**Abstract**

In the past few decades, the world has become a horrible place to live for the visually impaired people. Due to growing population, technology and the increasing traffic, it has become very difficult for visually impaired people to commute in their daily life. The daily life of such people goes on worsening day by day.

This is a very simple android application which helps blind as well as visually impaired people in carrying out their everyday activities. No external equipment or extra fitting is required for the proper working of the project. It’s a very cost effective and easy way to live and use for visually impaired people.

**Introduction**

The “Visual assistant chatbot” is a very easy and interactive application which is very easy to use and also doesn’t require any external or extra equipment, other than a proper internet connection. It is voice activated and also helps the user in finding out what all is included in the view range of the user. It also responds to various queries of the user. It uses Machine Learning algorithms to identify the various objects that are detected in the image that is captured in the user’s smartphone. It also uses Google SDKs for text-to-speech and speech-to-text conversion. As the application is voice command based, it is very easy for the visually impaired users to identify and get alerted about the coming danger in their path.

This chatbot can change the lifestyle of the visually impaired people in a positive way. It can help the users to identify various surrounding objects and also to find specific objects in the viewing range of the camera. This chatbot also answer the various queries a user may ask about any image present in the smartphone, i.e. it uses a Visual Question Answering model. It also gives the summary of the contents of an input image. All these activities are done by the chatbot application without using any external equipment, just a smartphone with internet connection is sufficient for its proper working.

**Conclusion**

The “Visual assistant chatbot” application provides better accuracy in terms of VQA (Visual Question Answering) model. Also, it is a very cost effective method which yields better results using minimum resources.