# Software Project Management Plan

Revision History

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| **Date** | **Revision** | **Description** | **Author** |
| 10/17/2017 | 1.0 | Document creation | Montrell and Abdoulkarim |
| 10/19/2017 | 1.1 | Document revision | Darian Hegerg |

## 1. Introduction:

### 1.1 Project Overview:

The general purpose of this software is to give students the opportunity to be interactive and to become more aware of what they should be doing to maximize their performance in each sport of their selection. While on this website, students have numerous choices in acquiring information such as, information on any given sport, playing an interactive game in which they will learn the benefits of healthy lifestyles. Students will also have access to search for local fitness facilities and a coaching system where students are free to ask and receive answers from a sport specialist.

Additionally, Students are also able to share their progress on popular social media platform such as Facebook, Twitter.

### 1.2 Project Deliverables:

· Project Requirements 09/14/2017

· Use Case and Sequence Diagram 09/21/2017

· HLA, Class Diagram, and Interface Spec 10/08/2017

· Repo Link 10/13/2017

· Software Project Management 10/18/2017

· Presentation 10/19/2017

### 1.3 Evaluation of the SPMP

This project is ongoing and is on its starting phase, therefore updates and changes should be expected in all sections. The table below will document all future changes and update to the project.

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### 1.4 Reference Materials:

### 1.5 Definition and Acronyms:

## 2. Project Organization:

### 2.1 Process Model:

We are going to use the agile model process. This will allow us to break down the project into manageable pieces, identify any risks, develop and test code, and then plan the next part and repeat the process. This process allows us to test code at each point and will reduce the chance of having issues when the product is being deployed.

### 2.2 Organization Structure:

### 2.3 Organization Interface:

### 2.4 Project Responsibility:

· Project Requirements Team Members

· Use Case and Sequence Diagram Team Members

· HLA, Class Diagram, and Interface Spec Team members

· Repo Construction Darian Hegberg, Richard Martins

· Software Project Management Abdoulkarim Dambo, Montrell Jubilee

· Web Development Andy Gonzalez

· Presentation/Documentation James Ream, Darian Hegberg

## 3 Managerial Process:

### 3.1 Management Objectives and Priorities

In order for this project to be successful the team must deliver a software product that will satisfy the needs of the client and during the project the goals of the team are considered and achieved whenever possible.

In order to achieve its goals the team must follow these goals and priorities:

* Use good software engineering methods so the product is developed with high quality.
  + Keep an open mind.
  + Practice reflective learning
* Deliver a quality product that pleases the client.
  + Deliver a product that meets the clients requirements.
  + Deliver a product with minimal errors.

* Be professional.
  + Meet clients deadlines.
  + Be proactive
  + Take responsibility for the project.

In order for the team to achieve its goal to develop a quality product that meets the clients need in a timely manner the team will follow a weekly schedule of assigned task. This will keep the team on schedule and keep the budget in-order.

### 3.2 Assumptions, Dependencies and Constraints

* During the duration of this project the team is assuming that the project will be funded throughout.

### 3.3 Risk Management

The team will plan for identifying and analyzing the risk of the project to insure the stakeholders and client made a safe investment.

* If the client becomes bankrupt while the product is being developed the team can only go as long as funding is provided.
* If the project becomes too large and overwhelming for the team assigned, then the team should ask for an extended deadline to accomplish the task.
* If requirements are making the project more complex discuss this issue with the client and give them an idea of your resources with the given timeline only delays the project further from completion.
* There is no danger of anyone leaving the project who are already here. The team will always have the set amount until the project is completed.
* If the client doesn’t like the prototype developed then the team has to decide on a plan to move forward that will allow the project to be finished on time, while also satisfying the customer.

### 3.4 Monitoring and Controlling Mechanisms

* The workload for this project will be divided up into equal parts. Each team member will be given a section of the project where they will complete their section by the given task deadline. This task deadline is part of the scheduling chart and displays each member's task and when to complete it by, this will make the project manageable.

### 3.5 Staffing Plan

* The staff team will remain the same during the duration of this project.

## 4 Technical Process:

### 4.1 Methods, Tools and Techniques

* The team will consider using a object-oriented methodology.
* The team will be using top software development methods and techniques to create high quality software. The plan is to use an agile methodology since requirements change repeatedly during the creation of the project.
* The team will be using Github a version control tool to share and update the project continuously.
* Each individual team member will use a text editor of their choice they are most comfortable with.

### 4.2 Software Documentation Plan

A number of documents will be produced during the duration of the project. All documents are the responsibility of the team members. The list of documents that will be created and maintained include:

* Requirements specification - defines the functionality that is required by the client.
* Use case diagram - How to system will interact with the different requirements.
* HLA diagram - How different subsystems will interact with the entire system to create a working product.
* Skeleton testing - tests that are executed.

### 4.3 Project Support Functions

* The team has developed different testing cases for each section of the whole system to assure the quality of the product as a whole.
* The team will maintain the entire system and have periodically check ups to make sure the system is running correctly to insure quality.
* The verification will test if the integrated system behaves with the overall design. Also if the individual software modules behave with the overall design.
* The validation will test does the system achieve the business goal and satisfies the clients requirements.

## 5 Description of Work Packages:

### 5.1 Work Breakdown Structure



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Schedule:

***Next week:***

Ø Technical Status Presentations

§ Assume your audience is technical

§ Include summary of each team member’s role/contributions so far

§ Presentation submitted to blackboard

§ 10 minutes; Format is of your choice

· Suggest something visual; key is to present info well

§ **You may designate a group member(s) to “present”**

· Every team member **MUST** be present and prepared to answer questions

§ Cover all parts of project turned in so far up to and including weekly assignments due on 10/19

§ Don’t just re-iterate your weekly hand-ins but justify why you made decisions

· i.e. What to do: “We chose this solution for our payment processor because…”

· i.e. What NOT to do: cut-n-paste a diagram into your presentation

§ Audience Role --> Interact with presenters by “reviewing” other presentations à constructive criticism **ONLY**

Ø Create skeleton of unit tests

Ø Fill in skeleton of unit tests as code is written

Ø Unit tests completed by end of project

Ø Create skeleton Integration tests

Ø Fill in skeleton of integration tests as code is written

Ø Integration tests completed by end of project

Ø Write end-to-end System Test Procedure

Ø Write Regression Test Procedure (Use **Prioritization** Method)

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***Skeleton***

* Login step {link to login here for demonstration}
* Array of options:
* 1 check students progress
* 2 play online match:

> establish connection

> user join room; challenger joins room

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