Project Final Report

SE 2112

Software Project Lab-1

Project Title: Super Mario Game

Submitted to

SPL-1 Assessment Committee

Bachelor of Science in Software Engineering

Institute of Information Technology

Submitted by

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Date of Submission:27/11/2024



### Letter of Transmission

Date:27/11/2024

To whom it may concern,

Institute of Information Technology,

Noakhali Science and Technology University,

Noakhali-3814.

Subject: Submission of SPL-1 Project Report .

Sir,

I am pleased to submit the project report titled "Super Mario Game" as a partial fulfillment of the requirements in the course titled “Software Project Lab-1” (SE 2112). The project, conducted under the guidance of Mohammad Nuruzzaman Bhuiyan, aims to develop the interesting game projects.

I kindly request you to review the enclosed report and provide your valuable feedback. Please feel free to contact me at mahmudul2517@student.nstu.edu.bd for any further clarification or additional information.

Thank you for your time and consideration.

Yours sincerely,

Mohammad Mahmudul Hasan

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Forwarded by,

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# **“Super mario game”**

# **Introduction**

The Super Mario game is the run type game where the player controls a character who continuously moves forward through a level or environment, and the objective is to survive as long as possible while avoiding obstacles and collecting rewards.

# **Objectives**

* Primary Goal : Goal Character
* Main actor: Player(Mario-Minhaj) - Journey through obstacles to complete the level
* Complete levels:
* Travers whole the map increase in difficulty (enemy, obstacles, small enemy, big-boss etc).
* Defeat Enemies: Overcome enemies like (big-boss, bat, small-enemy etc).
* Collect Items and Power-ups:
* Gather diamonds as a bonus or points.
* Reach the Goal-Point or Destination (Level Complete)
* Complete Level: Every level has one goal or destination point that will be ends in that point and that also marking as the level completion.
* Defeat Boss: Big-Boss are trying to kill the player.

# **Target Users**

* Children
* Casual gamers.
* Anyone Interested in escape and run Game.

# **Application Features**

**Gameplay & its Features:**

* + Continuous running: The player continuously running from start to target point. Before

reaching its target point , enemy continuously attack the player, increasing in difficulty and intensity as the game progresses. Each enemy may consist of various types of enemies with different attack patterns and abilities.

* + Enemy: Many types of enemy like as big-boss, bat, obstacles etc.
  + Player Health: The player has some stages of life. The player play multiple time plays at a time.
  + Coins: Player will constantly collect coin as it is count as a score-point.
  + Levels and Progression: The game features multiple levels or stages, with each level representing a certain point milestone. When player reach its destination then the level will be completed.
  + Scoring: The player earns points by eating diamonds.

# **Project Overview**

The **Super Mario Game Project** is a 2D platformer inspired by the iconic Nintendo series, designed to deliver a nostalgic yet engaging experience. Players control a character navigating through creatively designed levels filled with obstacles, enemies, and interactive elements such as moving platforms. The gameplay focuses on classic mechanics like running, jumping, collecting coins to complete each level by reaching a goal or defeating bosses. Featuring themed worlds with increasing difficulty, a scoring system make the project aims to balance entertainment and challenge. Built using modern tools and programming frameworks, the game emphasizes modularity, smooth controls providing players with a best gaming experience.

* **Classic Gameplay**: Features familiar mechanics like platforming, jumping, and power-ups.
* **Level Design**: Includes themed worlds, hidden secrets, and increasing difficulty to maintain player engagement.
* **Interactive Elements**: Introduces moving platforms, destructible blocks, and environmental challenges.
* **Scoring System**: Rewards players for collecting coins, defeating enemies, and finishing levels quickly.
* **Retro-Style Visuals**: Offers pixelated graphics and animations reminiscent of vintage Mario games..
* **Modern Implementation**: Built using modular code for flexibility and potential expansions.

# **Conclusion**

The **Super Mario Game** successfully recreates the timeless appeal of one of the most iconic platforming games in history while offering a modernized gaming experience. Players are immersed in a world of exploration, challenge, and fun, where every jump, coin, and power-up contributes to a rewarding journey.