



## **DATTA MEGHE COLLEGE OF ENGINEERING**

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### **CERTIFICATE**

This is to certify that

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Have submitted the Mini-project entitled “**JAVAFX MUSIC PLAYER APPLICATION – MUSIC BAY** ” as per the requirement of the syllabus of the **DEGREE(INFORMATION TECHNOLOGY)** course, according to the rules laid down by the DTE, during the academic year 2020-21 in view of fulfilment of the degree in Information Technology.

Date:

**Signature of Internal Examiner**

**Signature of External Examiner**

**Signature of Head of Department**

**Signature of Principal**

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# PROJECT INTRODUCTION



Name of Application: MUSIC BAY

Type of Application: Music Player

Libraries Used: JavaFX

Category: Music & Entertainment

The project is based on the JavaFX library of Java to create GUI applications and Java Media Player class.

The Application has a Graphical User Interface which provides the user with various options of songs categorized into various fields.

When the user clicks on a particular song, our own musicBAY music player starts to play the songs. The music player has various controls to make your experience better.

First of all, when the application gets running user will be staged to home screen where we have the creators' info and our social media account and user can get started | > with his journey on the path of music.

He will then be introduced to some genres out of which he can click on any genre of his choice or can go to the next page of artists or even comeback to home. Then list of songs from that particular genre will be displayed and user can listen to the music he wants.

## PROBLEM DEFINITION

Created a music player desktop application using JavaFX library of Java. The GUI has various controls and choices from which user can play his/her choice of song.

## SCOPE OF PROJECT

Target Audience: Youth, especially students

Almost each student listens to music to either relax themselves or complete tasks with more concentration by cancelling other noises. Music is universal. Hence, the usefulness of creating a music streaming application has a large scope.

Even though our target audience is youth, it does not limit to them. Our application can be used by anyone who loves music or has a background or job profile related with music & entertainment.

## BACKGROUND STUDY

Statistics show that 68 percent of adults aged between 18 and 34 years old reported listening to music every day, and the majority of their older peers also enjoyed music with the same regularity.

## PROJECT OBJECTIVES

- Benefits of Music:
- improved mood
  - increased motivation
  - improved memory and brain stimulation
  - better management of pain and fatigue

Our soul aim of creating MUSICBAY is that our target audience gets the best quality of music and controls that they can enjoy and help them do their tasks with ease.

## SYSTEM DESIGN

We first created the JavaFX environment like appropriate windows, stages, scenes and panels. We used the Gluon Scene Builder for creating the UI.

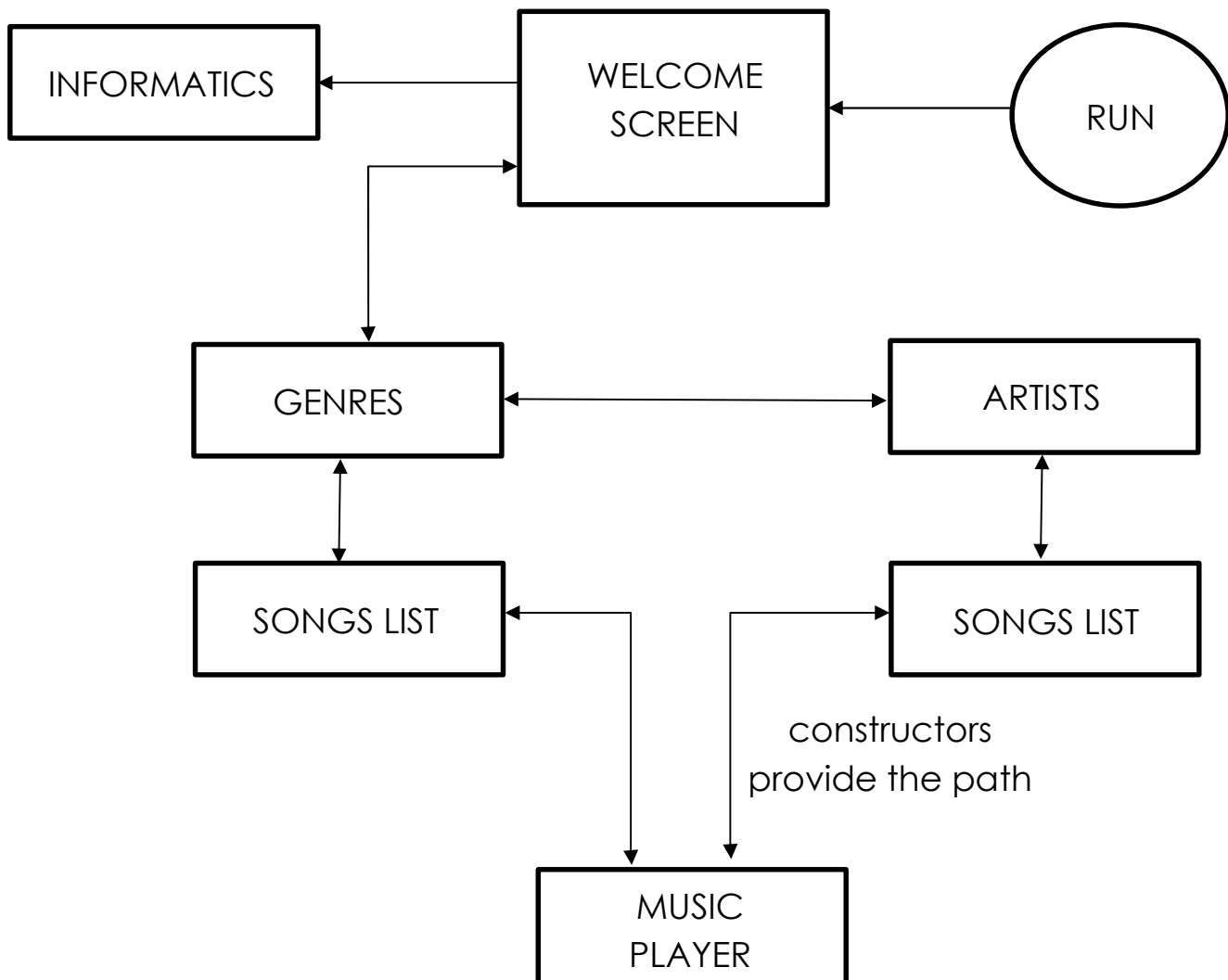
Then we added functionalities to the UI by placing buttons, labels and images. We gave the buttons appropriate event handlers like navigation in between the stages, for the controls of the music player and various other functionalities for smooth functioning.

