

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“Jnana Sangama”, Belagavi-590018



## Review REPORT

ON

### **V App: An Android Voice Guided System for Visually Impaired Students**

(CEC/CS/2019/P02)

*Submitted By*

Akshay V Bhat	4CB16CS008
Namratha Bhandary	4CB16CS046
Pradeep Kamath N	4CB16CS063
Prasanna Shanbhag	4CB16CS066

Under The Guidance of

**Annapurna M**  
Assistant Professor



**Department of Computer Science and Engineering**

Canara Engineering College Benjanapadavu

Bantwal -574219

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## **ABSTRACT**

Smart phone technology and mobile applications have become an indispensable part of our daily life. Many people living with blindness or a visual impairment find life easier due to these apps. V app is an Android based application that benefits from the commercially available technology to help the visually impaired people improve their day-to-day activities. A single screen tap in this app is able to serve as a virtual eye by providing a sense of seeing to the blind person by audibly communicating with them. Moreover, the communication between smart phone and its user is made through a text-to-speech software module. According to tests, this android application proves to be efficient, portable, small, cost-effective and does not require many hours of training. This app is specially designed for Visually Challenged Students who are depending on any third person for help. The basic workflow of the system is, the system speaks out any new update on trends or notes or assignments etc. and the user will be able to download them by voice commands. Many blind people's life becomes easier because of these apps being able to read things that are only in visual print.

## **OBJECTIVES**

- V App is specially designed for Visually Challenged Students who are depending on any third person for help.
- The system speaks out any new update on trends or notes or assignments etc. and the user will be able to download them by voice commands.

## **OUTCOMES**

- User interaction is very easy for visually challenged students.
- Saves time for the users to get all notes, video update, notice, answer at one place.

# ARCHITECTURE

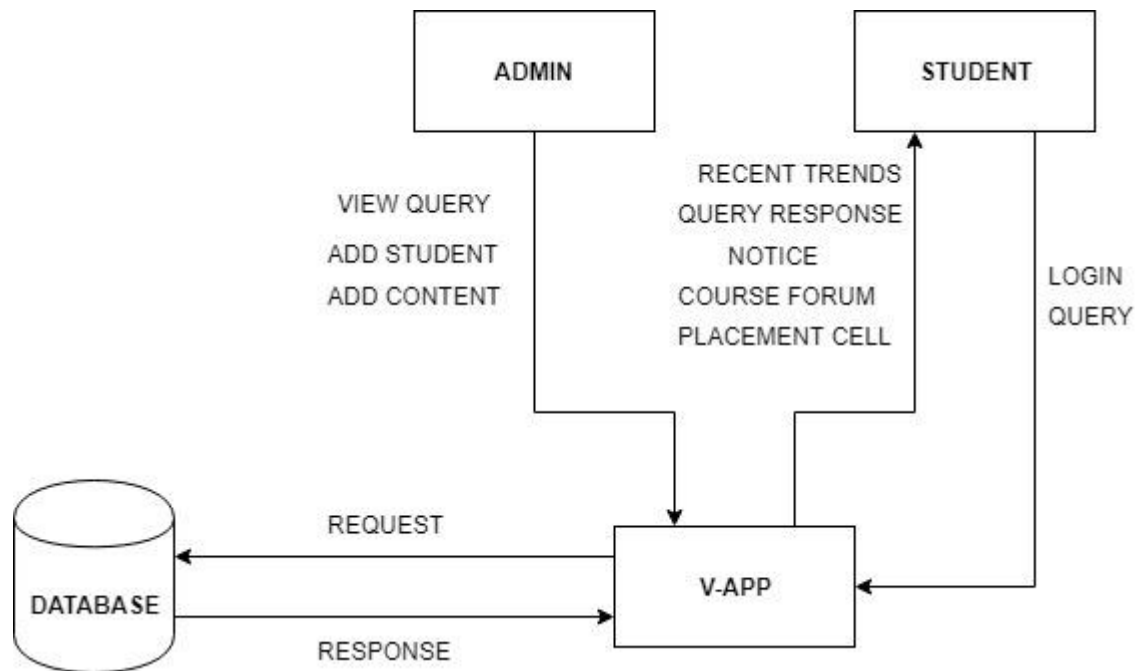


Fig 1:Architectural design of V App.

Architectural design is a graphical representation of a set of concepts that are part of architecture including the principles, elements and components.

Here the student will be giving the input in the form of speech, which is then converted into text. Smartphone will have a pre-installed application which will convert speech to text. Once the student logs in he can send queries to the app. In response he will receive answers to the queries. The student can also obtain details about Recent Trends, Notices, Course Forums and Placement Activities.

The admin will have special rights to add student details, Course contents. He can also view the queries sent by the students and give suitable responses to them.

All the details entered by both admin and students will be stored in the database and can be retrieved when required.

## METHODOLOGY

The system comprises of 2 major modules with their sub-modules as follows:

### 1. Admin

- a. **Add Students:** New student details will be added by the admin itself.
- b. **Add Contents:** Admin can add new content with its details.
- c. **View Query:** All the Queries received from the registered students will be answered by admin itself.

### 2. Student

- a. **Login:** A unique style voice based login is used where a student speaks his/her Login ID and Password to get authenticated.
- b. **Recent Trends:** Once student logs in successfully, Top 10 Updates from any sections will be read out loud.
- c. **Notice:** Option of (Exam Cell, Library, Scholarship), Details such as Topic, Description, File, Date-Time. Student can add a Comment by voice.
- d. **Course Forum:** Selection of Course, Branch, Year and Batch in that selection of Topics and then Details such as Description, Multi Links, and Multi File will be read out loud. Student can add a Comment by voice.
- e. **Placement Cell:** Selection of Course, Branch, Year and Batch in that selection of Topics and then Details such as Description, Date-Time, and Link will be read out loud.
- f. **Query:** Students can Send Query or View Answers

## Review Demo

### Grade Allocation:

USN	Name	Grade
4CB16CS008	Akshay V Bhat	
4CB16CS046	Namratha Bhandary	
4CB16CS063	Pradeep Kamath N	
4CB16CS066	Prasanna Shanbhag	

Comment by Examiner Name with Signature :	Comment by Examiner Name with Signature: