Emotion Detection Analysis

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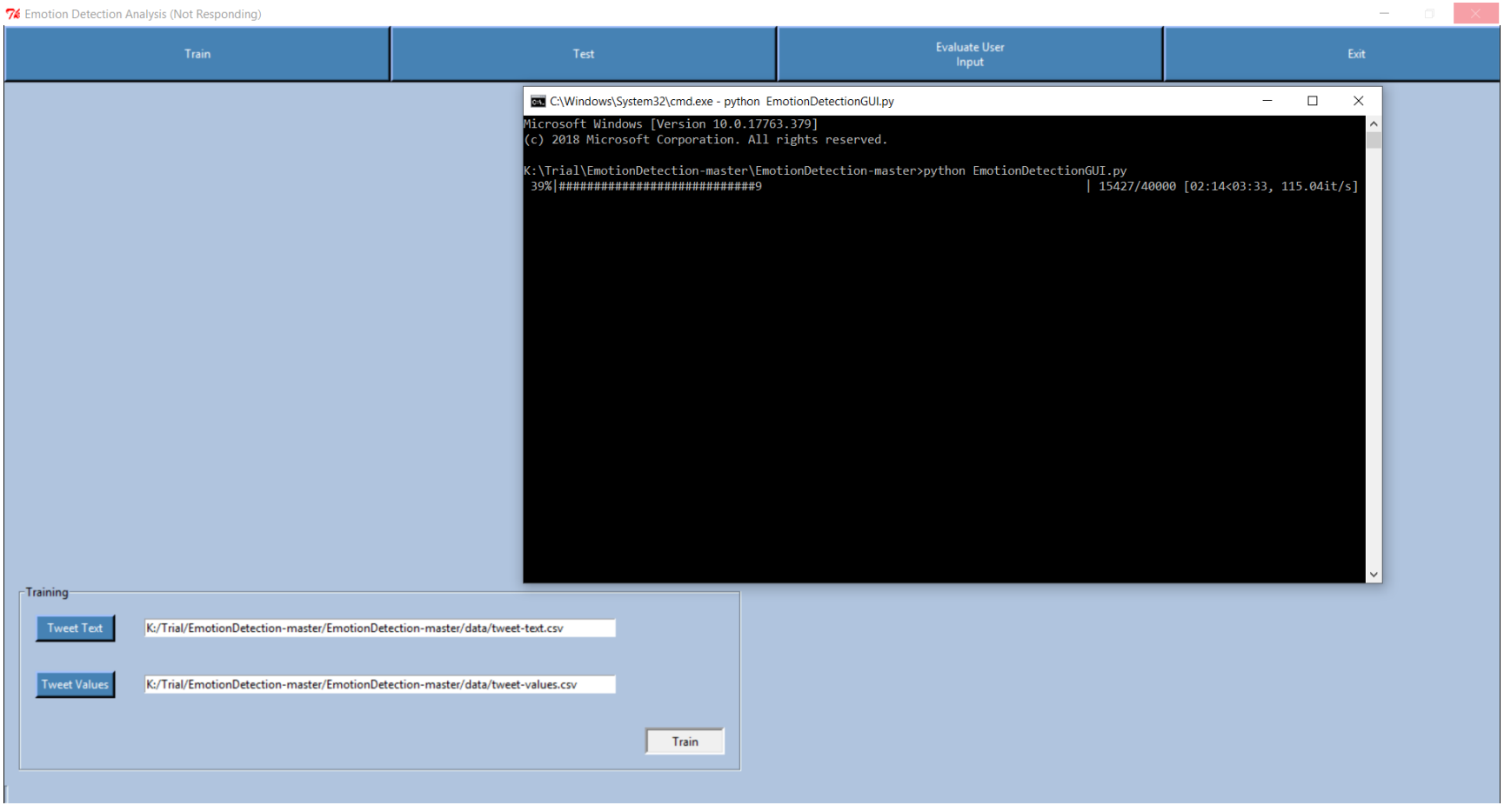
Overview

