Develop a music player app

The app will have control to

- (1) to start a foreground service to start playing music (store some music files in appropriate resource directory)
- (2) stop playing the music
- (3) start another activity that checks if the Internet connection is available, if so it talks a music player server and downloads the music files and save in appropriate files (we have hosted a sample audio file at http://faculty.iiitd.ac.in/~mukulika/s1.mp3, download and save this audio file) that are private to the app
- (4) It will have broadcast receivers for the following actions BATTERY_LOW, POWER_DISCONNECTED, BATTERY_OKAY Design the UI of the app using a fragment.

In the demo, we will evaluate your assignment on the following aspects:

- (1) start the service to play a song: 2 marks
- (2) stop the service: 2 marks
- (3) check for network and download song: 3 marks (1 mark for checking network availability, 1 mark for connecting to the webserver, 1 mark for downloading)
- (4) saving the downloaded song into appropriate file: 1 mark
- (5) correctly implement all broadcast receivers: 2 marks
- (6) UI design using fragments: 2 marks
- (7) viva (all related concepts): 2 marks
- (8) app functions properly (doesn't crash): 1 mark

Bonus mark: If your app is able to play the downloaded file (1 mark)