

# Software Project Management Plan for Art Prompt and Palette Generator

Version 1.0

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## Change History:

| Version | Date           | Author(s)    | Changes   |
|---------|----------------|--------------|---|
| 0.1     | March 24, 2021 | Nathalie Yap | <ul style="list-style-type: none"><li>• Initial Draft</li></ul>   |
| 1.0     | April 13, 2021 | Nathalie Yap | <ul style="list-style-type: none"><li>• Added Gantt Chart</li><li>• Filled out the empty spots according to Professor Broadwater's suggestions</li><li>• Made changes discussed in the design meeting</li></ul> |

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Part 1  
*Introduction*

## 1.1. Project Summary

### 1.1.1. Purpose, Scope, and Objectives

The purpose of this project is to analyze the requirements of, design, and implement a web based application that creates randomized prompts and colour palettes that artists can use to create art when they want to draw but have no ideas.

The objectives of this project are as follows:

- Produce a generator that randomly generates an art prompt
- Create a generator that makes a random colour palette
- Give users the ability to make an account
- Give users the ability to save prompts and palettes in their account

## 1.2. Deliverables

The following deliverables will be produced by the due date of the project:

- A function AP&CP Generator
- Software Project Management Plan (SPMP)
- Project requirements
- Project use cases
- Design documents

## 1.3. SPMP Revisions

This document is a living document. Therefore, it will be subject to changes as the project moves forward. Any updates will be noted and pushed to the repository for this project.

## 1.4. References

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

## 1.5. Definitions and Acronyms

| Term | Definition                       |
|------|----------------------------------|
| SPMP | Software Project Management Plan |

|       |                               |
|-------|-------------------------------|
| WBS   | Work Breakdown Structure      |
| HTML  | HyperText Markup Language     |
| CSS   | Cascading Style Sheet         |
| AP&CP | Art Prompt and Colour Palette |
|       |                               |
|       |                               |
|       |                               |
|       |                               |

## Part 2

### *Organizational Processes*



## 2.1. Process Model

The project will be using a kanban framework to implement an adaptable development method. I will be using Trello to keep track of tasks to be done. The diagram in Appendix A shows each stage of the project. As I will be using the kanban process, some stages will be repeated as necessary and features will be deployed as they are completed.

See Appendix A for this diagram.

## 2.2. Organizational Structure

As this is a solo project I will be tasked with putting on multiple roles.

The roles are as follows:

- Project manager
- Front-end engineer
- Back-end engineer

## 2.3. Organizational Interfaces

The Organizational Interface Diagram shows my project's relations with other entities such as hosts and APIs that will be used during the project.

See Appendix D for the diagram

## 2.4. Project Responsibilities

Responsibilities and tasks will be assigned and handled through the kanban board which is linked here: <https://trello.com/b/IPCgViIz/art-generator-kanban>

Part 3  
*Managerial Processes*

### 3.1. Management Objectives and Priorities

|                          | Fixed | Constrained | Flexible |
|--------------------------|-------|-------------|----------|
| Cost                     |       | X           |          |
| Schedule                 |       | X           |          |
| Scope<br>(Functionality) |       | X           |          |

The cost, schedule, and the scope of the project are all constrained as shown in the chart above.

### 3.2. Assumptions, Dependencies and Constraints

The project is planned with the following assumptions:

- Third party software and already existing and available solutions can be used in the project as needed

The project is planned with the following constraints:

- The project must be completed by the due date
- The project is to be done as an individual
- The project cost must be kept to a minimum

### 3.3. Risk Management

- If the project becomes too difficult, the team will do research to find workarounds to simplify the project and may simplify the functionality of the project.

### 3.4. Monitoring and Controlling Mechanisms

?

## Part 4

### *Technical Process*

## **4.1. Methods, Tools and Techniques**

The project uses firebase for hosting and for storing the database.

I will be using HTML, JavaScript, and CSS.

