

Review on Intelligent System for College

Ms. Snehal B. Gunjal¹, Ms. Dipti D. Ghorpade², Ms. Sonali E. Jadhav³, Ms. Sonali T. Bogir⁴,
Ms. Prachi S. Tambe⁵

^{1,2,3,4}Department of Computer Engineering SVIT College, Chincholi, Nashik, India (M.S.)

⁵Assistant Professor, Dept. of Computer Engineering, SVIT College, Chincholi, Nashik, India(M.S.)

Abstract - Intelligent voice assistant are taking over numerous areas to reinforce the user's solace and improve the extent of the gadgets utilized. They're being realized in contraptions running from mobiles to autonomous devices which basically house the assistant to be consolidated with splendid devices. This may be obviously observed with the exponential development with the effect it's had on society and consistently developing applications they're going to be utilized for. The venture displayed during this paper intends to coordinate one of the documented voice assistant to modernize the traditional strategies for a university framework. The intelligent assistant gets the help for the teacher, students, guests approving the beginning of the way toward finding the goal. This is often often trailed by the contribution from the students, teacher, guests for the data of faculty database present on a server. This aides find the actual information, reducing the time and exertion required by the user.

Key Words: Text to speech, Chatbot, Smart System, Artificial Intelligence.

1. INTRODUCTION

Virtual assistant is difficult to answering basic user questions. Further growth and integration of speech recognition improves learning algorithms for natural learning, Alexa performs undertakings given thereto, with the help of its range of abilities, which comprises of tons of aptitudes to reply upon each errand submitted thereto. Every ability has its very own conjuring expression, which is employed by Alexa, to delineate errand thereto specific expertise. The power proceeds to execute the undertaking hooked in to its example expressions, by arriving at the endpoint on a server, which may be facilitated on Amazon Web Services (AWS) Lambda, or on a close-by server within the client's system[3].

This endeavor manhandles this particular a piece of Alexa, by making an ability , which when sanctioned, finds a workable pace based database of an interest record housed on a near to server, which is encouraged on a Raspberry Pi. The going to is finished through a tunneling organization .Ngrok helps by making a secure passage and giving a URL of the neighborhood server to the Alexa aptitude, so on keep refreshing the database[2].

It is helpful because,

- It is easily find out the any department, classroom, or labs.
- Easy to search the way to going or reach any department.
- It is not difficult to find any information related to the college campus.

2. EASE OF USE

A. Purpose

The purpose is to design software for college campus easy to find out any place . This is very easily find out the basic information related to the college campus.

B. Proposed System

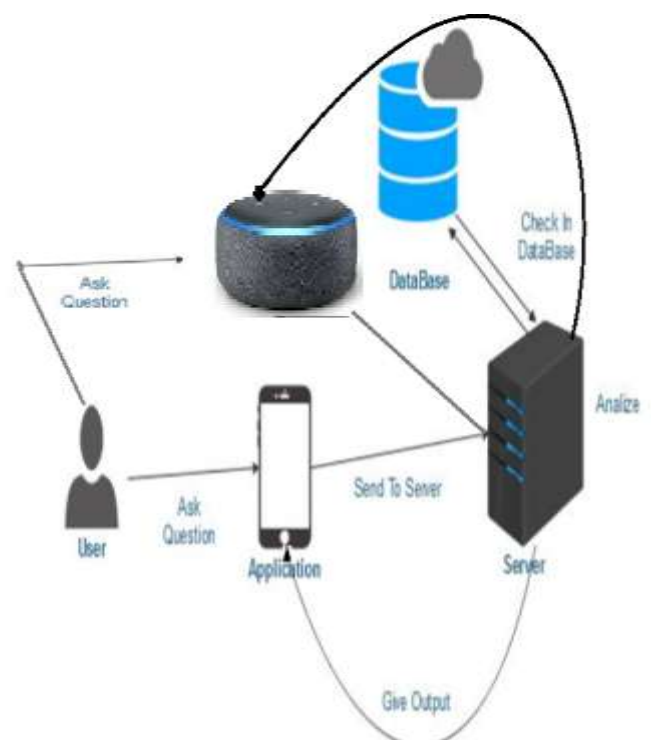


Fig.1. Intelligent System Architecture.

In this architecture shows, How does the Intelligent System work.

- **Alexa:**

Alexa is intelligent voice assistant and it is open source. It is listening the questions from user and analyzing in database through server and then responding to the user suppose alexa not properly listening the questions from user then respond to the user ask again.

- **Application:**

In application student, staff, guest sections are available. This is used for the navigation and information also.

- **User:**

User ask the college campus information related questions to the alexa or application.

