## REAL-TIME COMMUNICATION SYSTEM FOR THE SPECIALLY ABLED LIST OF PROBLEM STATEMENTS

- 1. The end user needs an active internet connection so that he can use the translation software without any hassle.
- 2. <u>The user requires familiarity with the target sign language</u> (ASL/BSL/Australian Sign Language) in order to <u>facilitate</u> communication with his/her partner.
- 3. The disabled user needs an integrated webcam so that he/she can capture an image of the sign language.
- 4. The deaf/dumb user requires a way to upload an image from the local file system to obtain the corresponding voice output.
- 5. The normal user requires a web interface with a text box to enter the input to betranslated.
- 6. The client needs a way to detect the edges in an image so that the image can be analyzed further.

- 7. The customer needs sufficient knowledge of supervised machine learning techniques so that he can understand how the various signs are grouped.
- 8. The disabled client requires an image viewing software in order to display the sign language result.
- 9. The end user needs a <u>text-to-speech (TTS) conversion tool</u> so that <u>the text output can be converted to speech.</u>
- 10. The normal user needs a speaker device so that the translated output can be played.