Analysis Document

Name: Tony Jiang

Class: RB04

Semester: 6

|  |  |  |
| --- | --- | --- |
| Version | Date | Description |
| 0.1 | 18 Sept 24 | Initial documentation. |
|  |  |  |
|  |  |  |

Contents

[Introduction 3](#_Toc177566506)

[User story 3](#_Toc177566507)

[Player 3](#_Toc177566508)

[1. Daily guess 3](#_Toc177566509)

[2. Login 4](#_Toc177566510)

[3. Replay song 4](#_Toc177566511)

[4. 5 guess opportunities 4](#_Toc177566512)

[5. Autocomplete search 4](#_Toc177566513)

[6. Skippable guess 5](#_Toc177566514)

[7. Show previous answers 5](#_Toc177566515)

[8. Statistic 5](#_Toc177566516)

[9. Create playlist 6](#_Toc177566517)

[Admin 6](#_Toc177566518)

[1. Login 6](#_Toc177566519)

[2. Add song 6](#_Toc177566520)

[3. See list of songs 7](#_Toc177566521)

[4. Delete song 7](#_Toc177566522)

[5. Modify song 7](#_Toc177566523)

[Moderator 8](#_Toc177566524)

[1. Login 8](#_Toc177566525)

[2. View playlist 8](#_Toc177566526)

[Non-functional requirements 8](#_Toc177566527)

# Introduction

This document contains the user stories and non-functional requirements for this project. It helps us define, review, and understand the importance of both functional and non-functional requirements.

# User story

The user stories are divided by user roles. Currently, there are three user roles: player, admin, and moderator. The player guesses the song by participating in the game. The admin manages the songs, and the moderator oversees the gameplay.

Each user story is prioritized using the MUSCOW technique, which determines which user stories to focus on first and which are most important to implement in the system. MUSCOW stands for:

**M**ust have

**S**hould have

**C**ould have

**W**on't have (this time)

## Player

### Daily guess

As a player, I want to play a daily guessing game, so that I can challenge myself to see if I know the song of the day.

**Acceptance Criteria**

* Players can play this without logging in.
* After guessing the song, the player has to wait until the next day to play the next daily song.
* A timer is displayed when the next daily song is ready.

**MUSCOW Prioritization**

Must

### Login

As a player, I want to log in, so that I can guess more songs and challenge my knowledge.

**Acceptance Criteria**

* Player has to provide user credentials to log in.
* Logging in will redirect the player to a targeted page.

**MUSCOW Prioritization**

Must

### Replay song

As a player, I want to be able to replay the song that I just listened to, so that I can secure my answer

**Acceptance Criteria**

* Players can interact with the replay button, to replay the song.
* The system will replay the song from the starting point.

**MUSCOW Prioritization**

Must

### 5 guess opportunities

As a player, I want to have five opportunities to guess the song, so that I can challenge myself and test my knowledge.

**Acceptance Criteria**

* Player can only listen to a set duration of the song in seconds.
* Each attempt to guess gets an additional number of seconds to guess the song.
* Player can see how many attempts they have.

**MUSCOW Prioritization**

Must

### Autocomplete search

As a player, I want to autocomplete my answer, so that I know if it’s the correct answer I’m thinking of.

**Acceptance Criteria**

* A max certain amount of autocomplete should be shown.
* Autocomplete should be displayed when the player starts typing.
* Autocomplete is displayed under the answer.
* Player can select the autocomplete answer.
* Autocomplete should not be displayed when there isn’t a match to what the player has typed.

**MUSCOW Prioritization**

Must

### Skippable guess

As a player, I want to be able to skip a song guess, so that I can listen to the rest of the song and make a guess.

**Acceptance Criteria**

* Player can interact with the skip button to skip a guess of a song.
* The duration of the song is extended when the skip button is activated.
* The system displays which guess was skipped.

**MUSCOW Prioritization**

Must

### Show previous answers

As a player, I want to see my previous wrong guesses, so that I know which answers I have already submitted.

**Acceptance Criteria**

* Players can see they previous wrong answers.

**MUSCOW Prioritization**

Must

### Statistic

As a player, I want to see my statistics, so that I can understand at which point in the guessing process I know the answer.

**Acceptance Criteria**

* Players can see the total songs they have guess.
* Players can see the total correct answer of each guess attempt of all the songs they have guessed.

**MUSCOW Prioritization**

Should

### Create playlist

As a player, I want to be able to create a song playlist, so I can challenge other players to see if they know the songs I added to the playlist

**Acceptance Criteria**

* Player has to be logged in to create the playlist
* Player would have to fill all the inputs on the form to create the playlist.
* A notification should be displayed when the playlist is successfully submitted.
* Player has to wait for approval after the playlist is submitted.

**MUSCOW Prioritization**

Could

## Admin

### Login

As an admin, I want to be able to login, so that I can manage the songs of the system.

**Acceptance Criteria**

* Admin should be able to log in with their credentials.
* Logging in will redirect the admin to a targeted page.

**MUSCOW Prioritization**

Must

### Add song

As an admin, I want to be able to add songs, so that the system has more songs for players to guess.

**Acceptance Criteria**

* Admin has to fill a form to add a song.
* A notification should be displayed when the song is successfully added

**MUSCOW Prioritization**

Must

### See list of songs

As an admin, I want to be able to see a list of songs, so that I know what has been added to the system.

**Acceptance Criteria**

* Admin can see the songs by alphabetic order.
* Admin can see the total number of songs.

**MUSCOW Prioritization**

Must

### Delete song

As an admin, I want to be able to delete a song, so that I can remove it if I make a mistake.

**Acceptance Criteria**

* Admin can interact with the delete button to delete the song.
* A notification should appear when the admin tried to delete a song to confirm if the admin wants to delete the song.
* A notification should appear when the song is successfully deleted.

**MUSCOW Prioritization**

Must

### Modify song

As an admin, I want to be able to modify a song, so that I can correct any mistakes that were made.

**Acceptance Criteria**

* Admin can interact with the modify button to modify the song.
* A notification should appear when the song is successfully saved.

**MUSCOW Prioritization**

Must

## Moderator

### Login

As a moderator, I want to be able to log in, so that I can manage the submitted playlists

**Acceptance Criteria**

* Moderator should be able to log in with their credentials.
* Logging in will redirect the moderator to a targeted page.

**MUSCOW Prioritization**

Could

### View playlist

As a moderator, I want to be able to view the submitted playlists from players so that I can see how many playlists I have to review.

**Acceptance Criteria**

* Moderators can see the total number of submitted playlist

Moderators can see who submitted the playlist.

**MUSCOW Prioritization**

Could

# Non-functional requirements

Here are the define non-functional requirements for this project and their criteria.

**Scalability:**

The system should be able to handle fifty thousand concurrent players during peak hours.

**Security:**

For security, I will follow the OWASP Top 10 guidelines to validate the system’s security and prevent hacks or cheating.

**Data:**

We will adhere to GDPR guidelines to prevent any sensitive data leaks and implement appropriate data protection measures.

**CI/CD:**

The system must implement a CI/CD pipeline to automate the integration and deployment processes.