Virtual Assistant For College

Guide: Kavitha K V
Assistant Professor
CSE

Presented By:
Athira S Pillai(215)
Disha Dinesh Majithia(221)

Introduction

- A chatbot is an instant messaging account that is able to provide services using instant messaging frameworks with the aim of providing conversational services to users in an efficient manner.
- Businesses need such systems to get rid of routine tasks and simultaneous processing of multiple requests from users.

Phase I Recap

Problem Statement

Whenever faced with unchartered territories humans have a tendency to get anxious and it is but natural- and even more so in the case of students who are about to join a new course. They are always filled with endless queries and mostly all of them are similar across people. Rather than flooding a single person with all those and to answer them over and over again, it is apt to segregate usual common queries and their solutions at a single place which is easily accessible by all.

Presently, the college has no provision for any such system and therefore our suggestion to create one to simplify the redundant nature of work and utilise manpower efficiently. The need for a virtual assistant is imminent in this scenario.

Design

Processes input text Selects the most accurate results

SERVER INTERFACE (WEB **APPLICATION)**

Input is accepted Output displayed

Modules

- Network Connectivity Module
 - Manages network connectivity
 - Helps bot to connect over network and work
- Database Connectivity Module
 - Handles database connection
 - Handles Querying
 - Helps in keyword match
 - Helps in pattern match

SERVER

- INPUT: Text input provided through the interface
- OUTPUT :The most accurate results provided by the chatbot
- PROCESSING
 - Bi-Gram word similarity measurement
 - Compare input to database
 - Perform keyword match

Algorithm

Semantic similarity between two sentences is carried out as below,

- Each sentence is divided into a list of tokens
- The divided sentence can implement bigram set
- After getting the divided sentence, it is counted
- The values are used in an equation
- Choose the pattern with the highest sentence similarity measure

Action Plan

Conclusion

- Chatbots are capable of accessing a broad array of information which can be made use of in the education domain to provide students with the necessary information.
- Help students to fetch information like availability of services, college environment, updates regarding activities happening inside the campus and other academic information
- Our chatbot has a general processing structure to adapt to the variable environment.
- Makes use of sentence similarity algorithm

References

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THANKYOU