## **4.2. Software Documentation**

There are several documents to be made and changed during the production of the project. These documents are the responsibility of the team's members. These documents include:

- Requirements
- SPMP

These documents will be made available on the project's repository page on github.

## **4.3. Project Support Functions**

This project uses two main project support functions:

- Trello for scheduling and keeping track of tasks
- Google Cloud Platform for API and Database management

## Part 5

### *Description of Work Packages*

## 5.1. Work Breakdown Structure

The work breakdown structure (WBS) summarizes the tasks and activities that need to be done to complete the project.

Refer to the chart in Appendix B

## 5.2. Task Interdependence

Some of the tasks needed for this project are reliant on other tasks to be completed prior to beginning while other tasks may be worked on simultaneously. In the chart located in Appendix C, tasks that require a previous one to be completed do not begin until the end of the bar of the previous task. Those that can be completed at the same time have overlaps in their bar.

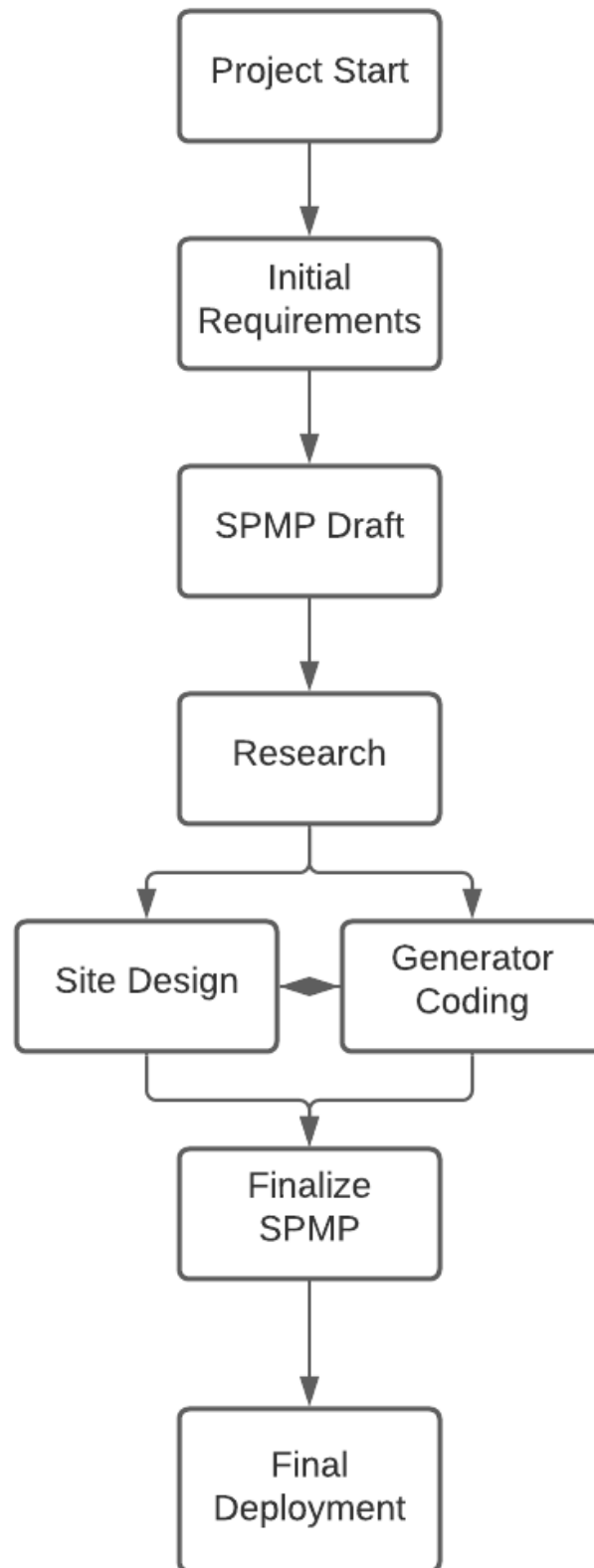
The task interdependence is summarized in the Gantt chart which is located in Appendix C.

