

Chatbot for Admission Queries

MINOR PROJECT SYNOPSIS

BACHELOR OF TECHNOLOGY

Information Technology

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1 Introduction

A **Chatbot** is a conversational agent that interacts with users in a certain domain or on a certain topic with natural language sentences. Using this chatbot, in our project we are working on building a conversational chatbot which would provide answers to prospective students and their parents who want to seek admission in this college.

- Chatbot work with a knowledge base and your institutional documentation to provide accurate information. They provide automated responses to prospective student queries and help them carry out basic tasks on the college website.
- Applicants can communicate with a chatbot on your site to get updates on their admission status.
- Chatbots can communicate if the application is in review, if they're missing important documents, or if there is a decision on their application.

2 Objectives

The key objectives of Chatbot for Admission Queries are:

1. **Connect with potential applicants 24/7.** This capture helps admissions get them into marketing programs to continue to grow their interest in the institution—at all hours of the day, without interaction from admissions.
2. **Allow applicants to check their admission status.** Applicants can communicate with a chatbot on your site to get updates on their admission status.
3. **Answer questions about financial queries.** Finances are another source of major stress for college students. .
4. **Schedule campus visits.** Chatbots can also take care of the logistics behind scheduling campus visits without the admissions team.

3 Facilities required for Admission chatbot

The Technologies required for developing a chatbot consist of front-end and back-end frameworks and libraries. The front end is the user interface with which the user interacts when he enters the site, while back-end act as controller for all the main things happening in the project like appropriate responses, training of chatbot, etc

3.1 Frontend

- The frontend of a software program or website is everything with which the user interacts. From a user standpoint, the frontend is synonymous with the user interface. Languages used for frontend are Javascript and slight bit of html and css, which basically does all the interface related parts and rest is all assured by the backend.

3.2 Backend

- Flask is used for developing web applications using python, implemented on Werkzeug and Jinja2. Flask is a lightweight Web Server Gateway Interface WSGI web application framework.
- Torch provides a flexible N-dimensional array or Tensor, which supports basic routines for indexing, slicing, transposing, type-casting, resizing, sharing storage and cloning.

4 Methodology

Chatbot work with a knowledge base and your institutional documentation to provide accurate information. Tackling the doubts of the student, collecting the correct information, providing with up-to-date data of the college: such as Fees structure, college facilities and faculty information, etc.

Based on the question or query given to them, they generate a response that is indicative of how intelligent they can be. But often their responses are grammatically incorrect. To make them accurate, is a very difficult task.

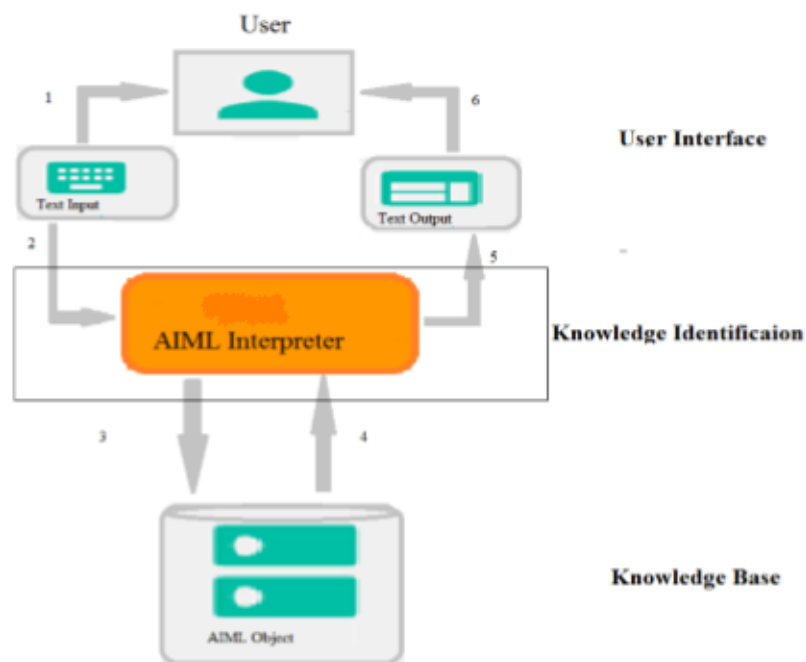


Figure-1. Architecture of typing based chatbot.

5 Feasibility Study

Chatbots are made to be the alternate for support centre or inquiries for specific jobs. In the hope to utilize the logical and thinking progress of humans in more regions where necessary. A chatbot is an automated program that interacts with customers as a human would and costs little to nothing to engage with.

Admission Query Chatbot is developed, so that it can attend to all the queries arise at the moment of Admission in the minds of a student, available 24/7 hrs. This makes its implementation appealing to the institution that may or may not have the manpower or financial resources to keep employee or working staff working around the clock.

6 References

1. Deep Learning Based Chatbot Models, arXiv:1908.08835 [cs.CL], Richard Csaky
2. Takyar, Akash “EVERYTHING AROUND AI CHATBOTS –CHALLENGESAND OPPORTUNITIES” ,LeewayHertz,
www.leewayhertz.com
3. How to make a chatbot in python
www.edureka.com
4. Anjana Tiha(April 26, 2019), Intelligent Chatbot using Deep Learning,[Paper]
Available: www.researchgate.net
5. Editorial Team “5 Enterprise Challenges Best Solved by Chatbots”, insideBIGDATA, 2 April 2018
www.insidebigdata.com