Music Player

Vision Document

Version 1.1

Revision History

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| 07/06/2022 | 1.0 | Initial version | Trương Samuel  Trần Hồng Minh Phúc |
| 21/06/2022 | 1.1 | Adding upload songs, role assign features to 5. Product feature and adjusting 8. Precedence and Priority | Trương Samuel |

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Vision (Small Project)

# Introduction

## Purpose

The purpose of this document is to define the high-level requirements of Music Player app in terms of the needs of the end users.

## Scope

This Vision Document applies to the Music Player app, which will be developed by Group01. This app will allow everyone to listen to music online; and the artists can upload their songs, albums to this app.

## References

None

# Positioning

## Business Opportunity

The Music Player app will be a pioneer in the music streaming market. As a result, there will be opportunities to sign with famous artists to attract more users.

## Problem Statement

| The problem of | the lack of high-quality copyrighted music streaming apps with massive library of songs |
| --- | --- |
| affects | those who like listening to music and artists |
| the impact of which is | hard to find music with high quality or lack of songs |
| a successful solution would be | a simple mobile app where everyone can enjoy listening to music, discover new songs and artists’ songs can access to more people |

## Product Position Statement

| For | non-artists and artists |
| --- | --- |
| Who | enjoy listening to music or want to publish their songs |
| The Music Player | is an Android app |
| That | enables everyone to listen to music online |
| Unlike | other music streaming piracy sites |
| Our product | provides a massive number of high-quality copyrighted music |

# Stakeholder and User Descriptions

This section describes the users of the Music Player app. There are 3 types of users of the Music Player; the Non-artists, the Artists, and the Admins.

## Market Demographics

The target market for this system is primarily aimed at young people (between the ages of 15 and 30) and artists..

The initial release of Music Player will be limited to Viet Nam and Android. As it grows, Music Player will come to iOS and other countries.

## Stakeholder Summary

| **Name** | **Description** | **Responsibilities** |
| --- | --- | --- |
| Development team | Group01 | Responsible for developing this project |
| Supervisor | Theory lecturer:  Nguyễn Thị Minh Tuyền | Supervise and guide the development team |
| Non-artist | Those who just listening to music | Ensures that the system will meet the needs of the Non-artist, who can listen to music online |
| Artist | Artist | Ensures that the system will meet the needs of the Artist, who can upload their songs |
| Admin | Admin | Ensures that the system will meet the needs of the Admin, who manages songs and account |

## User Summary

| **Name** | **Description** | **Responsibilities** | **Stakeholder** |
| --- | --- | --- | --- |
| Non-artist | Those who just listening to music | listen to music online  download music  create their own playlists  add songs to favorites  search for songs | self-represented |
| Artist | Artist | upload new songs, albums  view statistics of songs, albums | self-represented |
| Admin | Administrator | approve new songs from Artist  manage account | self-represented |

## User Environment

Users will be expected to have an Android phone that can connect to the network. Earbuds are preferred to have a better sound experience.

The initial release of Music Player will be limited to Viet Nam and Android. As it grows, Music Player will come to iOS and other countries.

## Stakeholders Profiles

### Development team

| **Description** | Team develops this project, which is Group01 |
| --- | --- |
| **Type** | Dev |
| **Responsibilities** | Responsible for developing this project |
| **Success Criteria** | Success is completion of the project within approved budget and before deadline |
| **Involvement** | Project reviewer. Budgetary approval signatory. Involved in staff performance reviews. |
| **Deliverables** | None |
| **Comments / Issues** | None |

### Supervisor

| **Description** | Theory lecturer: Nguyễn Thị Minh Tuyền |
| --- | --- |
| **Type** | Guru |
| **Responsibilities** | Supervise and guide the development team |
| **Success Criteria** | Providing enough knowledge and instruction to dev team |
| **Involvement** | Supervise and guide the development team |
| **Deliverables** | None |
| **Comments / Issues** | None |

### Non-artist

| **Description** | Those who just listening to music |
| --- | --- |
| **Type** | User |
| **Responsibilities** | Ensures that the system will meet the needs of the Non-artist, who can listen to music online |
| **Success Criteria** | Ability to listen to music online |
| **Involvement** | Provide reviews of music listening experience |
| **Deliverables** | None |
| **Comments / Issues** | None |