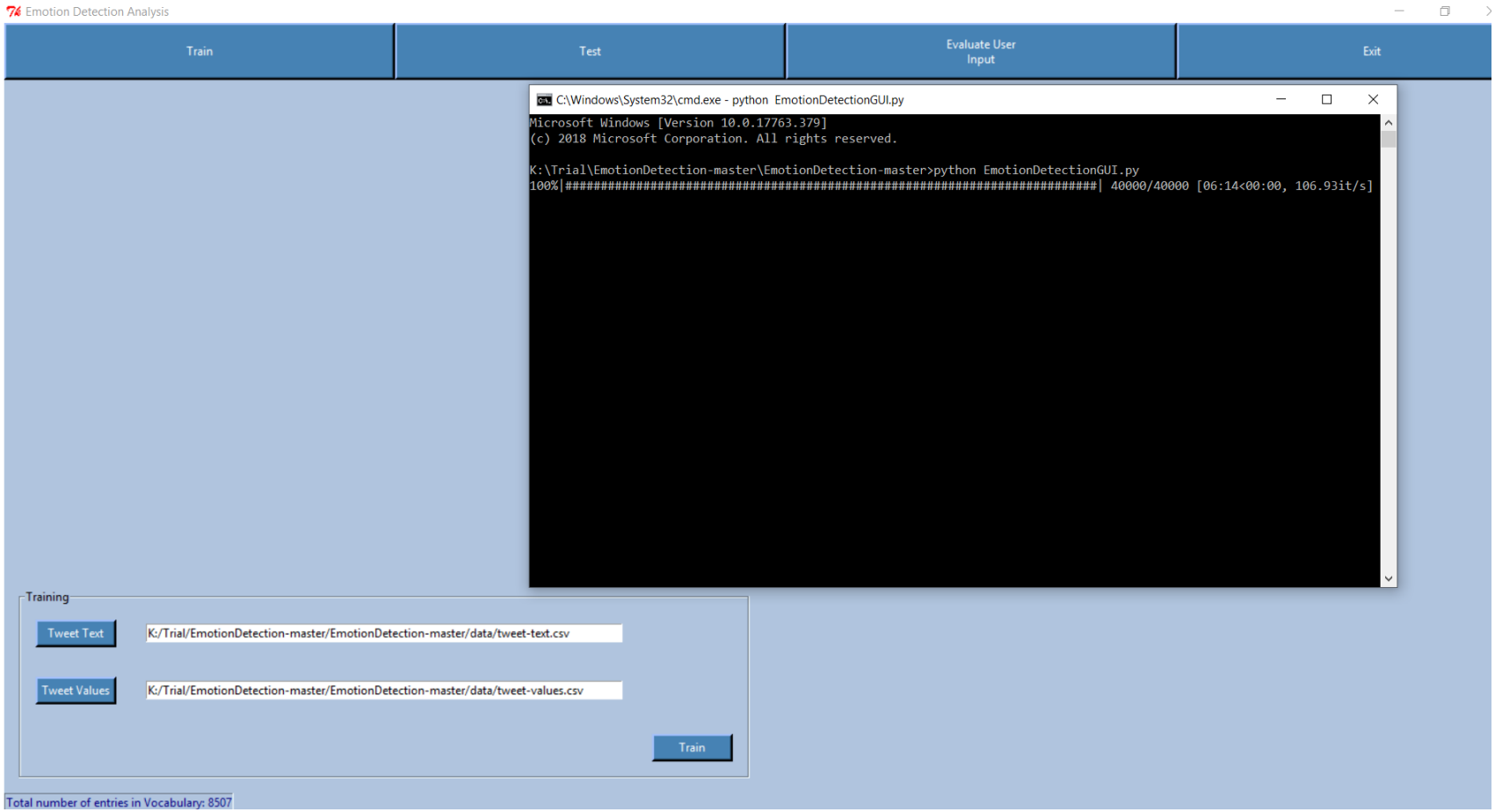
Interface Features

- Buttons for Train, Test, Evaluate User Input, and Exit
- Buttons for uploading excel sheets (both train and test data)
- Status bar to show current status of application (e.g. Evaluation Complete)
- Bar chart to visualise emotion percentage

