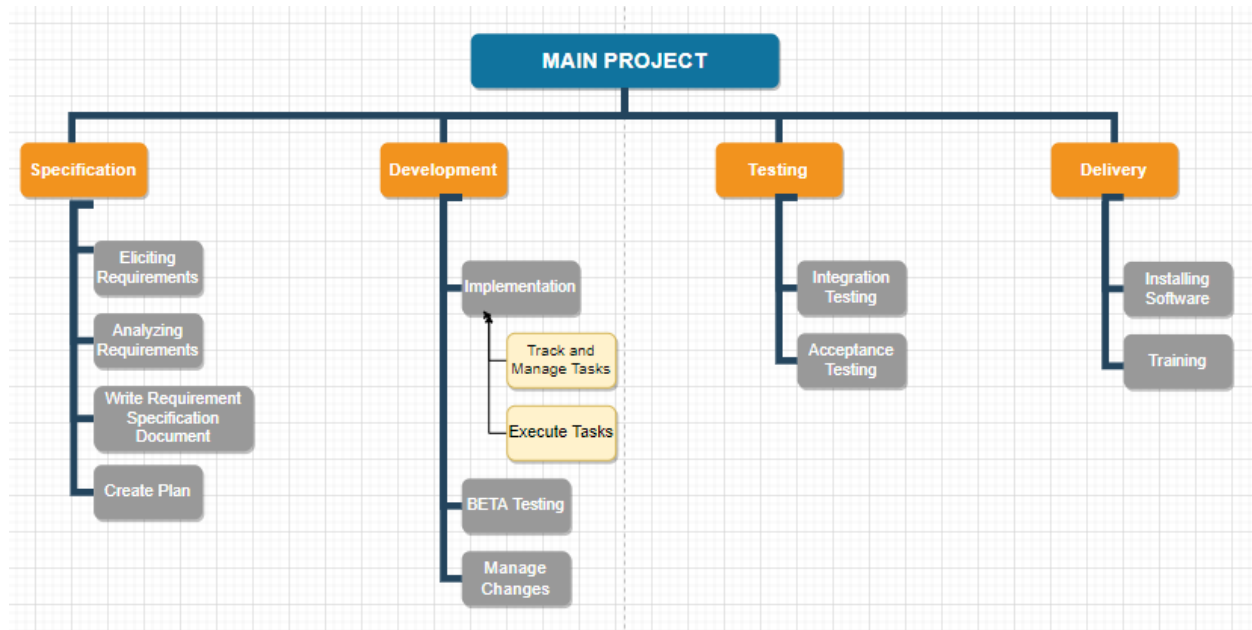
One project support function I have is a document github which breaks down and divides up each task for a due date or next in line to be done and how much time is available for said task.

Another project support function will be checking up with the Professor who in this case is an expert to assist in guiding us in the right direction if I am stuck or for reassurance.

#### **(5) Description of Work Packages**

##### **5.a Work Breakdown Structure**

March 31, 2021



### 5.b Dependencies Between Tasks

Dependencies between tasks will occur while moving further into our project. Small sections of code will be made separately and brought together later in order to minimize mistakes for each section of code and increase time efficiency. This is because I will be coding different parts of the project in unison and then adding them together using github. Myself and the client are also depending on all work to be done in a timely manner and depend on the stability of our hardware and software involved in creating the website.