The next task, the most important task was to play the songs by synchronizing correctly with the selection of user. To make all things work perfectly and in sync, we defined classes and constructors to handle the core of operations. One of the classes deals with the content to be delivered on the stage according to the user input. It is done with the help of parameterized constructors and appropriate paths fed in the program.

One class deals with the JavaFX elements like buttons, images and event handlers which provide the correct task to be done to the constructors. The last class of Music Player has all the paths of songs and other informatics that will be displayed on the stage. JavaX media player class was imported and its methods were used to play the songs.

## CONTROL FLOW DIAGRAM

- Indicate classes in the code as well as the GUI scenes
- ↩ Indicate change of scene using event handlers for button clicks



# IMPLEMENTATION

Our source code and video can be found at our GitHub repository:

<https://github.com/musicBAY/musicBAY.git>

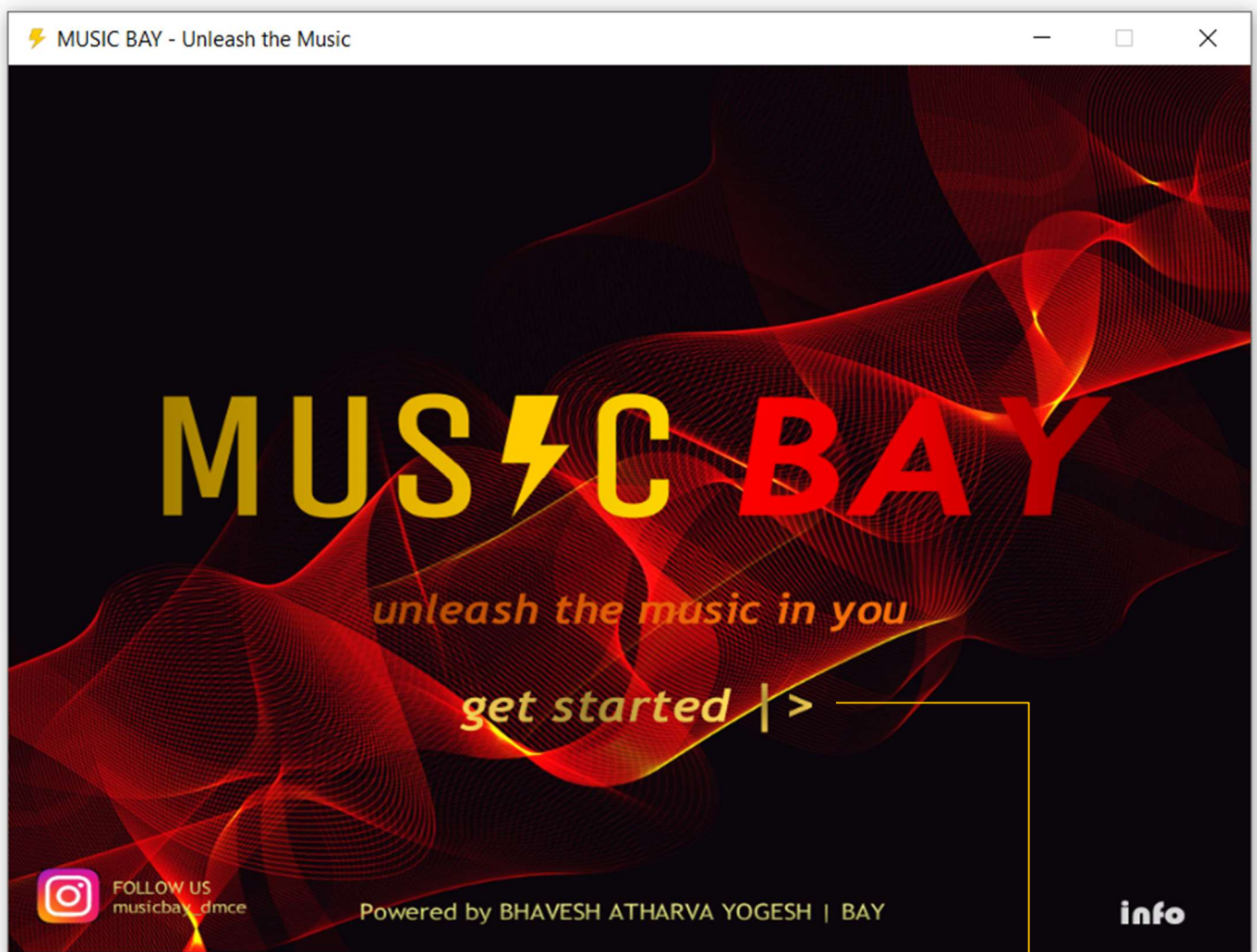


Our video presentation can be viewed at

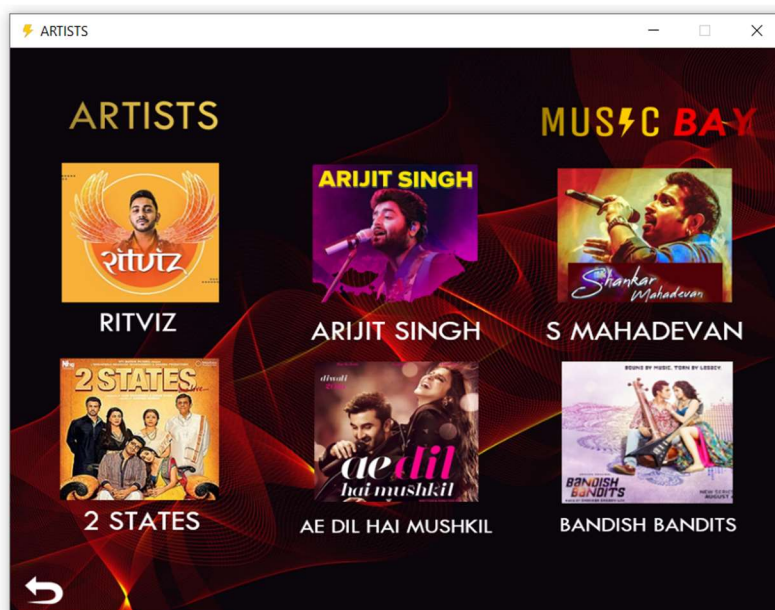
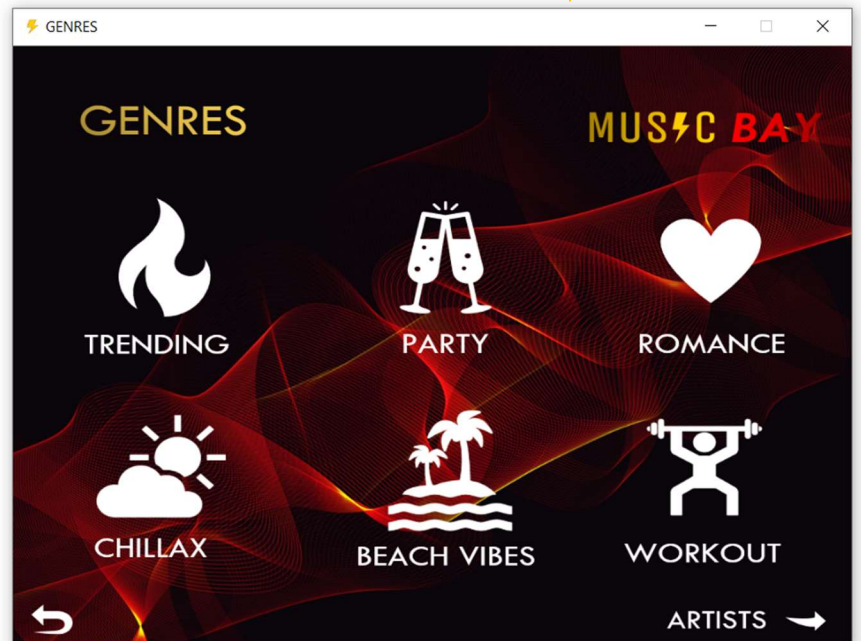
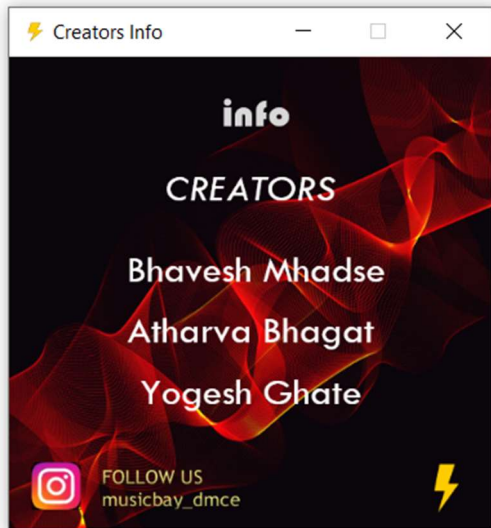
<https://youtu.be/9YdPrRcTSuA>



