Music Mobile App

Vision Document

Version <1.0>

Revision History

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| 08/11/2022 | 1.0 | Target users & Environments & Features | Vũ Đình Duy Khánh  & Trần Thị Tuyết Nhung |

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Vision (Small Project)

# Introduction

## Purpose

The purpose of this document is to collect, analyze, and define high-level needs and features of the Music Mobile App. It focuses on the capabilities needed by the stakeholders and the target users, and why these needs exist. The details of how the Music Mobile App fulfills these needs are detailed in the use-case and supplementary specifications.

The introduction of the Vision document provides an overview of the entire document. It includes the purpose and references of this Vision document.

## Scope

This Vision Document applies to the Intro to Software Engineering course registration system, which will be developed by the Group 11. The It department will develop this client-server system to interface with the existing course catalog database.

The Music Mobile App will enable users to listen to music online and offline.

The Music Mobile App allows artists to upload their song and allow other users to listen to it.

## References

PA’s document, slides of teacher, PA’s video.

# Positioning

## Problem Statement

| The problem of | Our team decided to develop a music mobile app. The software like zingmp3 or spotify allows people to listen to amazing songs and download them. Artists, musicians and singers can upload their music product to servers that allow everyone to listen. |
| --- | --- |
| affects | Artists, Listeners |
| the impact of which is | - User's listening experience  - Popularity of the song |
| a successful solution would be | - Musicians can post music  - Users can listen to music  - Vip users can download music and listen offline |

## Product Position Statement

| For | Music listeners, Musicians |
| --- | --- |
| Who | Listen to music, Compose music |
| The (product name) | It is a Mobile Music player |
| That | - Listen to music online  - Download music to listen offline  - Upload own song |
| Unlike | Music apps contain lots of ads  Music apps don't allow emerging musicians to post music |
| Our product | Connect ALL music listeners with ALL musicians under the management of administrator |

# Stakeholder and User Descriptions

## Stakeholder Summary

| **Name** | **Description** | **Responsibilities** |
| --- | --- | --- |
| Teacher | - Nguyễn Minh Huy | Mentor |
| Personal Assistant | - Nguyễn Lê Hoàng Dũng  - Hồ Tuấn Thanh | Supporter for development team |
| Development team | Group 11’s member | Project responsibility.  Project progress tracking |
| User try | Order group’s members | Ensures that the system will meet the needs of user |

## User Summary

| **Name** | **Description** | **Stakeholder** |
| --- | --- | --- |
| Music listeners | People who want to listen to music online | Self-represented |
| Vip User | People who want to listen to music online and download song for offline | Self-represented |
| Musician | Musician who want to upload their song | Self-represented |
| Administrator | Song curators and musicians (no nonsense uploading) | Self-represented |

## User Environment

Unique environmental constraints: all user, all platforms with internet

Platforms are in use today : Android

Future platforms : Windows, Mac-OS, Web, IOS

Marketing subsequent releases to all music listeners who want to listen to music, all musicians who want to upload their song

## Summary of Key Stakeholder or User Needs

| **Need** | **Priority** | **Concerns** | **Current Solution** | **Proposed Solutions** | |
| --- | --- | --- | --- | --- | --- |
| Free music listeners | Medium | Music listening experience is interrupted | Too many ads are inserted when changing new songs for free users | | Free users won't have to watch or listen to any ads |
| New musicians | High | Can't bring their song to people | They can't upload their songs when they're not well known | | All musicians can upload music to the system as long as it's not spam |

## Alternatives and Competition

Other music player app be like ZingMp3, Spotify which had many users before, many songs before

# Product Overview

## Product Perspective

Server is windows application

Client is Android 9.0 or newer, future : windows, IOS, web, Mac-OS

The client will perform the account and password input and transmit the entered information to the server to be checked

The client will allocate rights to use features for certain types of users

When listening to music, the client will ask the server to send information about that song to play

*Diagram

Description automatically generated*

## Assumptions and Dependencies

Key features: list the key feature for the app.

| **Feature** | **Description** | **Note** |
| --- | --- | --- |
| Play music | Users can listen to a large amount of songs in the app. |  |
| Download songs | Users can download their favorite songs from the app to their phones | Only VIP users |
| Upload songs | Users can upload their own music products (audio files) to the app’s server. | Only artists |
| Music playlist | Users can make playlists of their favorite songs. |  |
| Rate songs | Users can rate points to the songs that they have listen and every one can see that point |  |
| Recommend songs | We will recommend the most that have been listened to of week, of month and of all time or ones that have much good reactions |  |
| Information of the song | - Name of the song. - Performers, songwriter, …  - Kind of music.  - Comment,rate, … |  |
| Search | Find the song by name, by artists,… |  |
| Management | Manage accounts (delete and upgrade accounts) and ban unacceptable accounts. | Only admins |
| Have Account (Register & log in) | The app has different types of accounts. Recently, there are 4 types of accounts. |  |

Actors: list the types user join the app

| **Actors** | **Description** | **Note** |
| --- | --- | --- |
| Guest | Only be able to play songs. |  |
| Common user | - Can play songs and comment below the songs.  - Rate the songs and make playlists. |  |
| Vip user | Like common users but they can download the songs. |  |
| Artist | Can upload songs |  |
| Admin | Manage accounts and ban unacceptable accounts |  |

# Product Features

## Login

Connect to the server, log in to your personal account to use personal functions such as downloading music, uploading music, creating playlists

## Play music

Play the opened music

## Back-ward

Back to previous song

## For-ward

Go to the next song

## Rate song

Rate the song from 1 to 5 stars

## Search song

Search for your favorite song by 1 word in the song title or both the song title or the musician's name

## Music playlist

Create a playlist of favorite songs

## Download song

Download music to your device to listen to offline (vip users only)

## Upload songs

Upload your own music for many people to listen (musicians only)

## Management

Manage musicians, block spam musicians, spam songs

# Non-Functional Requirements

## Applicable standards

Android 9.0 or newer

## About music player software

- Copyrighted music requires a license

*- The song must be played smoothly without interruption*

- Server system errors must be fixed quickly when the program officially runs