

# TMP 3413

## Software Engineering Lab Project

### (Mario)

**Group : Five Stars**

Group Members:

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# Introduction

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1. The development and enhancement of the information technology have introduced a lot of games.
2. Popularity of traditional Mario has been taken over.
3. Project objectives :
  - i. Improve the popularity and quality of Mario
  - ii. Involve some educational purpose in the game
  - iii. Save valuable childhood memory



# Introduction (Con't)

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4. Include sound event, mouse event, keyboard event, graphic character and background.
5. Run on all computer with java platform installed.



# External Interfaces

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## 1. Hardware Interfaces

- Mouse
- Keyboard

## 2. Software Interfaces

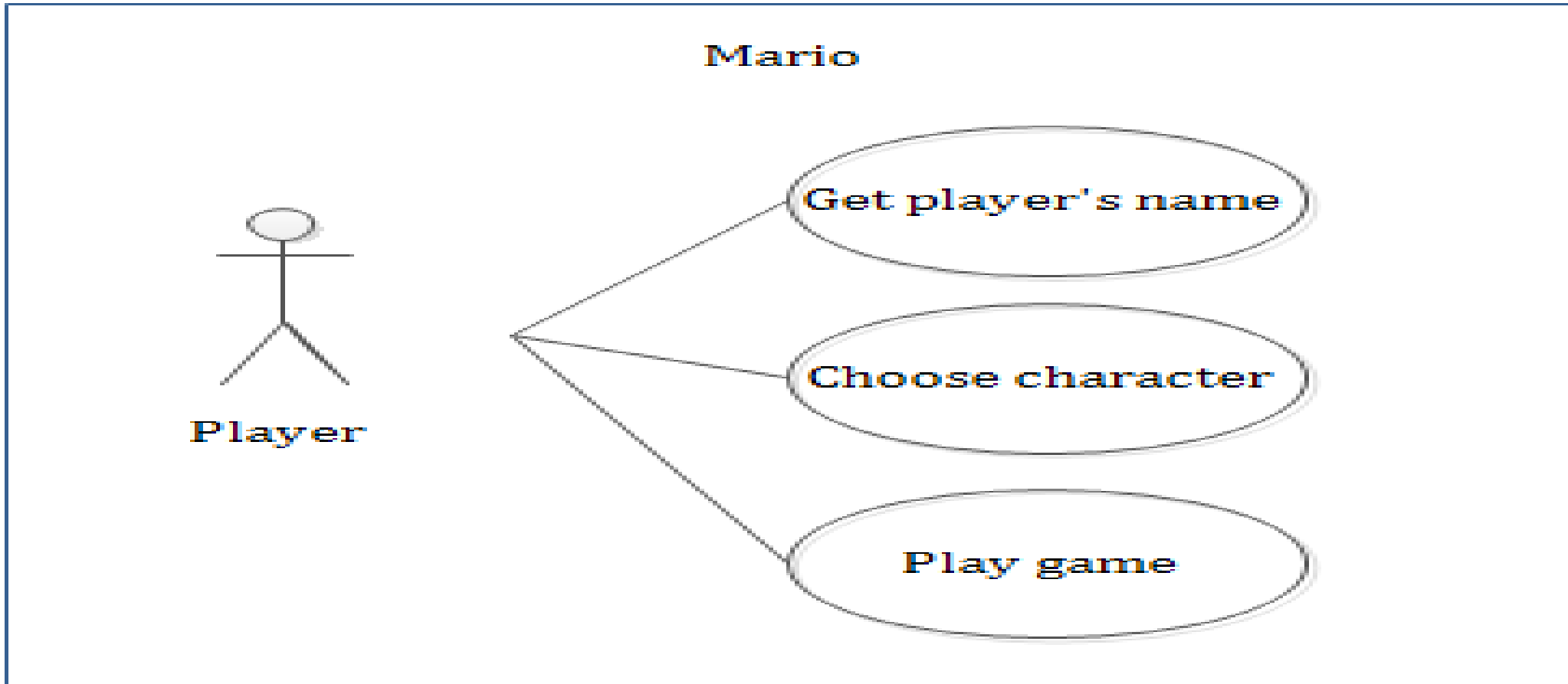
- Java

## 3. Communication Interfaces

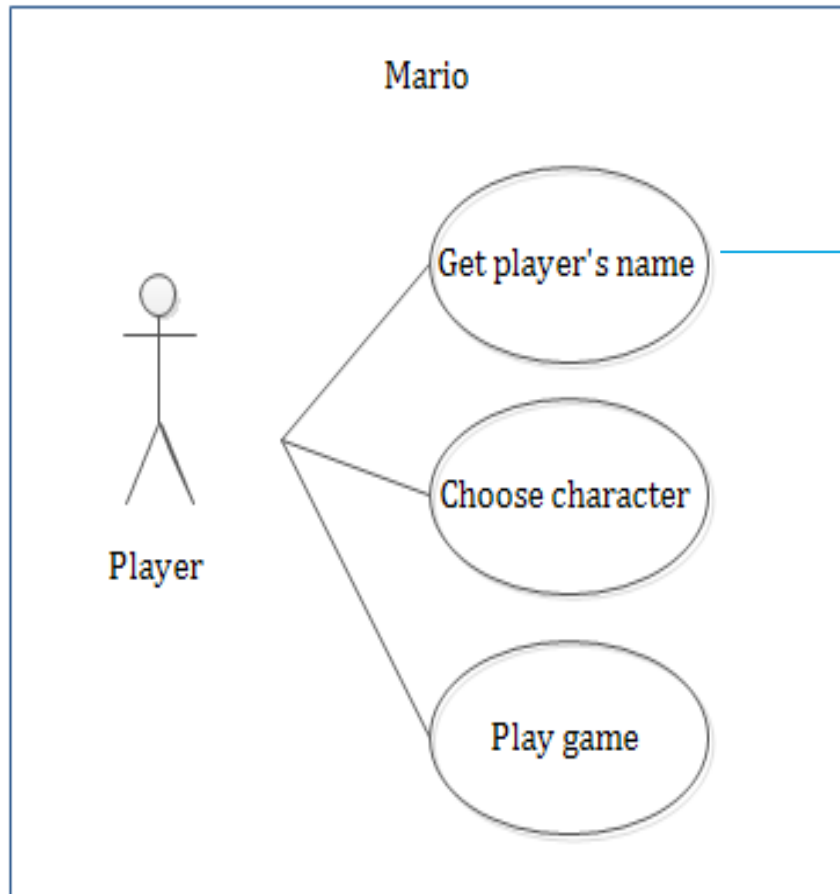
- Not a web application
- No communications functions and communication standards



# Functional Requirements (Use Case Diagram)



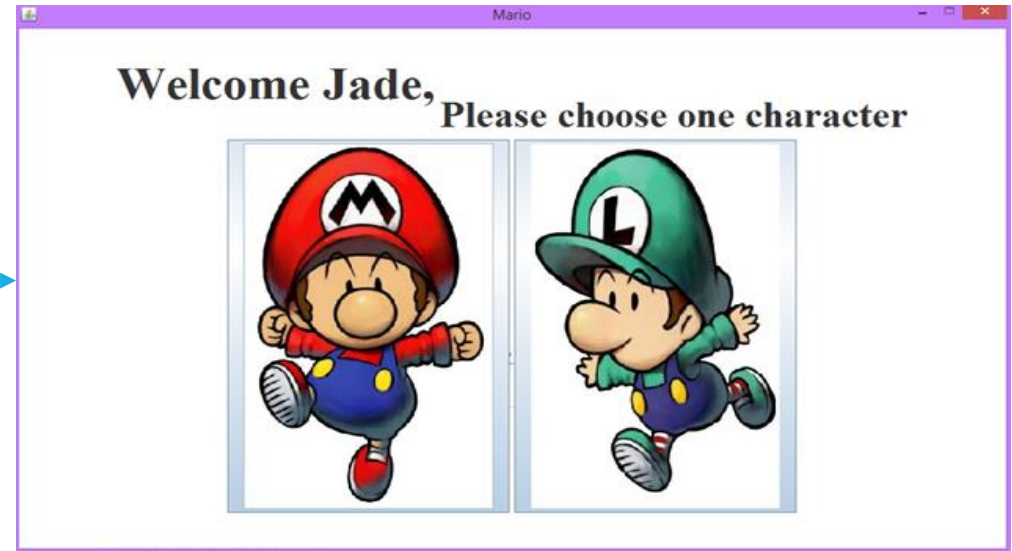
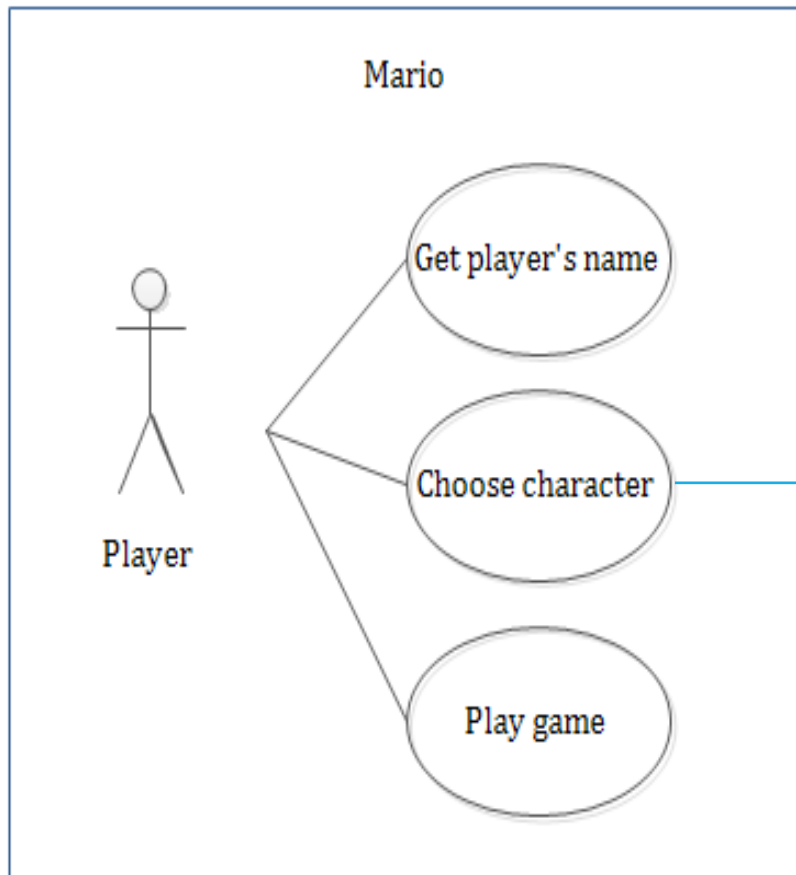
# Functional Requirements (Use Case Diagram - Con't)