Here are some of the screenshots



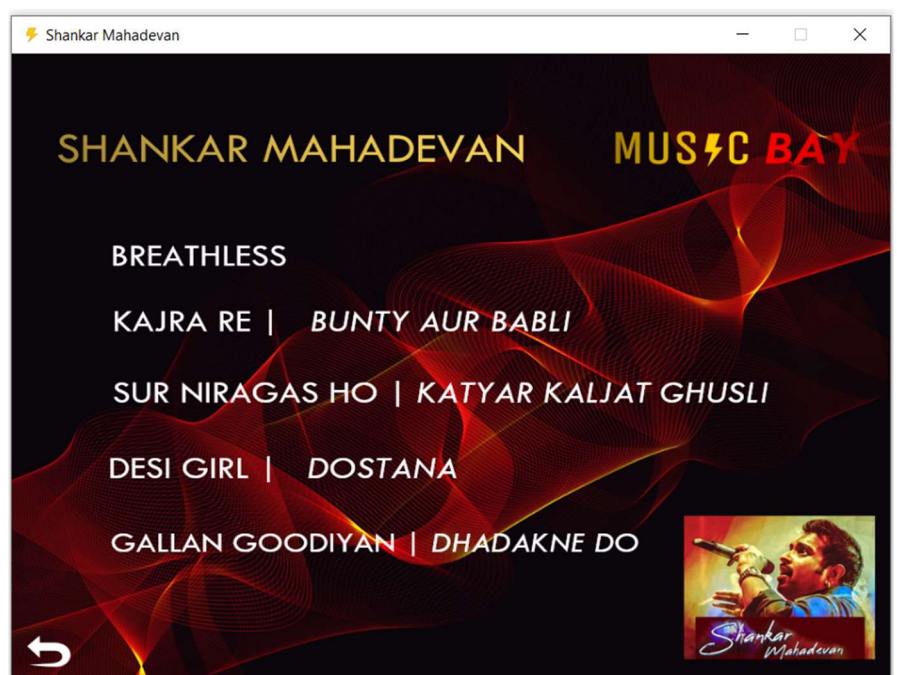




GENRE LIST PAGE

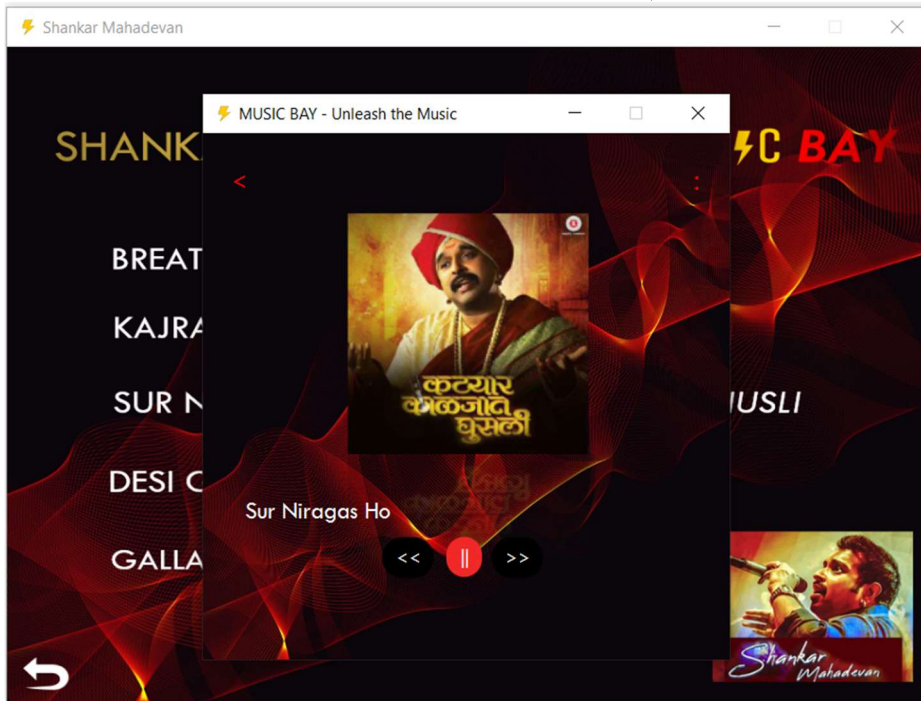
ARTISTS LIST PAGE

ONE OF THE ARTIST PAGE

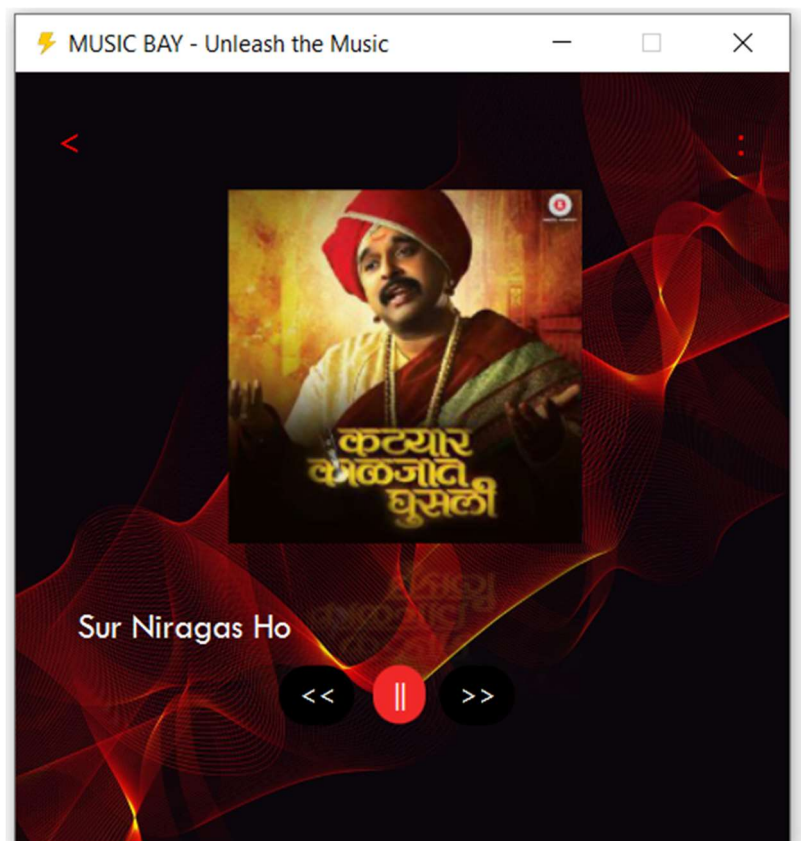




ONE OF THE SELECTED SONG



THE MUSIC PLAYER GUI



## CONCLUSION & FUTURE SCOPE

We can hereby conclude that the MusicBAY JavaFX Music Player Application will be able to fulfill its objectives and provide users a lifetime experience.

We will be continuously working on improving the UI & UX and bringing more controls and functionalities over the course. We will also try expanding the application to various other versions and devices.

## REFERENCES

**References for JavaFX Controls:** [www.javatpoint.com](http://www.javatpoint.com)

**Code Editor Used:** IntelliJ Idea Community Version 2020.2.1

Gluon Scene Builder

**Java Versions Used:** JDK 14.0.2, JavaFX 15.0.1

**Repository Stored on:** GitHub

--- greetings from the team ---  
thank you



ATHARVA BHAGAT

A 04



BHAVESH MHADSE

A 31



YOGESH GHATE

A 17