Analysis Document

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# Functional requirements

In the table below you will see the functional requirements of my project.

| № | Name | Description | MoSCoW | Status |
| --- | --- | --- | --- | --- |
| 1 | Authentication & Authorization | Login to receive a JWT | Must |  |
| 2 | Standard login & registration | Sensitive data such as passwords is encrypted before being stored | Must |  |
| 3 | Authenticate with third-party provider | Google, Facebook, Apple, etc | Could |  |
| 4 | Core playlist-related functionality | Creating, modifying, and displaying user’s playlists and their content | Must |  |
| 5 | Possible playlist-related functionality | Public/private playlists, like other users’ playlists | Should |  |
| 6 | Song searching | Full-text search of the available songs | Should |  |
| 7 | Song streaming | Backend service, responsible for streaming music files over the network | Must |  |
| 8 | Song uploading | A separate role (Artist) should be able to upload songs in the platform | Could |  |
| 9 | Offline mode | The user should be able to save a concrete song/playlist locally, so the user can listen to music offline | Could |  |
| 10 | Mock Payment functionality | The backend service should be able to track if the user has paid for subscription or not | Must |  |
| 11 | Real payment functionality | The user should be able to make payments for subscription securely | Could |  |

# User Scenario

The main scenario is when a user has created his own account to start searching for music, listen to hers/his favorite songs and she/he should be able to create playlists out of the available music in the platform. As the payment is a secondary requirement it will be part of the main scenario in the later phase of the project and then the user should have already paid hers/his subscription before using the platform with its account.

## User stories

1. As a user, I want to be able to login and register on the platform, so I can start using the platform.
2. As a user, I want to be able to create personal playlists, so I can store my favorite tracks in one place.
3. As a user I want to be able to make changes to my personal playlists.
4. As a user, I want to be able to play songs on the platform.
5. As a user, I want to create payments, so I can have a valid subscription on the platform.
6. As a user, I want to be able to search for tracks within the platform, so I can start listening to my favorite songs.
7. As a user, I want to see a detailed description about my personal profile on the platform.

# Non-functional Requirements

This section is about the non-functional requirements, regarding my project, which are:

· The system needs to be able to handle a huge number of users (e.g., 600 k simultaneous users).

· The system’s users are from all around the globe.

· The system must be available 24/7 uninterrupted.

· The application must not have a huge loading time (no more than 3-4 sec.).

· The application must encrypt the sensitive data before storing it in the database.

· The application must be open for modifications and easy for maintenance and extensions.