1. The game will provide an interface at every beginning whenever player wants to play the game.
2. The game will prompt player to enter his or her name.
3. The game will continue after player clicks the "OK" button



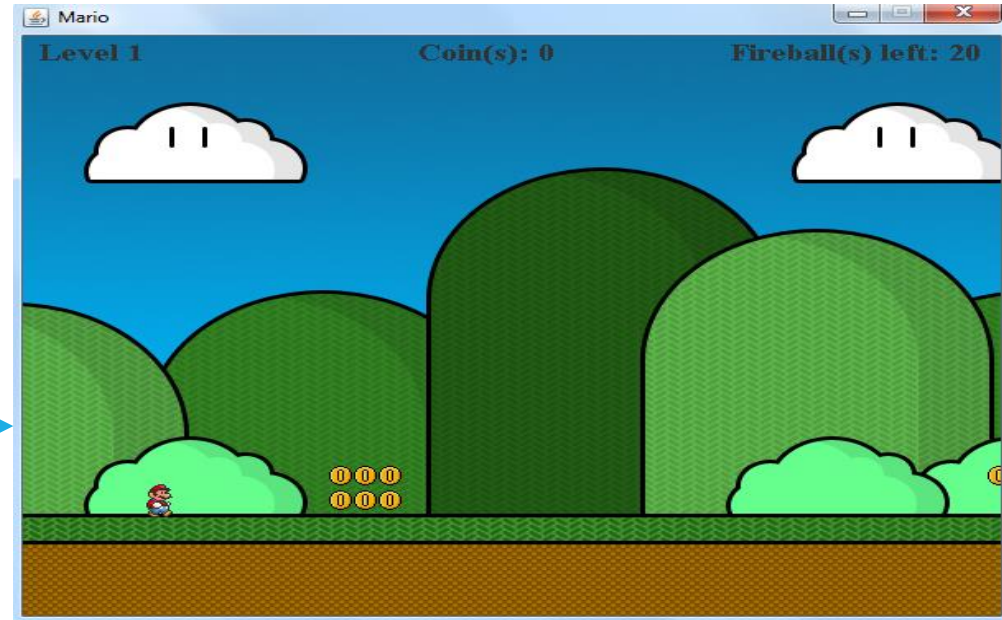
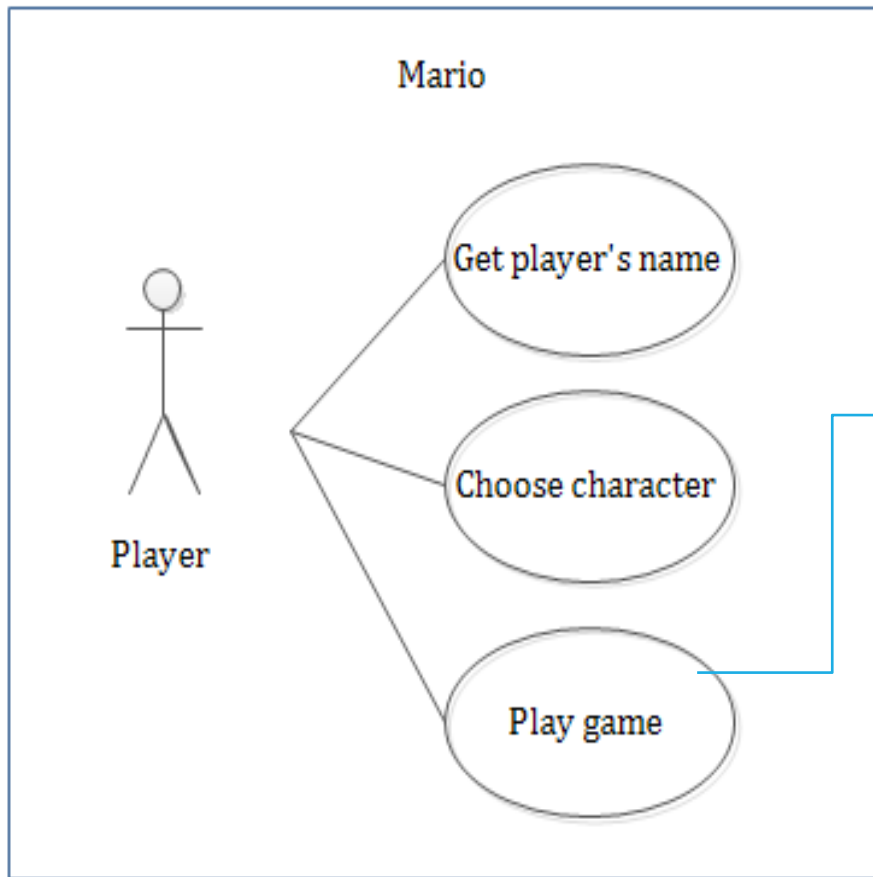
# Functional Requirements (Use Case Diagram - Con't)



1. The game will print out player's name and prompt player to choose character.
2. Player chooses the character by clicking one of the CHARACTER button.
3. The game will continue.



