Education for Dyslexic students using Virtual Reality

**Group No.:** 10

**Team members :** Bhavik Nahar, Rakif Momin, Rishab Parmar, Shubham Pawar

**Place :** VIIT, Pune

**Sponsored by :** Centre for Development of Advanced Computing (C-DAC), Pune

**Guide :** Prof. Mr. S.B.Tatale

**Objective/Aim**

The system, “Education for Dyslexic students using Virtual Reality”, is a web based application which gives a platform for people suffering with dyslexia where they could learn core fundamentals using visual representation. This platform can be accessed anytime anywhere by the concerned students.

**Technical Details**

This system will consist of a web application which will present the UI to the user. All the queries given by the human expert will be parsed by the Natural Language Processing (NLP) engine which will be processed on the server and the result of the query will be rendered on the screen. The functionalities such as avatar interaction, dynamic scene generation, quizzes and test will be provided in the UI developed in A-Frame virtual reality framework and all the backend processing will be carried out in the Django framework. The NLP part will be performed using the ‘NLTK’ library which will be required for processing the user query and perform operations like tokenization, removal of stop words, stemming and POS-Tagging.

**Innovativeness & Usefulness**

Some of the features and benefits provided by our system are –

* Easy to operate
* Interactive way of learning
* Independent learning
* Portability
* Free to use & easily accessible