Software Project Management Plan (SPMP)

**INTRODUCTION**

**1.1 Project Overview**

This project entails developing and building a website game for a client to help teens develop a sustained interest in a healthy, active lifestyle. The website game will have multiple modes including single player, and multiplayer. Due to the target demographic (teens), the website should be especially compatible with mobile devices.

**1.2 Project Deliverables**

     \*\*See Gantt Chart for more detailed information

1. Use Cases – due 2/18/20
2. Requirements – due 2/18/20
3. Software project management proposal – due 2/25/20
4. First website prototype
5. Finalize website/launched version

**1.3 Evolution of SPMP**

N/A

**1.4 Reference materials**

<https://www.computerhope.com/jargon/s/server.htm>

<https://cs.uwaterloo.ca/~apidduck/se362/Assignments/A2/spmp.pdf>

<https://existek.com/blog/sdlc-models/>

<https://www.softwaretestinghelp.com/software-development-life-cycle-sdlc/>

**1.5 Definitions and Acronyms**

API - Applications Programming Interface

Domain - the location of awebsite

Host - a computer or another device connected to a computer network

Server - a software or hardware device that accepts and responds to requests made over a network

**PROJECT ORGANIZATION**

**2.1 Process Model**

    The process model used for this project will be the waterfall model; this model has several phases where each phase depends on the deliverables of the previous one. The phases follow the following order: Requirements Analysis, Design, Implementation, Verification/Testing, Maintenance.



**2.2 Organizational Structure**

    There is a limited organizational structure for this project. The project is affiliated with the organization called Healthy Teen Healthy Life committee (HTHL). Our team consists of 5 team members including: Travis, Josh, Kafui, Adamma, Christian.

**2.3 Organizational Interfaces**

    N/A

**2.4 Project Responsibilities**

|  |  |  |
| --- | --- | --- |
| Role | Description | Person(s) |
| Project Manager/Point of Contact | Leads the team and handles the communications | Josh |
| Planner/documentation | Competes the various deliverables that are required by the client | Travis, Josh, Kafui, Adamma, Christian |
| Programmer | Completes the programming tasks in the team | Travis, Josh, Kafui, Adamma, Christian |

**MANAGERIAL PROCESS**

**3.1 Management Objectives and Priorities**

|  |  |  |  |
| --- | --- | --- | --- |
| Project Dimension | Fixed | Constrained | Flexible |
| Cost |  | X |  |
| Schedule | X |  |  |
| Scope/Functionality |  |  | X |

**3.2 Assumptions, Dependencies, and Constraints**

Constraints:

1. There is a constraint on the budget; this project is for a client with no public funding. The primary source of money comes from donations and advertising profits.
2. There is a constraint on time; we have a few months to complete the project. The project will be due in the month of May.

Dependencies:

1. We will be dependent and rely on the server, hosting service, and certain APIs I may use.

Assumptions:

1. The functionality of the website will be limited.
2. The website game will not be fully finished. It will be in a beta stage of development.

**3.3 Risk Management**

    Risk 1: What happens if the web server crashes?

Risk 2: What happens if there is an issue with host service?

Risk 3: What if the client does not respond back?

Risk 4: What if the client wants additional features added?

**3.4 Monitoring and Controlling Mechanisms**

    N/A

**3.5 Staffing Approach**

    N/A

**TECHNICAL PROCESS**

**4.1 Methods, Tools, and Techniques**

The waterfall model shall be used for this software project. Tools to be used include Github, HTML, CSS, JavaScript (specifically Angular.js), and SQL.

**4.2 Software Documentation**

    We will document the major sections of each file. The client has not explicitly expressed a need for software documentation within the code. We will document the sections for easy reference and in case any other programmers need to fix any issues or bugs.

**4.3 User Documentation**

We will provide documentation in the form of a separate files. There will be separate documentation. One file will be a manual for the client, and the other file will be a manual for all other users of the website. The file for the client will contain information on the Website Game and on the Admin Account. There will also be information on how government officials and designated personnel can contribute input to the site and how they can monitor teen users of the site.

**4.4 Project Support Functions**

    N/A

**WORK ELEMENTS, SCHEDULE, AND BUDGET**

**5.1 Work Breakdown Structure**