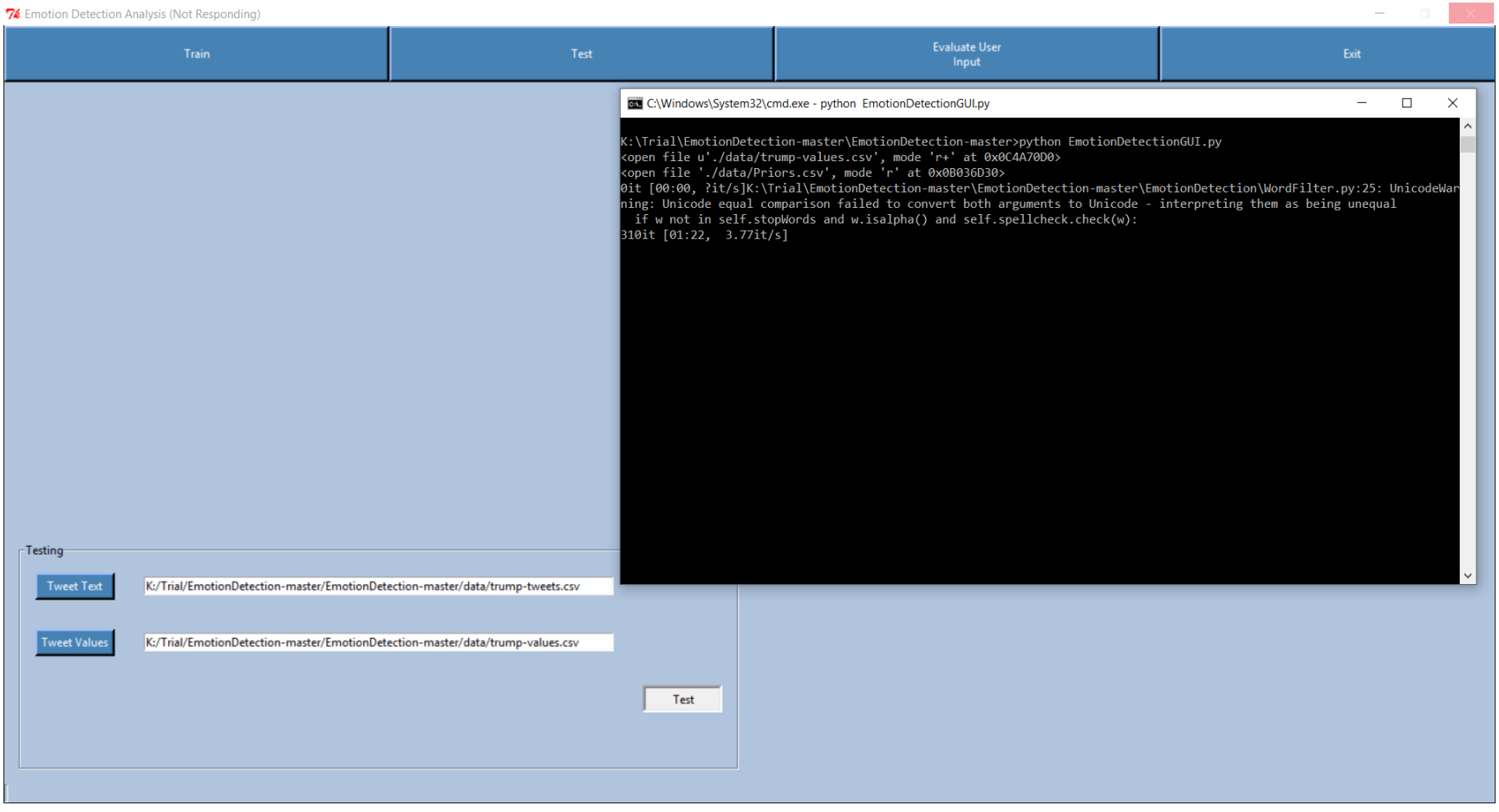
Training Interface



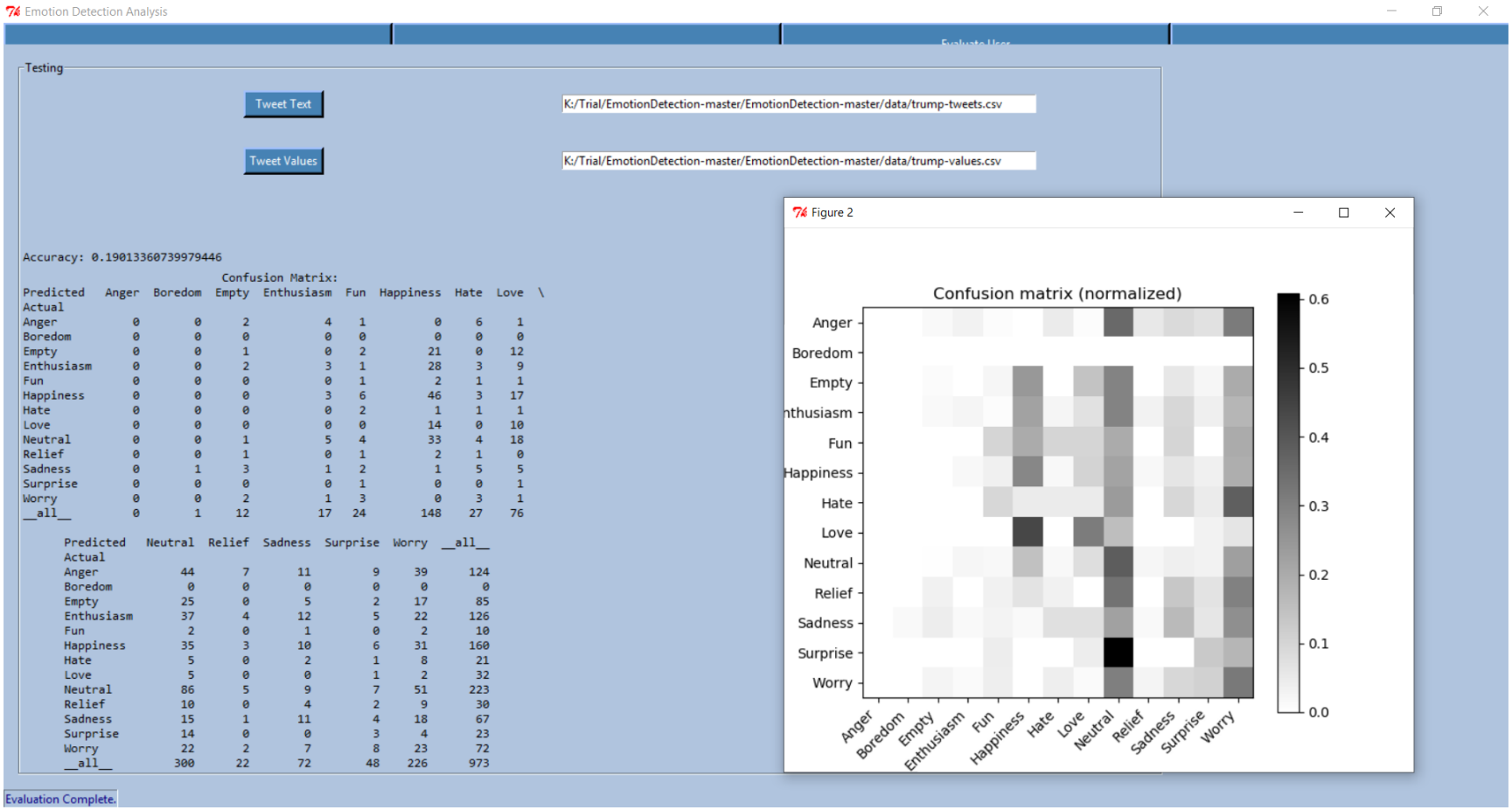
Training Interface - Completed



Testing Interface