- **Database:**

In database stored the overall information about the college campus.

- **f2: Check Database.**

C. Outputs to the System

Output = o1, o2 where,

- **o1: Get Navigation's.**

- **o2: Answers.**

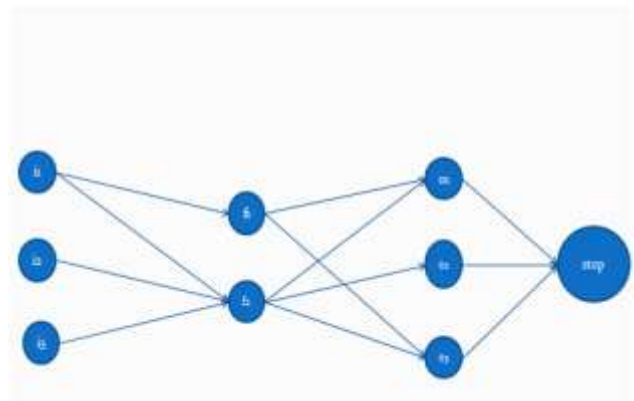


Fig.2. Mathematical Model

3. LITERATURE SURVEY

The thought proposed by Subhadeep Dey et al. [4] intends to utilize cell phones provided with intuitive voice reaction frameworks to see the understudy's quality utilizing discourse biometry. The framework checks the speaker utilizing MFCC highlights and I-vector-based displaying.

The thought set forward by J. Dhalia Sweetlin et al. [5] uses the staff's phones for the limit and invigorating of the cooperation database. the apparatus on the phone keeps up the database and gives survey access to the educators upon endorsement. The machine contains a talk recognizer which changes over the said talk to substance and methods the support.

4. MATHEMATICAL MODEL

$S = (\text{Input, Function, Output})$ Where,

S: System.

A. Inputs to the System

Inputs = i_1, i_2, i_3 where,

- i_1 : College and Department information.

- i_2 : Directions.

- i_3 : Questions.

B. Functions to the System

Functions = f_1, f_2 where,

- f_1 : Artificial Intelligence.

5. ALGORITHM

1) NLP (Natural Language Processing).

2) Naive Baye's.

6. FLOWCHART

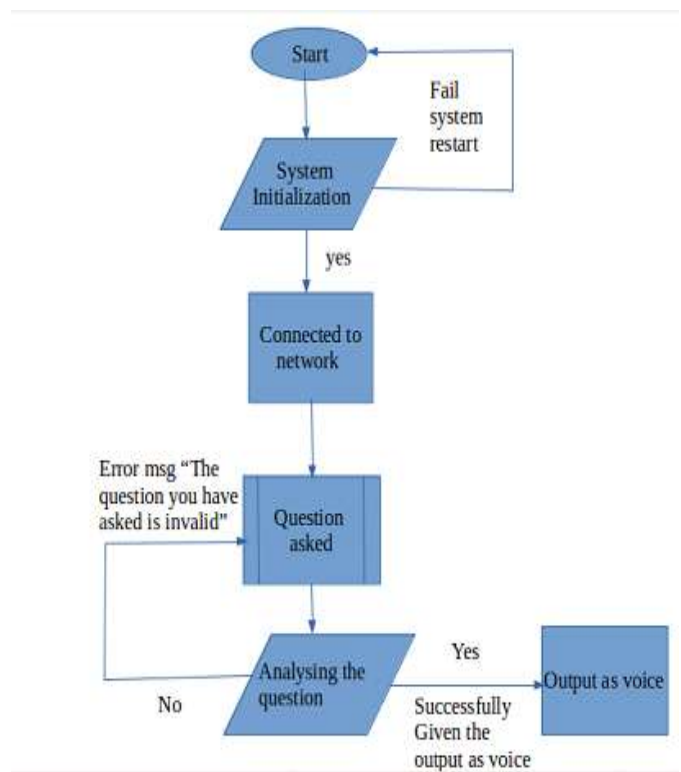


Fig. 3. flowchart of proposed system

7. CONCLUSION

In college campus, visitors face many problems as we have mentioned earlier. So, we believe that this is the best way to find a solution for our campus visitor questions and beneficial for unknown visitors to find the information about college campus. In this application, also use for the college campus related information easily find.

ACKNOWLEDGEMENT

We are thankful to Dr. Y. R. Kharde, principal, SVIT for providing useful resources for the preparation of this project work & we also grateful to thank our project guide Ms. Prachi S. Tambe, Assistant Professor of Computer Engineering department for the guidance and constructive suggestions that help us in the preparation of this project. We also thankful to the all staff members of Computer Engg Department, SVIT Nashik.

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