VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI

MOBILE APPLICATION MINI PROJECT REPORT ON

" **BASIC MEDIA PLAYER** "

Submitted in partial fulfilment for the requirements for the SIXTH semester

BACHELOR OF ENGINEERING

IN

INFORMATION SCIENCE AND ENGINEERING

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CERTIFICATE

It is certified that the MOBILE APPLICATION DEVELOPMENT Mini Project work entitled "Weather Application" is carried out by SUSHANTH S RAO (1MV19IS059), PRATHAM PAI B M (1MV19IS044), K SURAJ KUMAR (1MV19IS030) bonafide students of Sir M Visvesvaraya Institute of Technology in partial fulfilment for the 6th semester for the award of the Degree of Bachelor of Engineering in Information Science and Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2022. It is certified that all corrections and suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the course of Bachelor of Engineering.

Name & Signature of Guide   Name & Signature of HOD

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External Examination:

Name of Examiner Signature with Date

1)

2)

DECLARATION

We hereby declare that the entire project work embodied in this dissertation has been carried out by us and no part has been submitted for any degree or diploma of any institution previously.

Place: Bengaluru
Date: 18 July 2022

Signature of Students:

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INTRODUCTION

Media player is a software program or hardware device capable of playing a media file or disc. For example, many media players today are capable of playing audio files such as playing an MP3 song file and video files such as a short video clip or movie. Below is a list of some of our favorite media players.

- iTunes
- VLC Media Player
- Windows Media Player
- Films and TV

Media players are only designed to play multumedia content like songs or videos, they cannot be used to edit the content.

OBJECTIVE

The purpose of this project is to develop an android application which can play the mainstream mp3 file format.

Another objective is to learn about the MediaPlayer class in Android, and make use of its methods such as start( ), stop( ), pause( ) and prepare( ).

It also aims for a simple user interface, from which an mp3 file can run successfully.