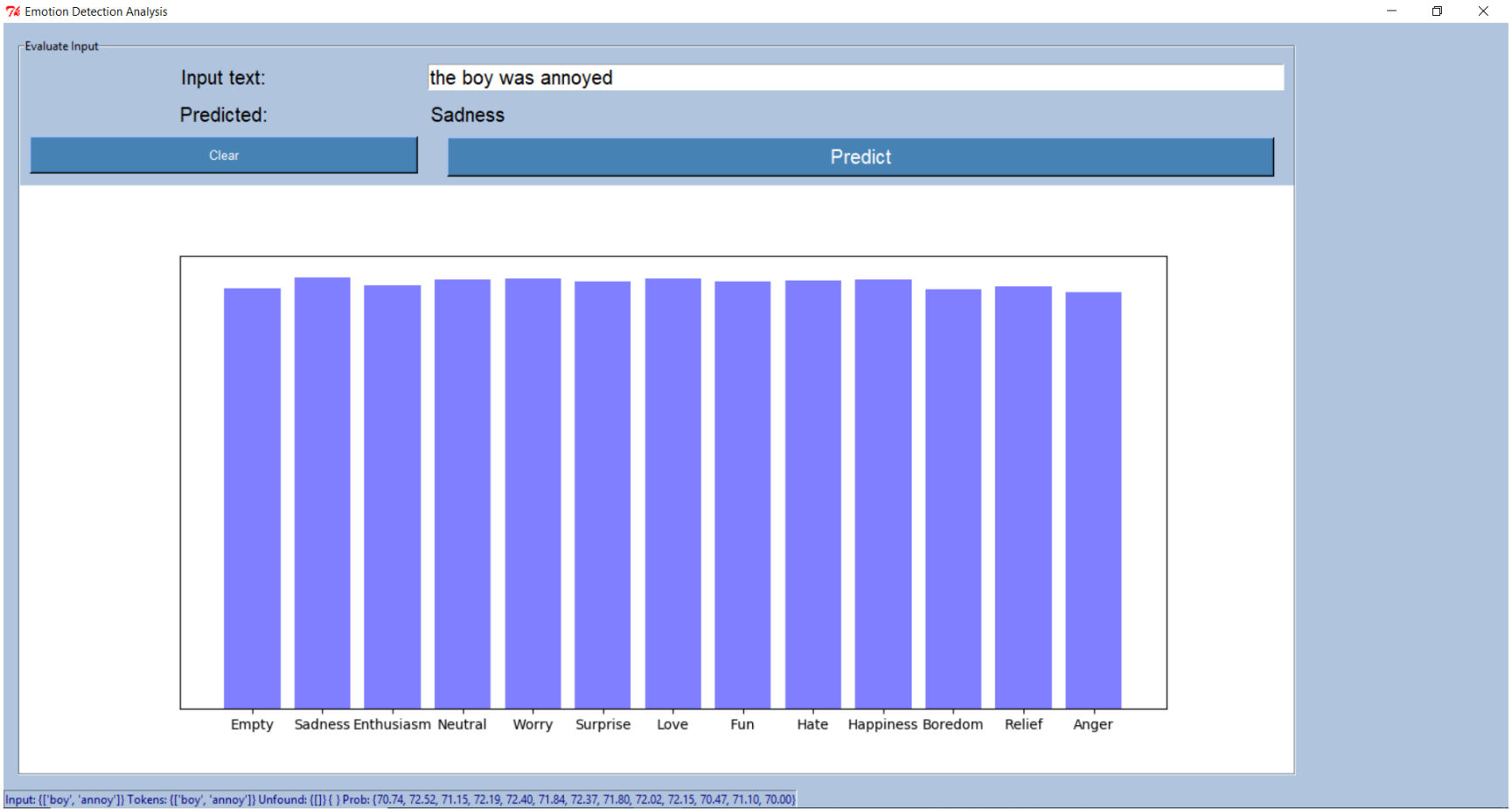
Testing Interface - Completed



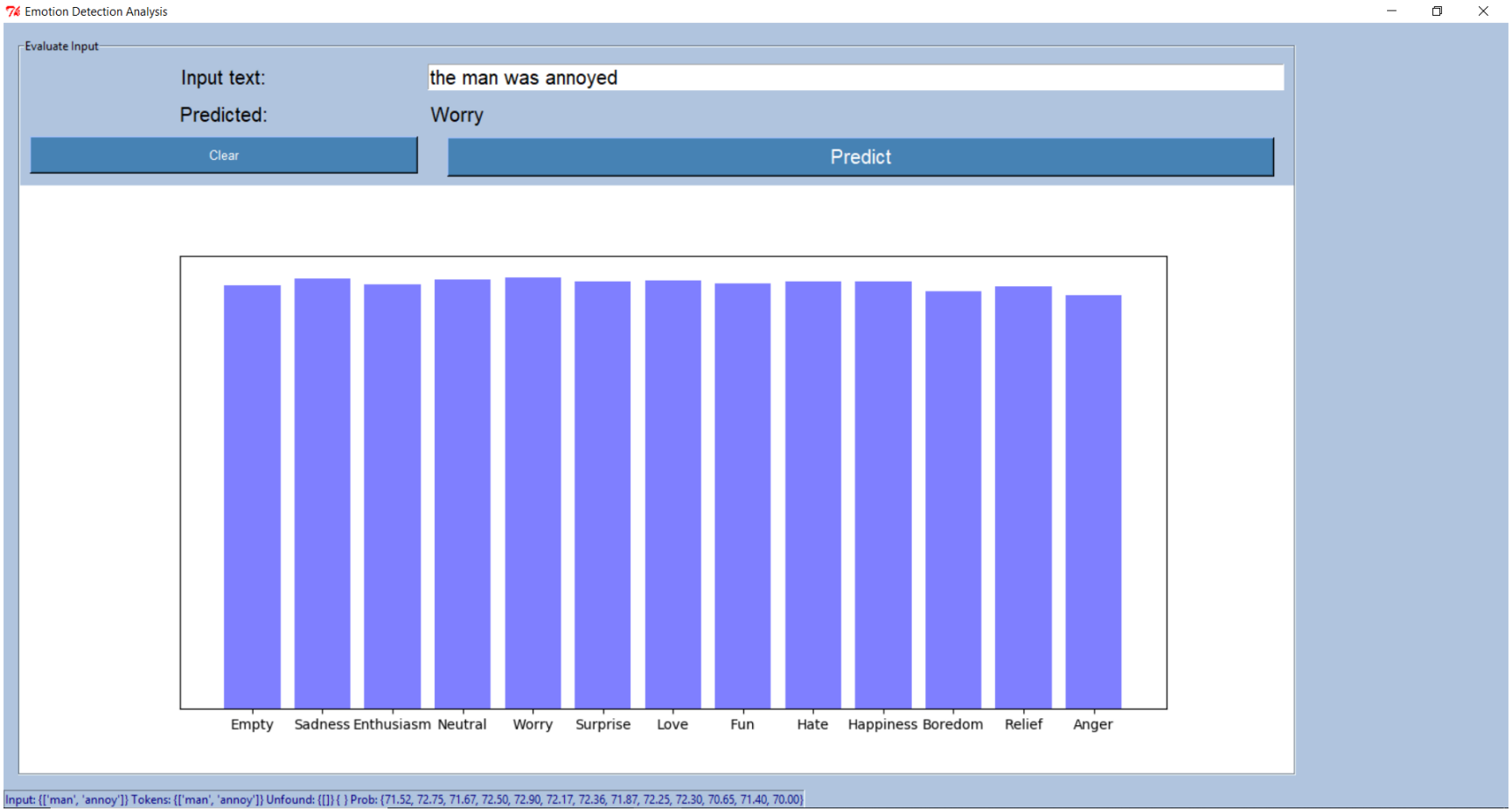
Testing Analysis

- Original experiment had an accuracy of more than 25%. However, our experiment accuracy was just 19%.
- The emotion identified as Anger was often predicted to be Neutral
- Whereas most Neutral statements were predicted to be the emotion Worry
- Overall, most of the identified emotions were more likely to be predicted to be Neutral

