

ORACLE OF TAK-UNIBOT

Mini Project Report

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ORACLE OF TAK-UNIBOT

“Streamlining your Admission Queries”

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ABSTRACT

A chatbot, usually referred to as a chatterbot, attempts to have a conversation with a person. When a question is posed, the system has the ability to detect sentences and select the proper answer. The response principle is the matching of the user's input phrase. The current technical project involves building a professional system for a college help desk employing an android-based chatbot, artificial intelligence technology, and virtual assistance (human-machine communication). This project aims to develop a UNIVERSITY enquiry Chabot that answers any queries post by students like college details, course-related questions, location of the college, fee structure etc.

The **ORACLE OF TAK-UNIBOT** project is built using machine learning algorithms that analyse user's queries and understand the user's message. This System is a web application that provides answers to the query. Any individual just has to query through the bot. Chatbot systems have become increasingly popular for automating interactions with users and providing information in various domains, including college enquiries. The answers are appropriate to what the user queries. The User can query any college-related activities through the system. The user does not have to personally go to the college for enquiry. The System analyses the question and then answers to the user. The user can also give their suggestions through the suggestion box. The system replies using an effective Graphical User Interface which implies that as if a real person is talking to the user.

REQUIREMENTS

Software Requirements:

Operating System	Windows 11 Pro
Front End	HTML, CSS, JavaScript ,Bootstrap
Back End	Python
Program	Python
IDE	PyCharm
Framework	Flask
Database	MySQL
Server	Local Server
System type	64-bit operating system

Hardware Requirements:

System	PC/Laptop
Processor	Intel Core i3 / Intel Core i7
RAM	8.00 GB / 16.00 GB
Hard disk	SSD
Keyboard	
Mouse	
Speaker	
Graphics card	

INTRODUCTION

About the Project

The ORACLE OF TAK-UNIBOT project is an advanced initiative designed to revolutionize how college-related inquiries are handled through a sophisticated chatbot system. This web-based application leverages artificial intelligence and machine learning algorithms to interpret and respond to a wide range of student queries, such as details about courses, college location, and fee structures. By providing an intuitive and interactive Graphical User Interface (GUI), the chatbot simulates a real human interaction, enhancing user engagement and accessibility. The system aims to reduce the administrative workload by automating responses to frequently asked questions, allowing college staff to focus on more complex tasks. It also features a suggestion box for users to provide feedback, which helps continuously refine and improve the chatbot's performance. Ultimately, ORACLE OF TAK-UNIBOT seeks to streamline the inquiry process, making it more efficient and user-friendly, while supporting the college's broader digital transformation goals.

This web-based application utilizes machine learning algorithms to accurately analyze and respond to a broad spectrum of student questions, covering topics from admissions and course details to campus facilities and fee structures. By automating these responses, the chatbot reduces the administrative burden on college staff, allowing them to allocate more time to complex and personalized student interactions. Additionally, the system's suggestion box feature provides valuable feedback for ongoing improvements, ensuring that the chatbot evolves to meet user needs more effectively. Through this project, the college aims to achieve greater operational efficiency and enhance overall service delivery.

About the Takshashila University

Takshashila University was established with the vision to recreate the glory of the ancient Takshashila, India's oldest university of higher learning. Located in Ongur, Tamil Nadu, the university is part of the prestigious Sri Manakula Vinayagar and Mailam Group of Institutions, with over 25 years of experience providing quality education. Takshashila University aims to promote academic excellence through rigorous programs taught by eminent faculty and innovative teaching methods like hands-on learning and research.

The organization behind the ORACLE OF TAK-UNIBOT project is a forward-thinking educational institution dedicated to leveraging technology to enhance student services and streamline administrative processes. As a pioneering force in the integration of artificial intelligence and digital solutions within the educational sector, the organization is committed to providing innovative and effective tools that meet the evolving needs of its student body.

Institutional Mission: The organization's mission is to foster an enriching educational environment through the adoption of cutting-edge technologies. By embracing digital transformation, the institution aims to improve accessibility, efficiency, and engagement within its community. The development of the ORACLE OF TAK-UNIBOT chatbot aligns with this mission, reflecting the institution's commitment to enhancing student experiences and operational excellence.

Vision: The institution envisions a future where technology seamlessly integrates with education to provide personalized, efficient, and accessible services. The ORACLE OF TAK-UNIBOT project exemplifies this vision by offering a sophisticated chatbot system designed to handle a wide array of student inquiries, from course details to campus facilities, through an intuitive web interface. This initiative is a testament to the organization's dedication to innovation and excellence in student support.

