**Tanzil Chowdhury**  
**Computer Science NEA**

**Analysis**

**Problem Definition and Stakeholders**

I will be making a music player app for my main client, Gayan a Year 13 student who spends a lot of time studying for his A Level exams and uses music to help him focus whilst studying. My stake holders will be other students in his classes who also listen to music.

Many students struggle to focus on their work due to a variety of reasons such as distractions from other sources or tinkering with their environment to get it just right. With more work than ever before students are expected to do, it can demand even more time from them. This can make it more difficult to even start the work as it just makes it seem worse and more tiring. Whereas, with music it makes it much easier to get started on the work and carry on doing it for a much longer time period as you get less fatigued from the work and it seems less daunting to start when you can listen to your favourite songs whilst doing so.

I intend on creating a Python desktop application which lets users listen to and create playlists, upload their own songs, track frequently played songs, search for songs by genre and artist, shuffle playlists as well as integrate it with other streaming services to listen to songs which you do not have downloaded. It will also have a GUI which aims to minimise the amount of interactions needed with the app one they are setup as the main goal is to get people working rather than maintain their attention.

**Use of computational methods**

A computer is needed for this problem as physical solutions often require a lot of interruption to change out songs and setup as well as often being very clunky and lacking portability. It is therefore much more efficient for students to be able to open an application on their computer and click one button to start playing their playlist than use any external machine.