SCOPE

Media players provide most or all of the following features. They allow users to organize their multimedia collection, play songs and movies, rip CD tracks to MP3 and other audio formats, burn CDs, listen to Internet radio, download content from online music stores and stream content from the Internet.
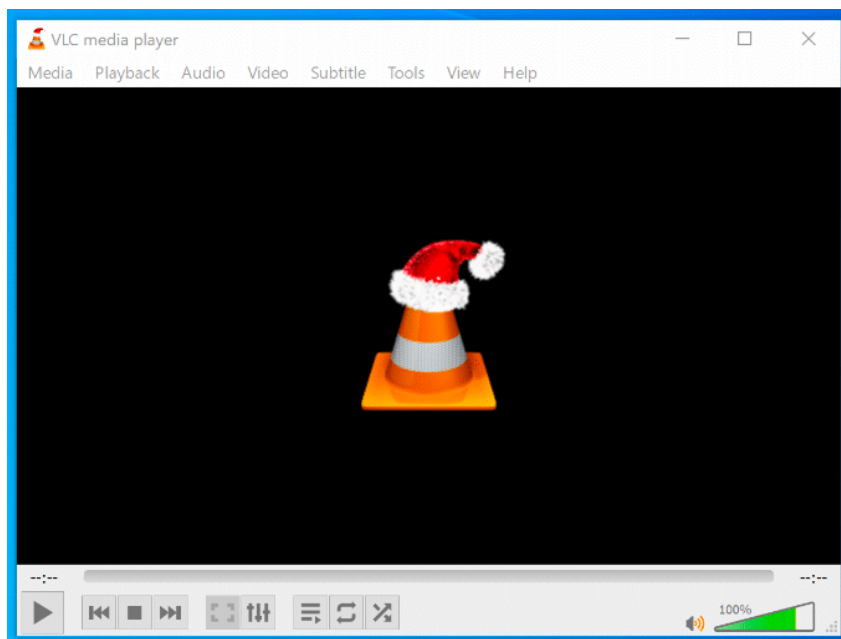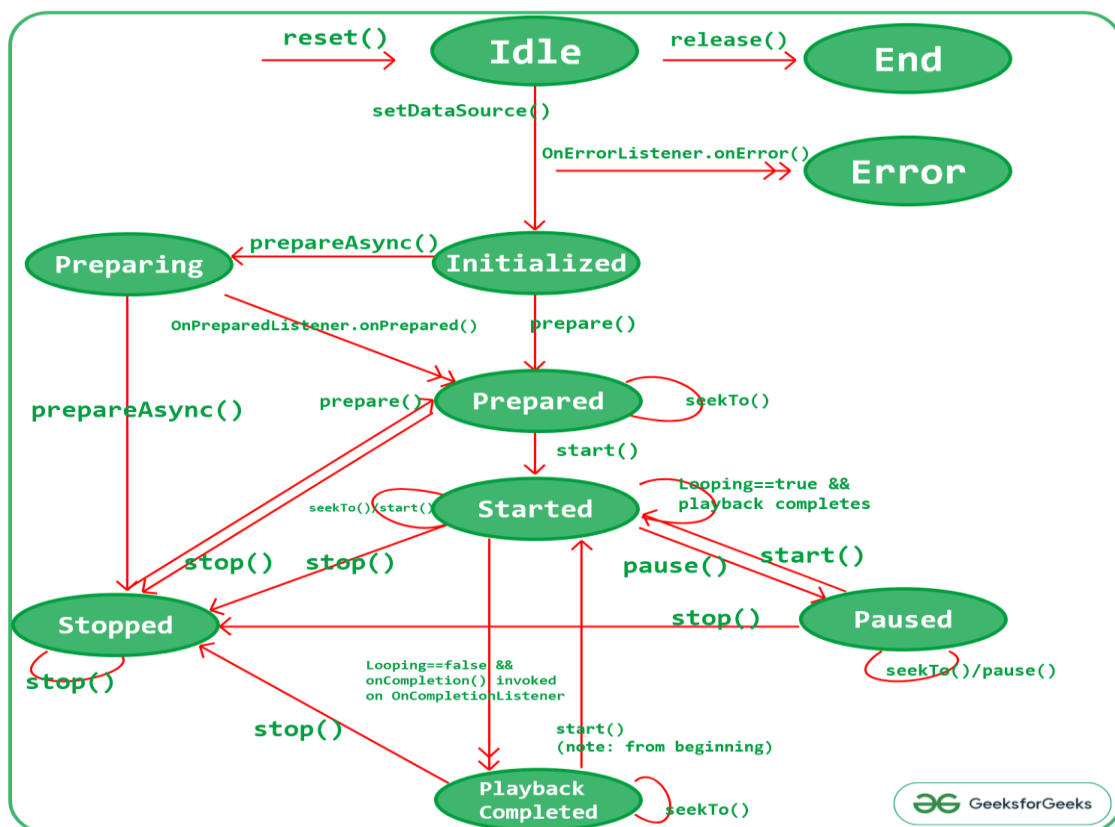
KEY CONCEPTS

**MediaPlayer Class in Android is used to play media files**
State Diagram of the MediaPlayer Class

- **The playing of the audio or video file using MediaPlayer is done using a state machine.**
- **The following image is the MediaPlayer state diagram.**

In the above MediaPlayer state diagram, the oval shape represents the state of the MediaPlayer instance resides in.