Existing System

In the olden days students had to visit the college to enquire about details and other information about the college ,which is a time consuming process as well as lengthy procedure for both parents as well as students. now a days there are many changes occurred in the Education system with help of advanced technological improvements. Everything is happening over the internet without any difficulty. In those days for submitting a small application also ,we have to visit that place, but as the days are passing away its completing changing. Collecting the applications manually will be hectic procedure and it also needs a manpower. For reducing that manpower and such difficulties many devices or systems were emerged day by day.

Knowledge graph creation: The first step is to create a knowledge graph that contains all the relevant information about college programs, courses, and admission requirements. This can be done using existing ontologies or by manually curating the knowledge graph.

Automation: Unlike the existing system, ORACLE OF TAK-UNIBOT automates responses to frequently asked questions, reducing the administrative workload and improving efficiency.

AI and Machine Learning: The new system employs advanced AI and machine learning to accurately interpret and respond to a wide range of queries, offering a more sophisticated and dynamic solution compared to the manual approach.

GUI and User Interaction: The chatbot features an intuitive and interactive GUI, simulating real human interaction to enhance user engagement, which is more advanced than the traditional communication methods currently in use.

Proposed System

A Student chatbot project is developed with the help of codeigniter that is widely called a php framework that analyzes user's queries and perceive user's message. The proposed System could be a internet application that provides answers to the queries provided by the scholar or the user. Users will merely question through the chatbot that's used for chatting. Students will chat by using any format there's no specific format the user needs to follow. The answers are applicable what the user queries. If the answers are found to be invalid or not accessible then those queries are hold on into the unrequited table that is essentially created by the admin. Later those queries can updated by the admin, just in case of urgency we are going to provides a message that "our representatives will get in touch with you shortly". This may be displayed once aggregation the specified info from the user. Admin will read invalid answer through portal via login System, it'll permits the admin to get rid of the invalid answer also as in updating the acceptable answer for the question raised by the user. The User will raise any faculty connected activities through the system. The user doesn't ought to in person move to the faculty for enquiry. The System analyzes the question and so answers to the user. The system answers to the question as if it's answered by the person. The system replies with the help of a good Graphical interface which suggests that as if a true person is reprehension the user. The user will question regarding the faculty connected activities through on-line with the assistance of this internet application. this method helps the scholar to be updated regarding the college related information.

Admin:

Add Student: The Admin adds the student and the password is generated by the system and sent to the students Mail Id.

Add Course: The Admin is allowed to add the Course and its Subjects semester wise.

Add Timetable: The Admin is allowed to add the timetable for the course semester wise in the form of an .jpg

Add Schedule: The Admin is allowed to add the Schedule for the course semester wise in the form of an .jpg

Add Booklet: The Admin adds the booklet limited to a pdf file only.

Add Test Solutions: The Admin adds the test solutions limited to a pdf file only.

Add Vide Links: The Admin adds the video links which is a URL.

Add Weekly Marks: The Admin adds weekly marks; weekly marks are not subjecting wise and out of 25.

Add PT1/PT2: The Admin is responsible to add the marks for PT1 and PT2 which 24 are subject wise out of 25.

Add College related information e.g., Events, workshop doc, photos, branch info with photos. Which is useful for represent college.

Student:

Student Login: The Student is allowed to login into the App with password sent to his/her email Id and is remembered once logged In.

View Timetable: The student can check timetable limited to only his/her course and semester, it's an Image and can be pinch zoomed.

View Schedule: The student can check Schedule limited to only his/her course and semester, it's an Image and can be pinch zoomed.

View Booklet: The Student can see a list of the booklets limited to his/her course and semester which are viewed by default by Google docs.

View Test Solutions: The Student can see a list of the test solutions limited to his/her course and semester which are viewed by default by Google docs.

View Video Links: The Student can checkout video links which are directed to the dedicated web link.

View Weekly Marks: The Student can see his weekly marks and the marks are displayed as a Bar Report.

View PT1/PT2: The Student can see his marks in the form of 2 reports namely Line Chart and Pie Chart. Line Chart is divided into 3 fragments (Highest, Average and Students Marks) to help the student with his progress and rank Pie Chart shows only the students marks.

University Link: The link is redirected to the Web. **Text to Speech:** The bot also speaks out the answer. (If student have any query student write query in text view and android app answer it in voice and also text format.) **View College related information** e.g., Events, workshop doc, photos, branch info with photos. Which is useful for represent college.

Parent:

Parent Login: The Parent is allowed to login into the App with password sent to his/her email Id and is remembered once logged In. 25

View College related information e.g. Events, workshop doc, photos, branch info with photos. Which is useful for represent college.

View Marks: The Parents can see his/her child marks and the marks are displayed as a Bar Report.