**[GAME TITLE TBD]**

**Software Requirements Specification**

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# Introduction

This document is intended to define the software requirements for [GAME TITLE]. It will outline the processes and procedures featured in [GAME TITLE].

## Software Purpose and Scope

[GAME TITLE] is a 2D RPG developed in Java by four students at the University of Montana as a class assignment.

## Document Purpose and Contents

*[This subsection should explain the purpose for writing an SRS for this project and describe the intended audience for the SRS. This subsection should describe the information that will be presented in each of the subsections from §2 on.]*

## Definitions, Acronyms, and Abbreviations

This section provides definitions for terms and acronyms necessary to understand the function of the program.

### Definitions

|  |  |
| --- | --- |
| Software Failure | A failure will be attributed to this software product whenever one of the delivered work products does not meet the requirements specified in this SRS, or does not meet ordinary and reasonable customer/user expectations. |

### Acronyms and Abbreviations

|  |  |
| --- | --- |
| 2D | Two-Dimensional |
| FPS | Frames Per Second |
| NPC | Non-Player Character |
| RPG | Role Playing Game |

## References

There are no pertinent references used by this program.

# General Factors

*[The General Factors section should describe the general factors that affect the product and its requirements. Place any material here that is not specific to any of the sub-sections.*

*In this and each subsequent major section, briefly describe the purpose of this section from the readers perspective.]*

## Product Perspective

The program is a stand-alone game. The only software required to run it is an installation of Java and the files for the game itself.

## Product Functions

*[This subsection should provide a summary of the functions to be performed by the software produced as a result of this SRS. Functions listed in this subsection should be organized in a way that will make it understandable to the intended audience of the SRS. (Note: this subsection is an overview, details of the specific requirements will be contained in section 4.)]*

## Environmental Conditions

The system running this program must have Java version 1.8 installed, at least (TBD) RAM, and (TBD) disk space.

## User Characteristic

The program is intended for users of all ages and demographics.

## Dependencies

*[This subsection should list all external system dependencies on which the software resulting from the SRS will depend. This subsection should be the source for recognizing the impact of any changes to systems on the SRS and resulting software depends. This section can highlight unresolved requirement issues that should be recorded on the Project Manager’s Open Issues List.]*

# Explanatory User Interfaces

*[This is an optional section that is used when providing the user with information that could be helpful in understanding the specific requirements in the next section.*

*If this section is used, care must be taken that the general descriptions given here are not presented as requirements.]*

# Specific Requirements

*[The Specific Requirements section should contain all the requirements for the subject software. The details within this section should be defined as individual, specific requirements. Each specific requirement should be stated such that its achievement can be objectively verified by observation, inspection, usability testing, functional testing, analysis, or a combination of these. The method verification must be described. Each requirement should be clearly identified for tracking.]*

## Functional Requirements

### Movement

Keyboard input up should move the player character up. Keyboard input left will move the player character left. Keyboard input left will move the player character left.

### Boundary Detection

Player character will not be able to move through walls or NPCs. NPCs will not be able to move through player character or walls.

### Actions

The position of the cursor, controlled by the mouse, will determine where the player character is aiming. The left mouse button will execute firing the player character’s weapon.

Pressing the ‘Esc’ button will open the Pause Menu. Pressing the ‘Esc’ button while the Pause Menu is open will close the Pause Menu.

Pressing the ‘I’ button will open the player’s Inventory Menu. The arrow keys will be used to navigate the Inventory Menu. The ‘Enter’ button will be used to use or equip an item. Pressing the ‘I’ or ‘Esc’ button while the Inventory Menu is open will close the Inventory Menu.

### Display

The world will be dynamically displayed to the user, with the player character always visible. NPCs will be visible to the user.

A small dialogue box will be displayed to the user at all times, showing the properties of the player character including name, health, level, and experience.

## Non-Functional Requirements

*[This subsection should specify both the static and dynamic numerical requirements placed on the software or human interaction with the software. All the identifiers for requirements in this section should begin with the two letter abbreviation shown below]*

### Design Constraints

There are no design constraints for the program.

### External Interface Requirements

#### Hardware

#### Software

#### Communications

### Development Environment

### Standards

### Delivery Environment

#### Site

The program must be able to read from and write to storage.

#### Operations

*[This subsection should specify normal and special operations required by the user to include:*

* *Various modes of operation within the user organization*
* *Periods of interactive operations and unattended operations*
* *Data processing support functions*
* *Backup and recovery operation.]*

### Performance

The game must run at a minimum 24 FPS. Ideally, the game will run at 60 FPS.

### Deliverable Items, Dates, and Conditions

### Quality

#### Reliability

*[Reliability is specified as mean-time-to failure of an operational item. An operational profile must be specified.]*

#### Availability

#### Maintainability

*[Failures can be classified as occurring in either operational or non- operational delivered items Failures in operational items can be classified by the work products that must be changed to eliminate that failure: code only, code and design, code, possibly design, and requirements. For each class of failure what is the maximum estimated effort required to eliminate that failure and what is the rationale for this estimate.]*

#### Usability

#### Enhanceability/Extendibility

*[If the future it might be necessary to change the Functional requirements in specified ways, what is the maximum estimated effort required to make such changes and what is the rationale for this estimate?]*

#### Portability

*[If in the future it might be necessary to change the above Development or Delivery Environments to other specified environments, what is the maximum estimated effort required to implement such changes and what is the rationale for this estimate]*