# **Gantt**

### (note: full Gantt chart on GitHub)

Identify need and benefits

Meet with the customers

**Establish Use Cases** 

List requirements

**Design Documents** 

Define database

**Define SPMP** 

Define the functionality of the game

Define the student-expert interaction

Revise definitions/documents as required

Research possible website URL

Research website templates

Research website host

#### Milestone: Establish project details (3/31/21)

Establish website URL

Establish website template

Establish website host

Research possible account system API/plugin

Contact account system API/plugin

Research possible payment processor

Contact payment processor

Research possible chat API/plugin

Contact chat API/plugin

#### Milestone: Find all APIs/plugins (4/5/21)

Establish connection with payment processor

Implement payment processor

Establish Connection to the chat API/plugin

Implement chat API/plugin

Establish connection with account system API/plugin

Implement account system API/plugin

### Milestone: Connect all APIs/plugins to website (4/12/21)

Test APIs/plugins

Revise APIs/plugins where necessary

Test Payment processor

#### Milestone: Finish API and website interactions (4/26/21)

implementing the functionality of the articles

Define desired output/control/input (OCI)

Find a template to use

Establish role capabilities Implement roles Test roles Revise roles as needed

Milestone: Finish admin/writer/chat (4/26/21)

Ensure all implementations work together Finish designing the website

Milestone: Finish rough draft of project (4/26/21)

**Test Project** 

Revise project where necessary

Milestone: Finish project revision (4/26/21)

Test changes

Revise changes where necessary **Milestone: Deploy project (4/26/21)** 

Maintenance: maintain project (5/18/21)

# **WBS**

# **SPMP** parts:

# 1.1 Project Overview

Executive summary: description of project, product summary

The goal of this project is to develop a website for older gamers to use to learn more about the game. In this website, we will develop an interactive chat, a way to search for specific articles, a way for users to interact with each other, and a way for admin to check on the user's roles. This website will be free but have ads and a donation button.

# 1.2 Project Deliverables

All items to be delivered, including delivery dates and location

All pre-project deliverables will be due at the end of March. The entire
project will be due April 24, 2021.

#### 1.3 Evolution of the SPMP

Plans for anticipated and unanticipated change

In the event of an anticipated or unanticipated change, I will redesign as soon as possible to alter the website/SPMP in accordance with the new changes.

#### 1.4 Reference Materials

Complete list of materials referenced in SPMP (subject to change) 4.1-

3CX Live Chat - <a href="https://wordpress.org/plugins/wp-live-chat-support/">https://wordpress.org/plugins/wp-live-chat-support/</a>
Account system - <a href="https://developer.salesforce.com/docs/atlas.en-us.api.meta/api/sforce\_api\_objects\_account.htm">https://developer.salesforce.com/docs/atlas.en-us.api.meta/api/sforce\_api\_objects\_account.htm</a>
Payment processor - <a href="https://stripe.com/docs/api">https://stripe.com/docs/api</a>

4.2-

https://clickhelp.com/software-documentation-glossary/documentation-plan/

### 4.3- Originals

Plan to ensure quality assurance:

https://portal.ct.gov/-/media/Departments-and-Agencies/DSS/CT-METS/Library/General/CTDSSQualityManagementPlanv11.pdf?la=en

Configuration management plan (IEEE Std 1042): <a href="https://www.nasa.gov/sites/default/files/t2401">https://www.nasa.gov/sites/default/files/t2401</a> - rev b.doc

Verification and validation plan:

https://www.ucop.edu/information-technology-services/\_files/itlc/iv-v-plan-template.docx

### 1.5 Definitions and Acronyms

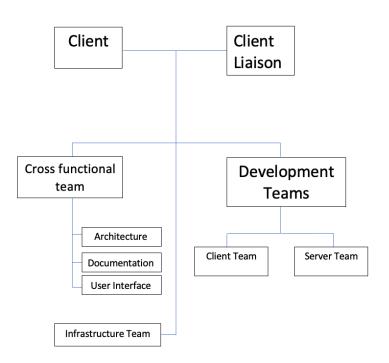
Moderator – A registered user picked by a admin who has the ability to delete comments and ban users

Writer – A registered user picked by an admin who has all abilities of a moderator and the ability to write and edit articles.

