Software Design Description

<An Endless Night>

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# 1.0 Introduction

## 1.1. Purpose

< Clearly state the purpose of this *document* and its intended audience. >

*The purpose of this document is to outline nuances on how our game will be built. An Endless night is standalone software created for a user to interact and traverse through for the purpose of making it to the last room to beat the game. This document will give details on the UI, data storage, and subsystems.*

## 1.2. Scope

< State the dominant design methodology. Overview the architecture of the product briefly. Describe the external systems with which this system must interface. >

*An Endless Night is a text-based game, the application is free to download for any operating system that has latest java jre installed. Players are able to traverse the game, fight monsters, and solve puzzles through the use of keyboard commands. Administrators have access to back-end functionality, and can change the contents and aspects of the game.*

## 1.3. Glossary

< Define the technical terms used in this document. Do not assume the experience or expertise of the reader. >

* UI: User Interface, refers to the window that the User will interact with and enter in information to.
* Hero: Is the player object within the game that will be traversing through rooms and getting health adjustments throughout.

## 1.4. References

< List here any references to other documents cited anywhere in this document including references to related project documents, especially the SRS. Add references here when other project documents are created. This is usually the only Bibliography in the document. >

## 1.5. Overview of Document

< Describe the contents and organization of the rest of this document. Since there is already a Table of Contents, this overview will be less formal but more informative. Describe the remaining sections. >

# 2.0. Deployment Diagram

# 3.0. System Design

Subsystem Descriptions

•***Combat Subsystem:*** *The combat System is responsible for handling the interaction between hero and monster in which both character types will be able to attack one another. Users will be able to enter commands for the combat system through the interface subsystem.*

*•* ***Room Management Subsystem****: The room management subsystem will be responsible for the generation of rooms.*

*•* ***Interface Subsystem****: The Interface subsystem will be responsible for the interpretation of user input and the interaction between subsystems. Beginning tasks including but not limited to combat, artifact manipulation, and room interaction.*

*•* ***Inventory Subsystem****: The inventory subsystem will be responsible for keeping track of all artifacts available within the game system.*

Design Goals

# 4.0. Data Structure Design

< Design in detail and specify the persistent data structures to be used in the implementation. If these include databases, define the table structure of all databases including full field descriptions and all relations. Graphical languages are appropriate. Note that a database is an object and may have been fully described in the previous section. Each subsystem in your program should be a subheading. >

## 4.1 Subsystem 1

4.1.1 Combat Subsystem (Aaron Kobloch)-

4.1.2 Description of Each object with attributes and methods described

## 4.2 Subsystem 2

4.1.1 Room management Subsystem (Estephanie Gonzalez)

4.1.2 The room management system will consist of three classes, room, puzzle and door, that will handle the position and interaction of the player as they traverse through rooms and interact with objects/NPCs found in rooms. The Room management subsystem will communicate with the interface subsystem to handle commands entered in rooms such as “Enter Room.”

## 4.3 Subsystem 3

4.1.1 Interface Subsystem (Jory Aexander)

4.1.2 The Interface Subsystem will consist of a series of menus that will prompt the user to input commands. The system will then create a control object based on the entered command that will perform the intended task. The primary entity object found within the subsystem is the Game Object. The Game object will be responsible for holding all room and hero data. This is the object that will be output and read during a save and load respectively.

## 4.4 Subsystem 4

4.1.1 Inventory Subsystem (Caleb Sears)-

4.1.2 Description of Each object with attributes and methods described

## 4.5 Subsystem 5

4.1.1 Object Model - more detail than requirements analysis and system design.

4.1.2 Description of Each object with attributes and methods described

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# 5.0 Flow of Control

This section consists of any new Sequence Diagrams and/or Flow Diagrams detailing various scenarios/use cases and how they occur using the objects described in section 4.0. DO NOT INCLUDE THOSE SEQUENCE DIAGRAMS PROVIDED IN REQTS ANALYSIS.

n/a

# 6.0 User Interface Design

< Describe the user interface. Prototype screenshots are acceptable. You should discuss the expected effectiveness of your design. >

*The user will be presented with a variety of input options on the console. The user will enter their command into the console and new information will be displayed based on the command.*

# 7.0 Help System Design

< Describe the **structure** of the help system and how it is to be accessed. Will it be context sensitive? Will there be a system reference capability? >

*At any time the user will be able to enter in the word help. The system will recognize the word regardless of case. The user will be given a list of general commands, relative to the context of their current menu, followed by a brief description of each command.*

# Index

< Anything not included in this document that helps you get started on the code. >