Software Requirements Specification for Eckerd Quest

Version 1.0 approved

Prepared by Jacob Kula, Rachel Halepeska, Zachary Smith

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Revision History

Name	Date	Reason For Changes	Version
Jacob Kula, Rachel Halepeska, Zachary Smith	2/23/21	Creation of Draft	1.0

Jacob Kula, Rachel Halepeska, Zachary Smith	3/5/21	Proofreading	1.1

1. Introduction

1.1 Purpose

To create a text-based role-playing game based around Eckerd College. We will form an entertaining story revolving around the daily life of an Eckerd College student.

1.2 Document Conventions

N/A

1.3 Intended Audience and Reading Suggestions

Our intended audience for this SRS is Eckerd College faculty and the developers. For reading this SRS, follow the table of contents to understand the certain information that someone may be looking for. Most people will be interested in the system features.

1.4 Product Scope

Our product is a text-based RPG called EckerdQuest. The majority of the product will be in Java. The benefits of the completion of the RPG will be an increased knowledge of Eckerd for the Eckerd Students. The goal of the game is to entertain the daily life of an Eckerd student through an educational text-based game.

1.5 References

N/A

2. Overall Description

2.1 Product Perspective

Our product is going to be self-made by the three developers using our knowledge from all of our classes at Eckerd. This is our project for the Software Capstone course.

2.2 Product Functions

The major functions of this product are allowing the user to follow the experiences of Eckerd students through choices and battles.

2.3 User Classes and Characteristics

The users that will be using this product are current, future, and former Eckerd Students and Faculty. The current and future Eckerd students and faculty might not have experience with everything that this game involves, however some of the former students and faculty may be more familiar with the contents of the game. (Game players vs. not)

2.4 Operating Environment

Anyone that has the ability to have Java version 8 or higher on their computer can use this game.

2.5 Design and Implementation Constraints

The most important issue will be time for the developers to create the product to their desired standard.

2.6 User Documentation

There will be a tutorial in-game so that the users can play the game to the fullest potential. Undecided on a user manual is at this given time.

2.7 Assumptions and Dependencies

Currently there is a pandemic among us, this could potentially cause problems if the situation worsens.

3. External Interface Requirements

3.1 User Interfaces

The User interface will be the Terminal/Command Prompt that the user will have. The user will type their commands through this. There will be keyboard shortcuts that will allow a player to access information that may be needed to play.

3.2 Hardware Interfaces

N/A

3.3 Software Interfaces

This text-based game will be running on Java 8. There will also be pictures that will be involved, however these will be included in the files for the game.

3.4 Communications Interfaces

N/A

4. System Features

4.1 Battle System

4.1.1 Description and Priority

The system feature is of the highest priority. It revolves around an RNG and stat-based mechanic. The player will have 4 moves to choose from for any given battle. There will be both random and scripted battles against various enemies. There will be a wide variety of battles, including social battles and academic ones.

4.1.2 Stimulus/Response Sequences

The user is given 4 moves that change depending on the context of the battle. There will be social moves, as well as academic moves depending upon the type of battle. The user will choose their move by typing the move name within the command prompt until the enemy's hit points or their own fall below zero.

4.1.3   Functional Requirements

If the user types an invalid command there will be an error message that informs them of their mistake and then allows them to try again.

REQ-1:   Java installation

REQ-2:   The ability to read and type in English

4.2 Player Stats

4.2.1   Description and Priority

This is a high priority feature. The player will have numbers that represent their hit points, stamina, strength, social skill, computation, wisdom, creativity, and literacy. These skill numbers will determine the player's performance in battles.

4.2.2   Stimulus/Response Sequences

The player will gain skill numbers in specific stats by going to various locations and winning battles. In order to win social battles, the player will need points in the social skill. Strength is what determines success in various scripted battles. Enemies can deplete the user's hit points, and decreasing to 0 means a loss. Stamina determines how much the player can do in a given 'day'. The academic battles are separated into four different classes, each of which corresponds to the other four stats. The corresponding stat to any given battle increases the percent chance of success for the player's moves.

4.2.3   Functional Requirements

4.3 Map, Locations and Movement

4.3.1   Description and Priority

The Map of Eckerd College will allow the user to know where they are on the map. It will be an image that will be pulled up whenever the player needs to move locations. This is High Priority because it allows the user to move around the map and into different situations.

Location and movement will be based upon the map location that the user is at. They will be allowed to move to any location on the map, however they may be limited to a certain amount of times they can move.

4.3.2   Stimulus/Response Sequences

The map will be called up by using a command that the user will input into the command line. They will be allowed to go to multiple locations by inputting the number of the given locations that the user would like to go to.

4.3.3   Functional Requirements

If the user types an invalid command there will be an error message that informs them of their mistake and then allows them to try again.

5.   Other Nonfunctional Requirements

5.1 Performance Requirements

N/A

5.2 Safety Requirements

N/A

5.3 Security Requirements

N/A

5.4 Software Quality Attributes

Currently, the most important attribute is usability/functionality. Looking into the future we are hoping for more optimization from either the original developers or someone else.

5.5 Business Rules

N/A

6. Other Requirements

Appendix A: Glossary

RPG: Role Playing Game

RNG: Random Number Generator

Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

Appendix C: To Be Determined List

<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>