- The uniqueness added to this project is speech recognition. Through a speech-to-text service, it can transcribe audio into words and use it as the source for personality insight. It was made with the intent to be used on politicians and public speakers as a means to know their values and know them better
- This service is intended towards three types of businesses. HR, therapists, and sales. By using it on potential employees, they can be judged better and the hiring the process will be improved to hire employees who are a better fit for the role. Therapists can know the personalities of their patients better and treat them accordingly. This will, in turn, result in better mental health of the patients. By studying about the personality of the client, salesmen and saleswomen can adjust their sales pitch accordingly. For example, a client low in agreeableness might need more objective reasons to buy a service or a product.
- Firstly, user will encounter Selection Interface where he/she has to choose any one of the option from "Check Personality", "Compare two people", "Check your interest", "Analyze via Audio" and "Your friend's personality type". On the basis of user's selection program moves forward accordingly.

If chosen "Check Personality", user will encounter Personality Trait Input Interface, where user needs to input any one of the ID from Twitter ID or Reddit ID, or both of them and then submit the information. The data will interact Twitter Service and Reddit Service accordingly and will get the desired data in return. All of this will be done through Tweepy (Twitter's API) and Praw (Reddit's API). Then the data extracted from the above mentioned services will move to Personality Insight by IBM Watson (IBM Watson's API) and it will read the incoming data, analyze it and will give the output accordingly. This data given by Personality Insight will move to the libraries namely Matplotlib, Seaborn and Pandas which will give the final output.

If chosen "Compare two people" user will encounter Personality Comparison Input Interface where user needs to input any one of the ID from Twitter ID or Reddit ID, or both of them of both the persons. The input data will interact Twitter Service and Reddit Service accordingly and will get the desired data in return for both the persons. All of this will be done through Tweepy (Twitter's API) and Praw (Reddit's API). Then the data extracted from the above mentioned services will move to Personality Insight by IBM Watson (IBM Watson's API) and it will read the incoming data, analyze it and will give the output accordingly. Both the person's data will be compared and then will move to the libraries namely Matplotlib, Seaborn and Pandas which will give the final output.

If chosen "Check your interest" user will encounter Checking Interest Input Interface where user needs to input his/her Stack Overflow ID according to the Image attached within the form and submit it. This input data will interact Stack Overflow Service will get the desired data in return. All of this will be done through StackID (Stack Overflow's API). Then the data extracted from the above mentioned service will move to Personality Insight by IBM Watson (IBM Watson's API) and it will read the incoming data, analyze it and will give the output accordingly. This output will move

to the libraries namely Matplotlib, Seaborn and Pandas which will give the final output.

If chosen "Analyze via Audio", user will encounter Analyzing via Audio Input Interface, where user needs to enter the path of the Audio file and then submit it. The data will interact Speech to Text Service and will get the desired data in return. All of this will be done through Speech to Text (IBM Watson's API). Then the data extracted from the above mentioned services will move to Personality Insight by IBM Watson (IBM Watson's API) and it will read the incoming data, analyze it and will give the output accordingly. This data given by Personality Insight will move to the libraries namely Matplotlib, Seaborn and Pandas which will give the final output.

If chosen "Your friend's personality type", user will encounter Your friend's personality type Input Interface, where user needs to input any one of the ID from Twitter ID or Reddit ID, or both of them and then submit the information. The data will interact Twitter Service and Reddit Service accordingly and will get the desired data in return. All of this will be done through Tweepy (Twitter's API) and Praw(Reddit's API). Then the data extracted from the above mentioned services will move to Personality Insight by IBM Watson (IBM Watson's API) and it will read the incoming data, analyze it and will give the output accordingly. Then it will give the final output in a text form and also in graphical form analyzed by the libraries namely Matplotlib, Seaborn and Pandas.

• The scope of the project. The project aims to deliver a functional graphic interface with five different features, namely, checking personality, compare the personality of two people, checking specific interests in programming, analysing personality via audio, and categorising personality type. 'Checking personality' is to be done by 30th June. Using tweepy by Twitter an PRAW by Reddit, the words from tweets and reddit comments will be used as the source for analysing personality through Personality Insight API by IBM Watson. The result will be presented in a visual form using seaborn, matplotlib, and pandas libraries.

Using the same modules as above, 'compare the personality of two people' is to be done by 5th of July. It uses a simple mathematical algorithm to check the difference between the personalities of two people and show it visually in a graph.

'Checking specific interests in programming' is to be done by 15th of July. Using the StackID API by stackoverflow, extract data from the questions asked by the user. Use the data to make a visual graph of the interests of the user.

'Analysing personality via audio' is to be done using the SpeechToText API by IBM Watson, the data extracted from the audio to be used as the source for analysing personality. To be completed by 15th of July.

'Categorising personality type' is to be done by 19th July. Thoroughly research the big five personality traits and write a report for each possible personality trait. Categorise people by checking if their percentile is greater than 50%.

All of the aforementioned features are to be completed and added to a graphical interface using tkinter library. Every feature will have a different window and will be linked together on the main interface. To be completed on or before 21 July.