Project Plan for Rainbow Boys

1.0 Introduction

1.1 Project Scope

'Rainbow Boys' is a program meant to make the process of tracking gymnast's progress easier for young men's gymnasts. This software will keep track of gymnast information like name, birthday, etc., as well as their progress through the rainbow progress checklist used at Gymnastics World. The users of this program will be administrators to the gymnasts such as coaches. Users will be able to create classes and assign gymnasts to these classes as well as check off skills that a gymnast has learned. The user will also be able to query the program in different ways to get information about different groups of gymnasts.

1.2 Major Software Functions

To do this, there will be a front-end desktop application that will display all the necessary fields to enter and query data using buttons, dropdowns, etc. When data is saved, the front-end will use a connection to a database and store information accordingly. When the user wants to query information, the front-end will send a query to the database, providing the user with their desired data.

1.3 Performance/Behavior Issues

The user should only be prompted to change as much data as necessary, hence not allowing the user to change a gymnast's name or class when they are simply updating their progress, changing those will require extra steps. Also, permission will never be granted to remove a gymnast from the system, that would be reserved for a higher-level administrator than a normal user. The software should also keep track of when the gymnast learns a skill and who marks it for use in progress reports. Finally, this new system should be able to import information from the old, outdated system to maintain all previous records.

1.4 Management and Technical Constraints

As far as management constraints, there is only a single developer of this project, so other responsibilities could eclipse this project at certain points of its development and cause delays. For technical constraints, a database is best held on a server that always stays on, unless Gymnastics World has a server like this, if there is to be remote login, then some cloud-based server will need to be leveraged.

2.0 Risk Management

2.1 Project Risks

Some of the risks that go along with this project are listed here. First poor communication between the developer and the users. Good communication is crucial to ensure that the requirements the developer follows are the same as the those that the users have. Next, unclear definitions of the steps of the project can be a risk. If each step of the project outlined is too large, the process of development can become unclear and difficult, causing development to take much longer. Another risk is using software in the system that is not applicable for crossplatform use. If this is the case, changes will need to be made after progress has been made, which may even require reworking large parts of the system.

2.2 Risk Table

| Risk | Probability | Impact | Mitigation |
|-----------------------|-------------|----------|------------|
| Communication | Moderate | Moderate | Risk 1 |
| Unclear steps | High | Moderate | Risk 2 |
| Limited Compatibility | Low | High | Risk 3 |

2.3 Overview of Risk Mitigation, Monitoring, and Management

Risk 1: This risk will be mitigated by providing dates of completion for steps in the process in this project plan, so progress is checked at each of these dates to periodically ensure the developer and the product owner are on the same page.

Risk 2: This risk will be mitigated by outlining a detailed project specification that will be approved by the product owner in one week after the completion of this project plan. If this project specification is approved, the developer and the product owner should be on the same page and steps should be clear for the developer.

Risk 3: This risk will be mitigated by research by the developer before the use of any software to ensure its cross-compatibility across computers (mostly, Mac and Windows). Also, this will be monitored by testing the software periodically to ensure every feature works in multiple places.

3.0 Project Schedule

3.1 Project Task Set

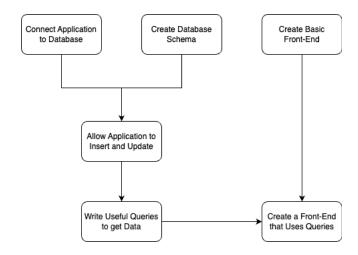
Some tasks to complete this project include designing basic user interface, constructing the database schema, connect the application to the database to add, change, and query data, write specific queries to get data in a way that users will want, write queries to insert and update gymnast data in the database, and create a user interface to execute these queries.

3.2 Functional Decomposition

On its first draft, the following lists the breakdown of features

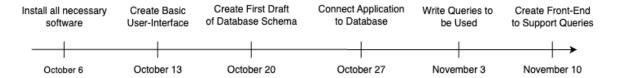
- 1. Gymnast management
 - a. Add gymnasts
 - b. Edit gymnast information
 - c. Log gymnast progress
- 2. Class management
 - a. Add/remove classes
 - b. Edit class information/times
 - c. Add gymnasts to classes
- 3. Gymnast querying
 - a. Query by class
 - b. Query by event
 - c. Query by age
 - d. Other useful queries

3.3 Task Network



3.4 Timeline Chart

The following timeline shows the above steps on a timeline to finish the first draft of the project by November 10.



3.5 Schedule Compliance

Weekly, the developer will update the product owner of if the project is meeting scheduled deadlines. If not, the developer will update the product owner of the new plan for the project.