Admin – A registered user in charge of managing roles throughout the website.

### 2.2 Organizational Structure

Internal management, organization chart



### 2.3 Organizational Interfaces

Relations with other entities (subcontractors, commercial software)

Since I require an API for the account system, ability to chat, and payment processor (not all of these will be APIs), I must develop a working relationship with the owner of these APIs.

## 2.4 Project Responsibilities

Major functions and activities; nature of each; who is in charge Matrix of project functions/activities vs responsible individuals

The staff will consist of only 1 person, which will create the project. I will also be the client liaison. I will be in charge of everything.

# 3.1 Management Objectives and Priorities

Describes management philosophy, priorities among requirements, schedule, and budget

The priority requirements are the account system, the payment processor, and the chat. The budget is undefined, but as low as possible and certainly below \$50. My management philosophy is only my best judgment.

### 3.2 Assumptions, Dependencies and Constraints

External events the project depends on, constraints under which the project is to be conducted.

Take account of any possible errors or difficulties. Any systems the program will rely on, i.e., the different APIs needed

The project depends on getting working APIs for the account system, chat, and payment processors. In addition, the schedule of the project is subject to change based upon the client's desires. Furthermore, I must provide all functionality without ever leaving the domain.

### 3.3 Risk Management

Identification and assessment of risk factors, mechanism for tracking risks, implementation of contingency plans

- 1. Project too large: If the project is too large, I will identify areas of the website that can be eliminated then discuss with the client.
- 2. Project too complex: If the project is too large, I will identify requirements that can be eliminated then discuss with the client.
- 3. Leaving class: If I leave, I will tell the client.
- 4. Client dislikes project: If the client is unhappy with my project, we will attempt to fix the website based upon their preferences.

# 3.5 Monitoring and Controlling Mechanisms

Frequency and mechanisms for reporting

I will report project progress once per week regularly. I will report each time I encounter a serious problem or finish a part of the project and seek help if needed. All reporting will be done through GitHub.

### 3.4 Staffing Plan

Numbers and types of personnel required to conduct the project The staff will consist of only one person, which specializes in programming. I will also need to be the client liaison.

### 4.1 Methods, Tools and Techniques

Specify the methods, tools, and techniques to be used on the project For my project I will utilize the Waterfall Method. Step:

- 1. Feasibility study
- 2. Requirements
- 3. Design
- 4. Implementation
- 5. Testing
- 6. Deployment
- 7. Maintenance

### I will use a:

- Chat plugin
- Account system API
- Payment processor API
- Other API's/Plugins if time allows

### 4.2 Software Documentation

Describe the documentation plan

- 1. Project Name: paradox explorer (work in progress)
- 2. Scope and Objectives: Design an interactive website that teaches users about the given game.
- 3. Detailed Content Plan: The website will include a method for registered users to talk on each article, a way for admin to check on registered user roles, and a way for users to support the website. The website will be free to create an account for the website.
- 4. Time Estimates: A basic setup of the website should be completed early April in 2021 and the entire project will be finished by April 24, 2021.

- 5. Responsible Persons: The responsible persons are me alone developing the website.
- 6. Workflow: I will have hard deadlines and a schedule of when certain tasks will be completed as well as assigning time frames to those tasks.
- 7. Resources (software, style guides, websites): The website will use a self-built role management system. In addition, the website will use APIs/plugins for the account system, chat, and payment processor.
- 8. Publishing Details (formats, ways of delivery to end users): I will use GitHub and GitHub actions.

### 4.3 Project Support Functions

Plans for (at least) the following project support functions.

Plan to ensure quality assurance - evaluates and modifies an organization's procedures to make sure they provide the desired results. A quality assurance plan should include an organizational structure, details on each employee's responsibilities, and the qualifications an employee needs to fulfill those responsibilities.

Configuration management plan (IEEE Std 1042)- the management of software engineering projects.

Verification and validation plan - to identify the activities that will establish compliance with the requirements (**verification**) and to establish that the system will meet the customers' expectations (**validation**).

All the above are on GitHub.

# 5.1 Work Breakdown Structure (WBS)

Hierarchical decomposition of project into activities and tasks

