

Assignment 6.

Title : Media Player App in Android.

Problem Statement :

Design a mobile app for media player to load data from internal or external storage.

Objective :

To understand the design & development to Android studio & to learn about memory management in android.

S/W & H/W Requirements :

- 1) Windows
- 2) JDK
- 3) Android Studio
- 6) Music (Audio files)
- 4) 8 GB RAM
- 5) Mobile Phone (Android)

Theory :

What is Android Studio ?

~~IDE~~ Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software & designed specifically for Android development. It is available for download on Windows, macOS & Linux based operating systems or as a subscription based in 2020.

What is media Player APP?

Media Player is an app to play media like songs and videos on the device it is intended to be used.

It requires layout to be designed, songs to be listed & played providing info about the song played & provisions of fast forward, play, pause etc.

MediaPlayer Class?

Android provides many ways to control playback of audio/video files & streams. One of this way is through a class called MediaPlayer. Android provides MediaPlayer class to access built-in mediaplayer services like playing audio/video etc. In order to use MediaPlayer we have to call a static method `create()` of this class.

```
MediaPlayer mediaPlayer = MediaPlayer.create(this, R.raw.song);
```

Once you have created the MediaPlayer object you can call methods to start or stop the music.

```
mediaPlayer.start();  
mediaPlayer.stop();
```

In order to start music from the beginning, you have to call `reset()` method.

```
MediaPlayer.reset();
```

Steps:

- 1) Create and configure a new Android Studio Project.
- 2) Query the device for songs from external storage.
- 3) For playing songs make another activity.
- 4) Display song Activity and play song selected.

Conclusion:

Implemented MediaPlayer app using various layouts in android available.