### Artist

| **Description** | Artists |
| --- | --- |
| **Type** | User |
| **Responsibilities** | Ensures that the system will meet the needs of the Artist, who can upload their songs |
| **Success Criteria** | Ability to upload songs |
| **Involvement** | Provide reviews of uploading songs process |
| **Deliverables** | None |
| **Comments / Issues** | None |

### Admin

| **Description** | Administrator |
| --- | --- |
| **Type** | User |
| **Responsibilities** | Ensures that the system will meet the needs of the Admin, who manages songs and account |
| **Success Criteria** | Ability to manage songs and account |
| **Involvement** | Requirements reviewer. |
| **Deliverables** | None |
| **Comments / Issues** | None |

## User Profiles

Covered under the previous section.

## Summary of Key Stakeholder or User Needs

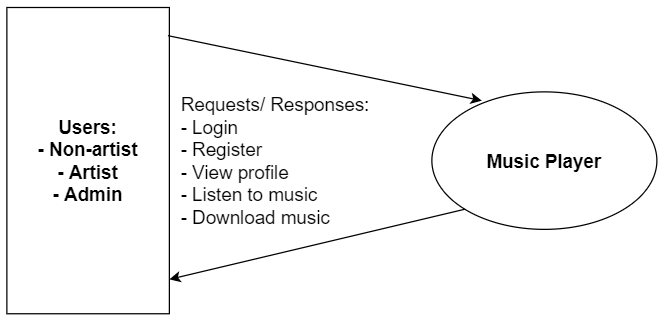
| **Need** | **Priority** | **Concerns** | **Current Solution** | **Proposed Solutions** |
| --- | --- | --- | --- | --- |
| Listening to music online | High | Delay when playing music | See proposed | Using a server with high-speed connection |
| Artists can upload new songs | High | Songs that violate customs | See proposed | Songs must be censored |

## Alternatives and Competition

Zing MP3 and NhacCuaTui are one of the most powerful competitors. In terms of the advantages of these two, they provide a large number of Vietnamese songs; the UI design is simple to use; most songs are free to download. Concerning the drawbacks, due to be a domestic app, the amount of foreign music will be quite limited

# Product Overview

## Product Perspective



**Figure 1. Music Player Context Diagram**

## Summary of Capabilities

| **Customer Benefit** | **Supporting Features** |
| --- | --- |
| Listen to music in anywhere as long as having network connection or songs have been downloaded | Music streaming and downloading services |
| Artist's songs can approach to more users | Artists can upload songs |

## Assumptions and Dependencies

None

## Cost and Pricing

None

## Licensing and Installation

Require Copyright Licensing in Music Distribution.

# Product Features

## Login

Users login by entering their username and password.

## Register

Only Non-artist accounts can be registered; contact Admin to create an Artist account; Admin account is pre-created.

## Music streaming

All users can listen to music online.

## Music downloading

All users can download songs.

## Search songs

Everyone can search by criteria (song’s name, artist, genre, album).

## Create playlists, add songs to favorites

All users can customize their own playlists and add songs to their favorites.

## View statistics of songs

Artist accounts can view statistics of their songs (likes, views).

## Upload songs

Artist accounts can upload their songs.

## Approve songs

Admin accounts can accept or reject new songs uploaded by Artists.

## Share songs to social networks

All users can share songs to social networks (Facebook, Twitter).

## Light & Dark theme modes

All users can switch themes of the app.

## Role assign

Admin account can assign roles (Non-artist, Artist, Admin) for other accounts.

# Constraints

This project must be done before the deadline.

# Quality Ranges

This section defines the quality ranges for performance, robustness, fault tolerance, usability, and similar characteristics for the Music Player.

Availability: The System shall be available 24 hours a day, 7 days a week.

Usability: The System shall be easy-to-use.

Maintainability: The System shall be designed for ease of maintenance.

# Precedence and Priority

| **Priority** | **Feature (By Number Above)** |
| --- | --- |
| High | 1, 2, 3, 4, 5, 6, 9, 12 |
| Medium | 7, 8, 10, 11 |

# Non-Functional Requirements

The delay when playing music should not be greater than 3 seconds.

The security of the account should have password salting.

The maximum users access app at the same time should be 50.

# Documentation Requirements

None