- There are two types of arcs showing in the state diagram. One with the single arrowhead represents the synchronous method calls of the MediaPlayer instance and one with the double arrowhead represents the asynchronous calls.
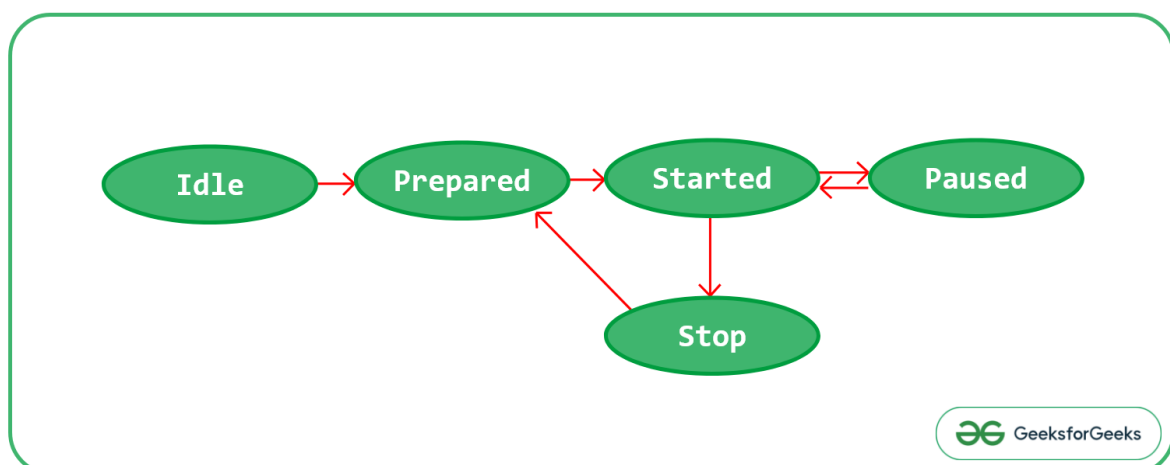
User Interface
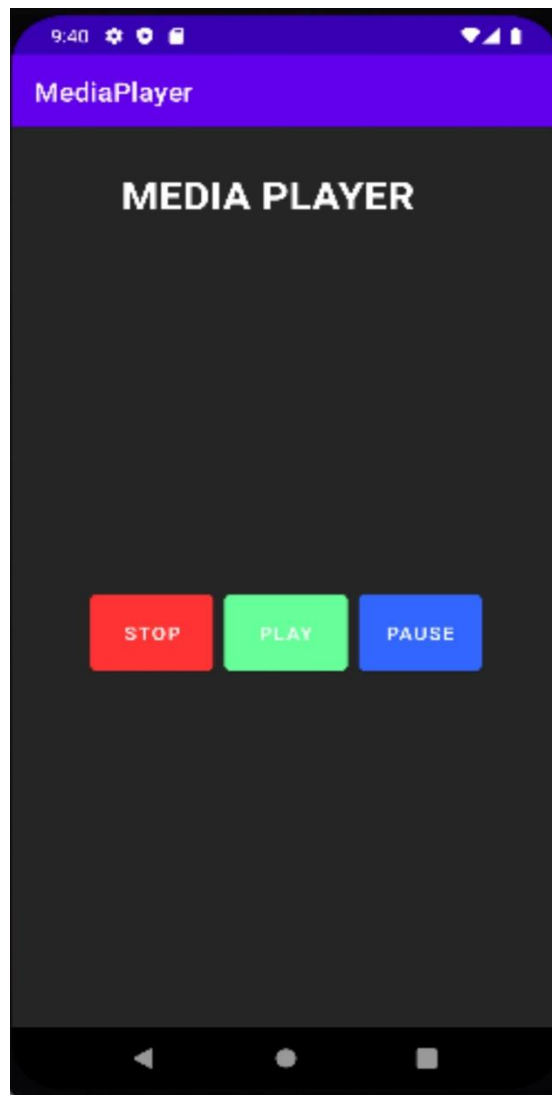
Applied on Dark Mode linked to colors.xml, the interface consists of three buttons placed on a linear layout. They trigger the STOP, PLAY and PAUSE operation on the specified audio file.

ANDROID STUDIO REQUIREMENTS

The application of android need to run based on Android environment. The following is the configuration requirement and installation steps of Android development environment: The required software of the developing environment.

Operation system: Windows 10, Linux
Software: Android SDK(Software Development Kit), ADT(Android Development Tool), JDK: Java Runtime Environment virtual machine Java Development Kit(JDK) Installation steps of the developing environment
Step 1: install the Java virtual machine JDK version – 7
Step 2: install the Android SDK: first download the Android SDK
Download address: http://developer-android-com/sdk/index-html
Input SDK tools path in the SDK location: D: \ android \ software \ android
SDK– Windows and click OK. The Android environment is set up successfully.

Hardware requirements to run the App
>30MB of Storage depending on music file
~50KB of RAM

CONCLUSION

Through the development of music player on Android platform, we get a clear understanding of overall process of the system. The core part of the music player is mainly composed of main interface. Grasping the development of the music player has had the preliminary scale small features. Music player system realized the basic function of player: play, pause, stop. The volume adjustment is performed through the Android System itself. This development implicated the popular mobile terminal development technology.

REFERENCES

Books:
- Headfirst Android Development 1st Edition by Dawn Griffiths
- Android Programming for beginners 2nd Edition by John Horton
- Android App Development FD 3rd Edition by Michael Burton

Websites:
- https://www.javatpoint.com/android-tutorial
- https://fileinfo.com/filetypes/audio/
- https://www.w3schools.com/java/
- https://www.geeksforgeeks.org/android-tutorial/
- https://www.w3schools.com/xml/