Software Requirements Specification

for

Trivia Maze

Version 1.1 approved

Prepared by Nathan Graham Kyle Johnson Eric Laib Daniel Moore

Twenty Hats

11/7/14

Table of Contents

Ta	able of Contents	, ii
Re	evision History	ii
1.	Introduction	1
	1.1 Purpose 1	

		Document Conventions 1			
		Intended Audience and Reading Suggestions 1			
		Project Scope 1			
	1.5	References 1			
2.	Ov	rall Description	2		
	2.1	Product Perspective 2			
		Product Features 2			
		User Classes and Characteristics2			
		Operating Environment 2			
		Design and Implementation Constraints 2			
		User Documentation 2			
	2.7	Assumptions and Dependencies 3			
3.	Sys	stem Features	3		
	3.1	System Feature 1 3			
	3.2	System Feature 2 (and so on) 4			
4.	Ex	ternal Interface Requirements	4		
		User Interfaces 4			
	4.2	Hardware Interfaces 4			
	4.3	Software Interfaces 4			
		Communications Interfaces 4			
5.	Ot	her Nonfunctional Requirements	5		
		Performance Requirements 5			
	5.2	*			
	5.3	Security Requirements 5			
	5.4	Software Quality Attributes 5			
6.	Ot	her Requirements	5		
		ndix A: Glossary			
Appendix B: Analysis Models					
Aı	ppen	ndix C: Issues List	6		

Revision History

Name	Date	Reason For Changes	Version
Kyle Johnson	11/7/14	Initial Draft	1.0
Daniel Moore	12/8/14	Final Draft	1.1

Introduction

Purpose

This is a Software Requirements Specification document for Trivia Maze. This document is intended for use by the team members of Twenty Hats for the purposes of the development process.

Intended Audience and Reading Suggestions

This document will be composed by developers for the reading by the developers.

Project Scope

Trivia Maze is a game to be enjoyed by children and adults alike, given that they enjoy video games and having their knowledge of such tested. This project is intended for the enjoyment of the player and for the education of the developers involved.

References

- 1. http://penguin.ewu.edu/cscd350/
- 2. www.pivotaltracker.com
- 3. www.github.com/comebacktomebaby

Overall Description

• Product Perspective

Trivia Maze is a new product developed for a software development class at Eastern Washington University.

Product Features

Trivia Maze utilizes a procedural maze generation algorithm to increase replayability value. Mazes are composed of rooms containing one to four doors. As the player navigates the maze, the gender-neutral individual will be asked video game trivia questions. Correct answers will allow the player to pass through the door and incorrect answers will lock the door permanently. The player's objective is to traverse the maze and find the exit. If the maze becomes impossible to complete, the player will lose the game.

User Classes and Characteristics

Player ---> Game <--[maintenance and post-release development]--Developer

Players People playing the game
Developers People developing the game

• Operating Environment

Trivia Maze is developed for Windows and requires the .NET framework version 4.0.

• Design and Implementation Constraints

The given time frame for the development process will limit the content included in the final product.

User Documentation

There will be a help section available to the player that includes all necessary how-to-play documentation and general information about the project.

Assumptions and Dependencies

It is assumed that the player will be able to use a keyboard and mouse and have some knowledge of video game trivia. There are no prior software dependencies.

System Features

• Create, Save, and Load Maze

3.1.1 Description and Priority

Maze creation is essential for gameplay and is a primary priority. The saving and loading of maze games will be implemented later in the development process for the convenience of the player.

3.1.2 Stimulus/Response Sequences

The option to create, save, and load mazes will be accessible through the file menu of the application.

3.1.3 Functional Requirements

REQ-1: Maze Generation Algorithm REQ-2: Serialization of Maze Data

Maze Navigation

3.2.1 Description and Priority

The maze can be navigated with the arrow keys or the mouse. As said in the how to play inside of the game.

3.2.2 Stimulus/Response Sequences

N/A

3.2.3 Functional Requirements

N/A

Trivia Question Interaction

3.3.1 Description and Priority

Trivia question will be generated by the database from SQL. We will fill the database wit hthe questions then the program will interact with the database to get the quesiton for the game.

3.3.2 Stimulus/Response Sequences

N/A

3.3.3 Functional Requirements

N/A

External Interface Requirements

• User Interfaces

UI-1: Menu

UI-2: Trivia Question Box

UI-3: Room Display

UI-4: Mini Map

Hardware Interfaces

HI-1: Keyboard

HI-2: Mouse

HI-3: Monitor, Speakers, Computer, Chair, User, Mountain Dew

Software Interfaces

SI-1: SQLite Database

SI-2: .NET Framework (version 4.0)

• Communications Interfaces

Text boxes will pop up to tell the user information as the game is being played.

Other Nonfunctional Requirements

• Performance Requirements

- PE-1: The system will accommodate a single user.
- PE-2: Given a modern computer, game features will load and execute within 2 seconds.

• Safety Requirements

SR-1: Don't cross the streams.

• Security Requirements

- SE-1: Prevent SQL injection attacks
- SE-2:

• Software Quality Attributes

- QL-1: All trivia questions will have correct answers as determined by the developers.
- QL-2: Short answer trivia questions will be straightforward
- QL-3: The graphical user interface will be intuitive for user interaction

• Other Requirements

ET-1: TBD

Appendix A: Glossary

SETM9001 = Trivia Maze