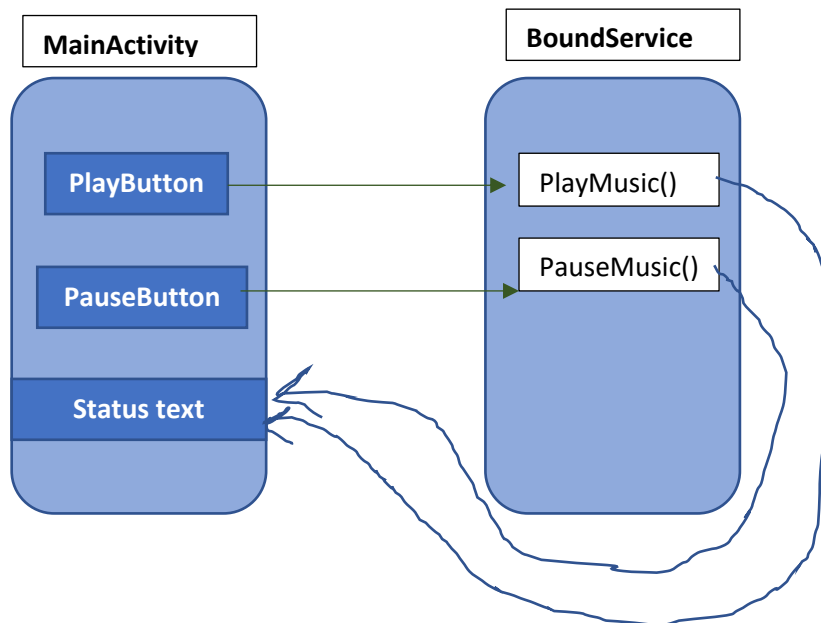# Exercise 9: Bound Services (Due by 8 August 2019)

This exercise will be a homework task, and in this you will practice bound services in Android. Following instructions are exactly similar to the notes and example code that I showed in class during the Bound services lecture. You can find the lecture notes and my example Android Studio Project on Blackboard:

Lecture Notes: Course Material →Course Documents → Lecture Notes→ Lecture 15 Bound Services

My Class example - Android Studio Project: Course Material → Course Documents → Android Studio Project →Lecture 15 Bound services.

Task:

Play/Pause an audio file using the bound services and update the current status of the task (Playing/Paused) on MainActivity.

This exercise comprises MainActivity and BoundServices class(create a Java class and extend Service).

- The functionality to play/pause the audio should reside within the Bound Services class, and you are required to trigger these two functionalities based on the button clicks from the mainActivity.
- The MainActivity should have two buttons (pause and play) and a TextView(to show the current status → whether the audio is playing or paused).
- Use BindService() command in MainActivity to interface your MainActivity with the BoundServices class and access the play and pause buttons inside the BoundServices class.
- Additionally, update the current status(playing/paused) of the audio on the TextView in MainActivity.

MainActivity:

- In OnCreate() use the bindService() to initiate the bind process with BoundServices class.
- Use ServiceConnection to extract the iBinder from BoundServices class.
- Update the status of the audio in the textview

BoundServices class:

- Create an iBinder, and return this in onBind()
- Include two methods Play and Pause, and here's where you need to start / pause the audio when the user clicks on the respective buttons in the MainActivity. You can use any audio file for this purpose.

You can follow my lecture notes and example code to accomplish this task (the above-mentioned steps are exactly the ones that I worked in class during Bound services lecture). *But, directly taking code blocks from the class example Android Studio project is not allowed.*