# <SUPER MARIO GAME>

# Software Requirements Specification

Version 1.0

**Produced for:** 

Play Store Games

Presented by:

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## 1.Introduction

Super Mario, first released in 1985, is a game developed by Nintendo. This project will aim to create a Super Mario game.

The game can be categorized as a level based adventure game, with Mario being the main character. The main objective of the game would be to overcome obstacles and reach the end point.

## 1.1 Purpose

The objective of the game is to clear as many levels as one can with a limited number of lives. Each level will consist of obstacles, monsters and traps. There will also be bonuses like coins and power-ups. The game will also have a net score of the player. The score will be dependent upon the number of coins collected, the number of monsters killed and the number of lives remaining.

## 1.2 Scope

The game will be controlled by just the keyboard. Additionally playing the game is very simple as the user only needs to use the arrow keys and the spacebar to send fireballs when Mario is in fire form.

# 2. Specification of Requirements

## 2.1 Functional Requirements

Number	Description	Rules
FR01	<ul> <li>User will be able to control Mario:</li> <li>By speeding him up with a constant acceleration to a constant velocity.</li> <li>By making him jump.</li> <li>By making him duck.</li> </ul>	
FR02	User will be able to break some bricks on the maps by making Mario jump to them.	
FR03	User will be able to proceed to right on the map by going right when Mario is at the one thirds of the game screen.	
FR04	Game will support sound for various actions.	
FR05	User will be able to kill monsters. User will be able to collect coins:  By going over them. By jumping under coin boxes.	
FR06	User will have three lives in the beginning.	Life will be maintained when passing level.
FR07	Game will be over when user spends all lives.	

FR08	User will get one life when he/she collects 100 coins.	
FR9	User will start a new level when he/she reaches to end of a level.	
FR10	The game will be controlled by just the keyboard.	
FR11	User will be able to pause/resume the game.	
FR12	User will be able to choose a map to play. There will be an achievement system for this, user must pass and unlock previous maps in order to play next.	

# 2.2 Non-Functional Requirements

Number	Description
NFR01	Game will be implemented in Java.
NFR02	Game will support over 60 FPS.
NFR03	Game will be a desktop application and will be developed using the Java programming language.
NFR04	Game code will be written in java.

NFR05	Game must be multiplatform (windows, linux, macos)
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#### 2.3 Actors

Rol	Description
User/gamer	Has access to all game features, they remain locked until levels are cleared.

## 2.4 Use Cases

Case 1. Play

• Case 1.1 Pause

Case 2. Exit

Case 3. Settings

- Case 3.1 Modify volume
- Case 3.2 Modify brightness