## Appendices



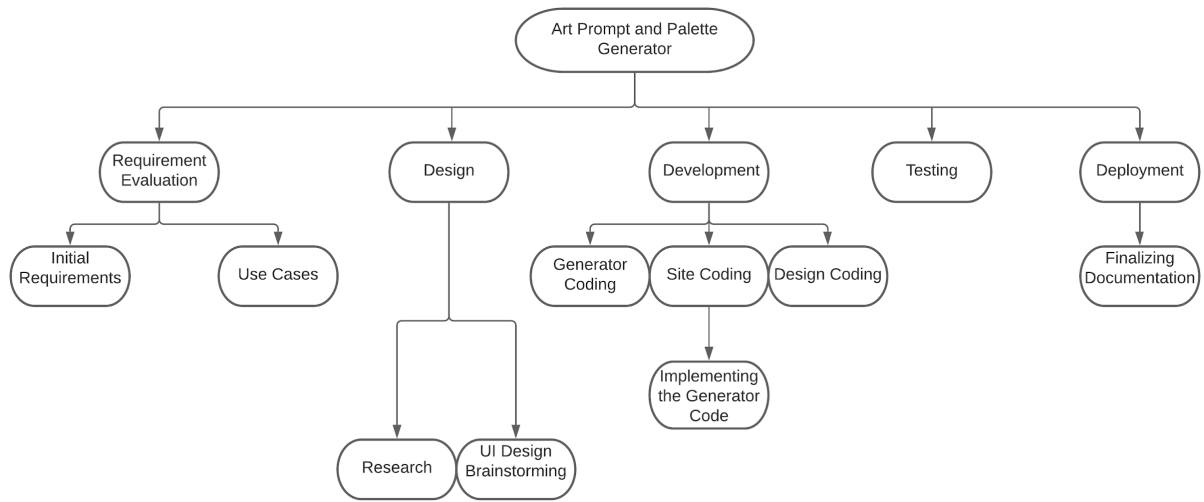
## **Appendix A**

### ***Process Model***



## **Appendix B**

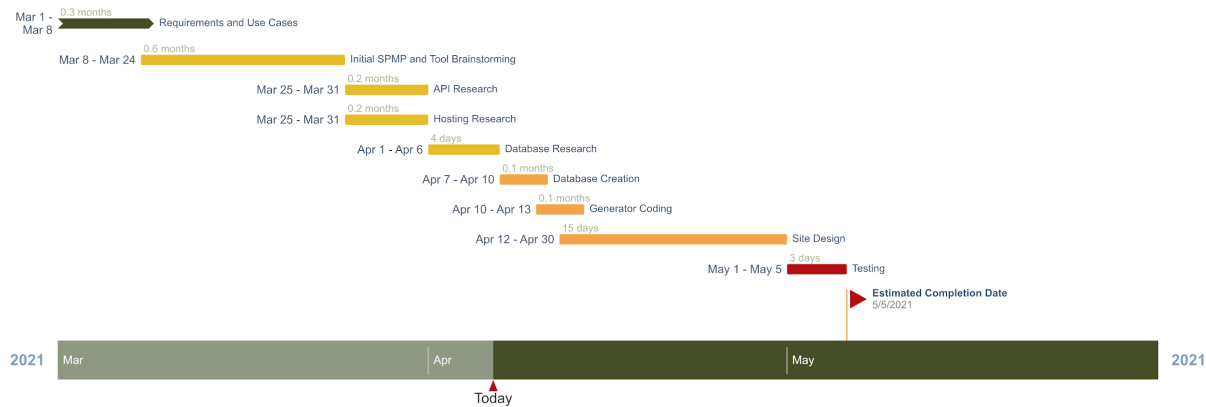
### ***Work Breakdown Structure***



## **Appendix C**

### ***Gantt Chart***

# AP&CP Generator



## **Appendix D**

### ***Organizational Structure***