# Functional Requirements (Use Case Diagram - Con't)

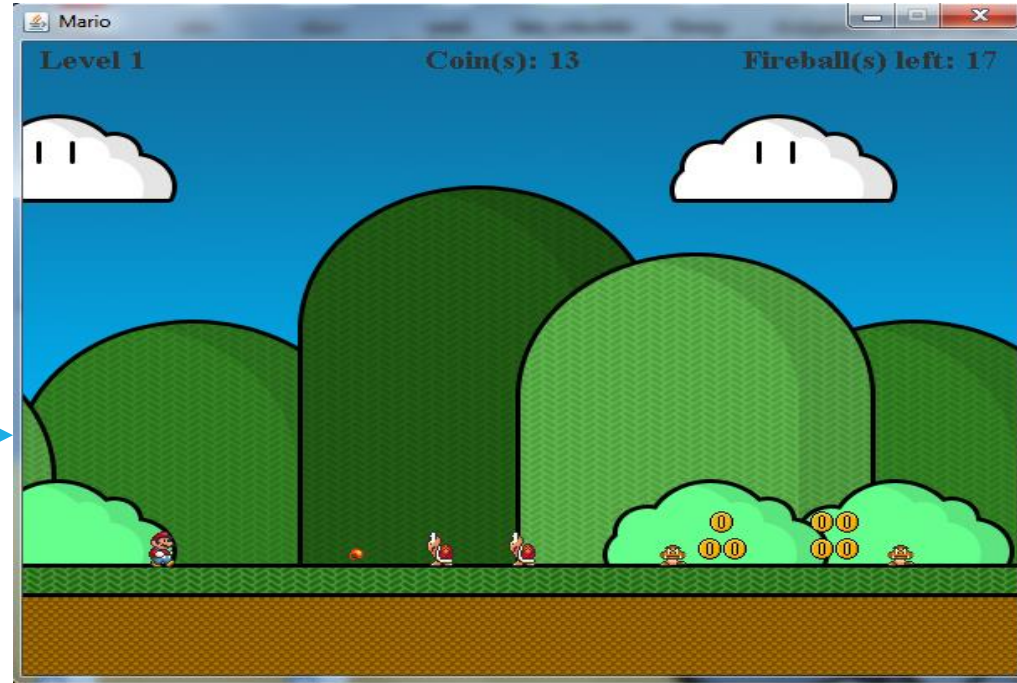
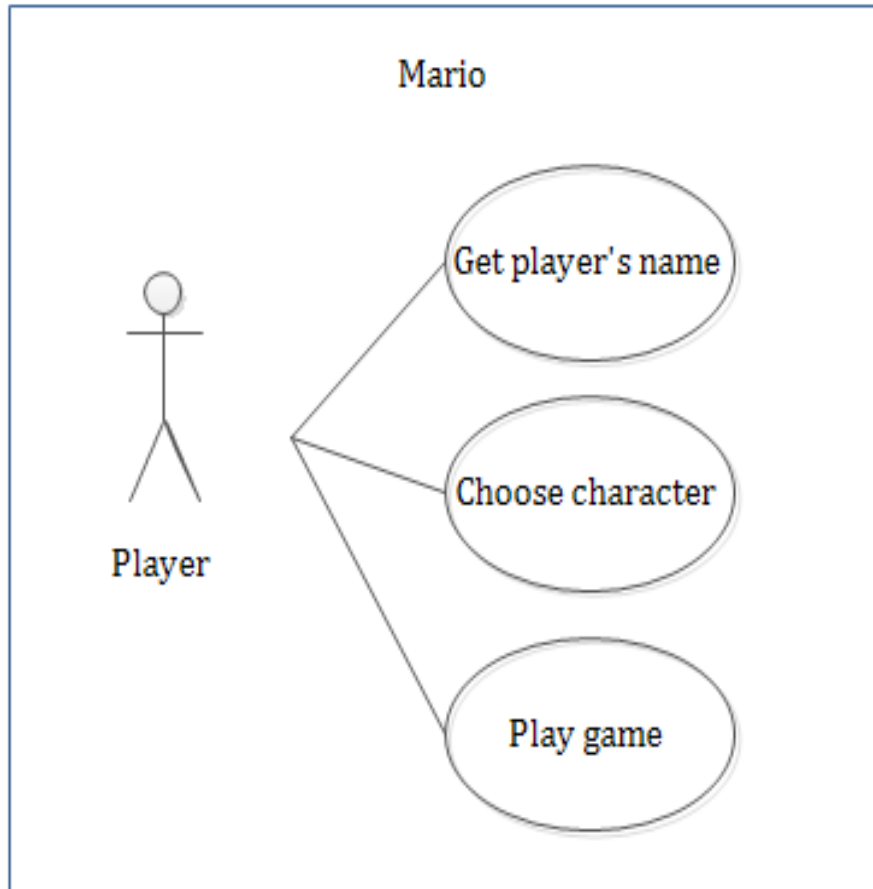


1. Player starts play the game.
2. The Mario will move forward and backward by pressing the RIGHT and LEFT on the keyboard.
3. Player can collect coins during the adventure.





# Functional Requirements (Use Case Diagram - Con't)



4. Player has to kill the enemies in the game.
5. A fireball will be fired each time when the player presses SPACEBAR.



# Video of the game



# Non-Functional Requirements

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## 1. Performance Requirements

- The loading time for Mario will not take more than 10 seconds.
- The game shall respond to each player input within 3 seconds.



# Non-Functional Requirements (Con't)

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## 2. Software Quality Attributes

- Usability
  - A new player should be able to play a complete game of Mario in less than 10 minutes.
  - A new player should commit less than one error in use of the game every ten minutes.
  - A user who is familiar with the traditional Mario game be able to correctly play the game without any written documentation.
- Portability
  - Compatible to devices with Java implementations



# Difficulties

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## 1. Communication

- Difficulties for some group members to online
- Progress of the project is not up to date
- Solution:
  - i. Have a face to face meeting more frequent, every Monday (5p.m.-7p.m.), every Wednesday (1p.m.-3p.m.), every Friday (4.30p.m.-6.30p.m.)
  - ii. Process manager will finalize everything from the FB group chat into Word document each day and upload it to the group chat







Thank  
You!