

## Write-up

### Assignment No. B2

Aim: Media player in Android

Problem Statement: Design a mobile app for media player to load data from internal or external sources.

Objectives:

- ① To understand design and development in Android Studio
- ② To learn memory management in Android.

h/w & SW Requirements: Android Studio, Java, 64-bit OS - Windows/Fedora.

#### Theory:

Music player or media player is an application to play media like songs and videos on the device. Music player requires layout to be designed, songs to be listed and played, providing info about the songs played & other provisions like fast forward, skip/seek, play, pause, next/previous.

Building the music player will involve using Content Resolver class to retrieve facts on the device, MediaPlayer class to play audio & MediaController class to control playback. We will also use a service instance to play audio when user is not directly interacting with the app.

→ We have used the "read phone state" permission to access phone state to listen to events.

→ MediaPlayer implementations are done through various methods release(), onDestroy(), onStart(), onStop(), onCompletion, etc. are used.

→ Local device audio files are loaded from the device by using ContentResolver (create array list of files or Audio objects to store songs).

### → Test Cases

Name	Output	Result
1) Launch App	App must open	PASS
2) List Songs	list all mp3/ wav format songs from device storage	PASS
3) Audio Controls	Next, previous, fastforward, seek bar should work	PASS
4) Refresh List	Song List should be refreshed	PASS

Conclusion :- Successfully implemented the music player application in Android and tested it.

## Outputs