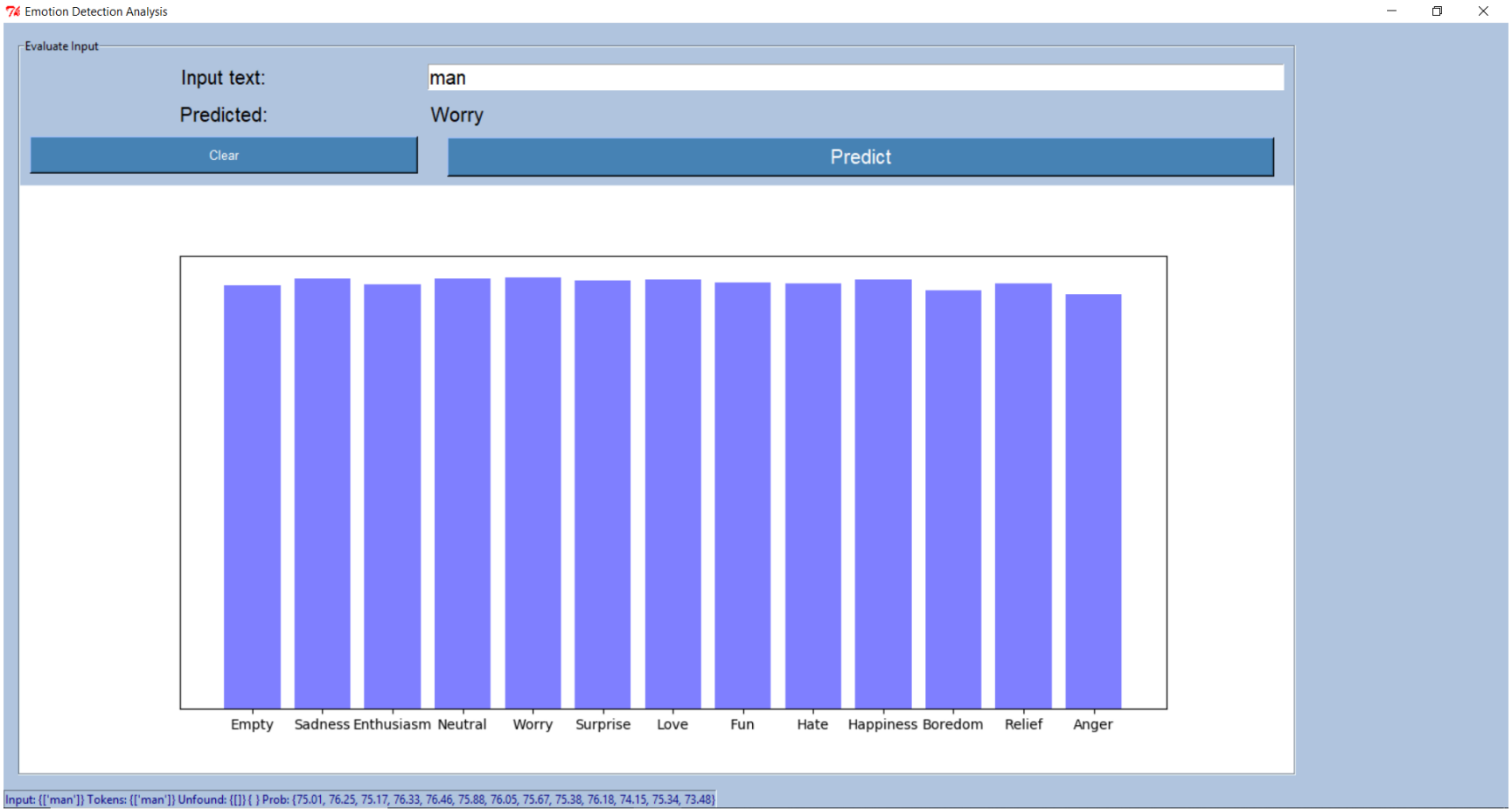
Data Visualisation 1



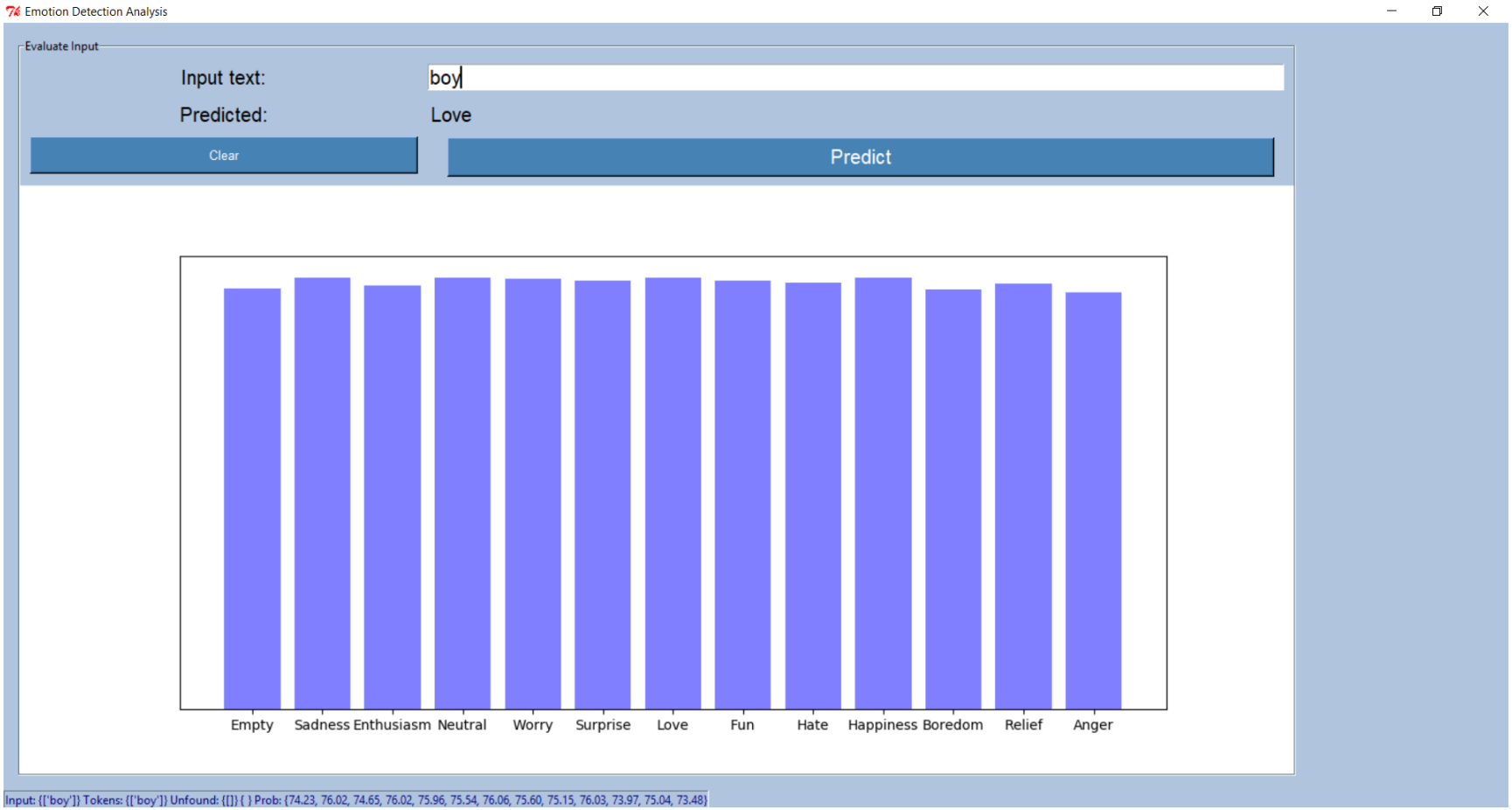
Data Visualisation 2



Data Visualisation 3



Data Visualisation 4



Data Visualisation Analysis

- From the data visualisations, it can be noticed that words that should be neutral, such as boy or man, were predicted to have emotion
- If these words were to be used with a word that should contain emotion, such as "annoy", it is difficult to identify which word lead to the prediction
- As such, to improve the accuracy of this Emotion Detection application, words such as boy or man that do not contain emotion should be classified as Neutral. This could lead to a better prediction of emotions

Thank You