COLLEGE SAMACHAR

a College chatbot

Presented By:
Subhajit Mandal- NIT DURGAPUR-Computer Science and Engineering

edunet foundation

OUTLINE

- **Problem Statement** (Should not include solution)
- **Proposed System/Solution**
- **System Development Approach** (Technology Used)
- **Algorithm & Deployment**
- **Result**
- **Conclusion**
- **Future Scope**
- **References**

edunet foundation

PROBLEM STATEMENT

Modern students demand instant, accessible, and reliable information. Traditional methods of communication in colleges, such as email and in-person inquiries, are often slow and inefficient, leading to student frustration and dissatisfaction. Need for a user-friendly and efficient system to provide accurate information and guidance.

PROPOSED SOLUTION

- An AI-powered chatbot designed to streamline and enhance student support by providing real-time, accurate, and consistent information through WhatsApp.. **The solution will consist of the following components:**

- Data Collection:
  - Gather comprehensive data on student queries and college resources.
  - Utilize real-time data sources like event schedules and campus updates.
- Data Preprocessing:
  - Clean and preprocess the collected data to handle inconsistencies.
  - Implement feature engineering to extract relevant features impacting student inquiries.
- Machine Learning Algorithm:
  - Implement NLP models to enhance the chatbot's understanding and responses.
  - Consider incorporating contextual factors like time of day and specific student needs.
- Deployment:
  - Develop a user-friendly interface within WhatsApp for seamless student interaction.
  - Deploy the solution on IBM Cloud for scalability and reliability.
- Evaluation:
  - Assess the chatbot's performance using metrics such as response accuracy and user satisfaction.
  - Continuously fine-tune the model based on feedback and monitoring.

edunet foundation

SYSTEM APPROACH

- **Technology Used:** IBM Watson Assistant for natural language processing and dialog management and Twilio for WhatsApp integration
- **System Requirements:** Compatible with modern web browsers and mobile devices.

ALGORITHM & DEPLOYMENT

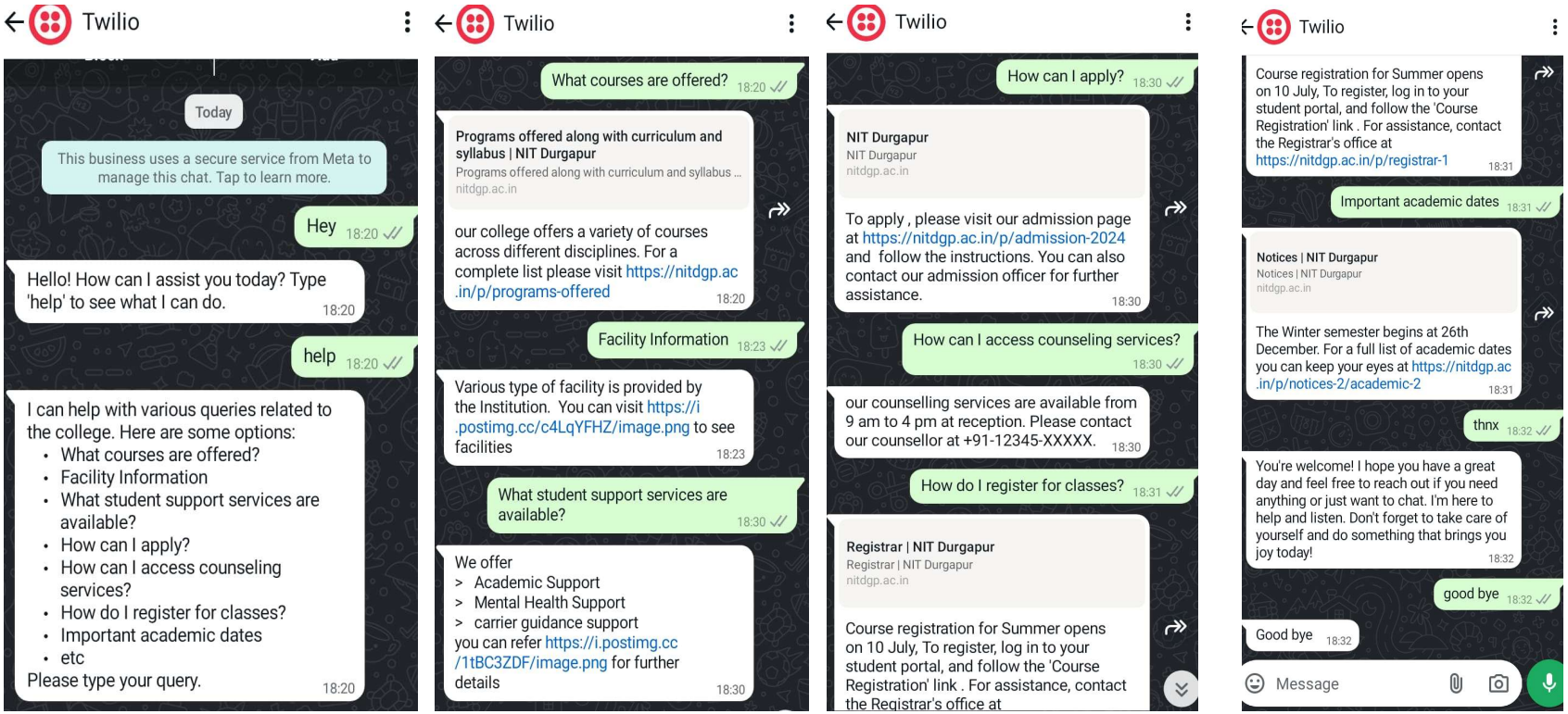
- **Algorithm Selection:**
- **Overview:**
  - Selected an NLP model using IBM Watson Assistant to handle student queries.
  - Justified by its robustness in understanding and processing natural language, crucial for diverse student inquiries.
- **Data Input:**
- **Features:**
  - Historical data on student queries.
  - Real-time data such as event schedules, weather conditions, and academic calendar.
- **Training Process:**
- **Training Details:**
  - Trained using historical query data and feedback..
- **Prediction Process:**
- **Real-time Interaction:**
  - Makes predictions on-the-fly using real-time inputs.
  - Continuously updates and improves responses based on new data and user interactions
- **Deployment Strategy:**
- **User-Friendly Interface:**
- **Design:**
  - Developed a simple and intuitive WhatsApp interface for seamless student interaction.
- **Platform Integration:**
- **Scalability:**
  - Deployed on IBM Cloud to ensure scalability and reliability.
  - Integrated Twilio for WhatsApp to facilitate communication.

edunet foundation

RESULT

- Developed a college admission chatbot aimed at simplifying and enhancing the application process for prospective students.
- Facilitates intuitive and efficient interaction through natural language processing capabilities.
- Ensures secure and confidential handling of user data throughout the application journey.
- Enhances user experience by providing timely and accurate information tailored to individual queries.
- Feedback mechanism enables ongoing refinement of chatbot responses based on user interactions.

RESULT



edunet foundation

CONCLUSION

- The college admission chatbot represents a significant advancement in improving accessibility and user experience in the admission process.
- By leveraging AI-powered natural language processing, it effectively addresses the informational needs of prospective students.
- Offers a scalable solution to accommodate future enhancements and adapt to evolving user requirements.
- Contributes to a streamlined and efficient admission process that benefits both applicants and the institution.

FUTURE SCOPE

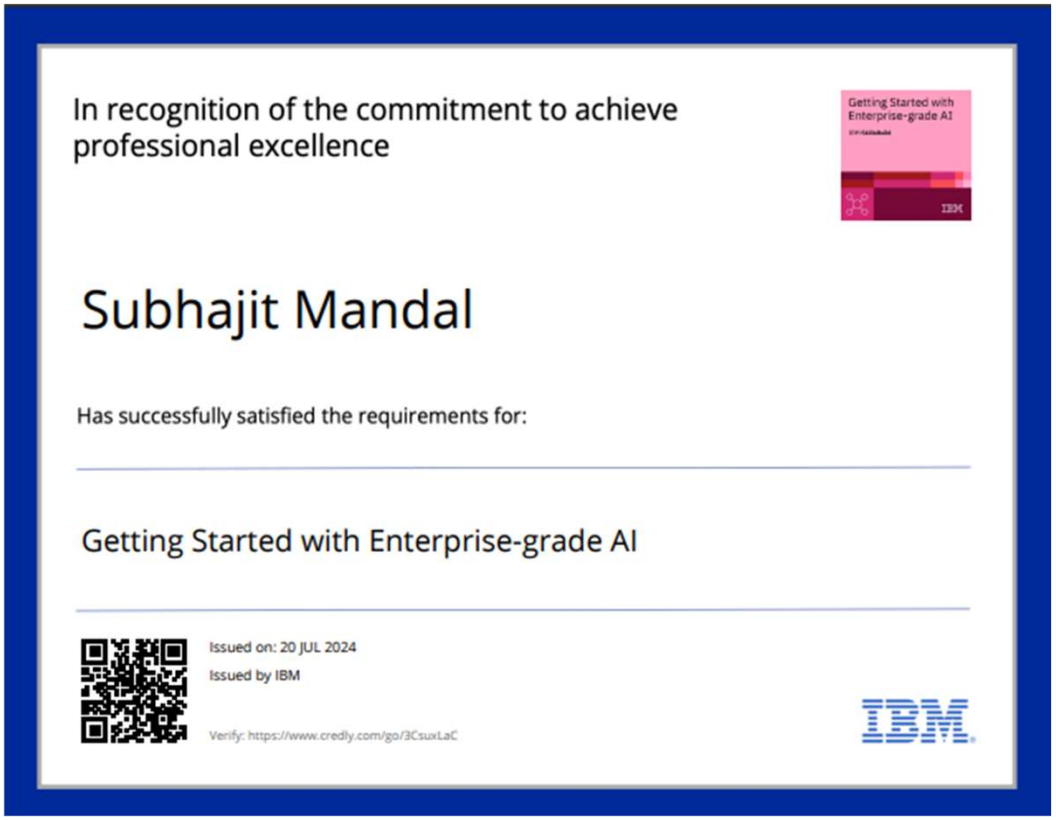
- **Personalized Assistance :** Implement machine learning algorithms to offer personalized recommendations and adaptive guidance.
- **Multilingual Support :** Integrate language translation capabilities to cater to diverse applicant demographics.
- **Enhanced Features :** Incorporate virtual campus tours, interactive FAQs, and real-time application status updates.

REFERENCES

- IBM Assistant Tutorial

edunet foundation

COURSE CERTIFICATE 1



In recognition of the commitment to achieve professional excellence

Getting Started with Enterprise-grade AI

IBM

Subhajit Mandal

Has successfully satisfied the requirements for:

Getting Started with Enterprise-grade AI

Issued on: 20 JUL 2024

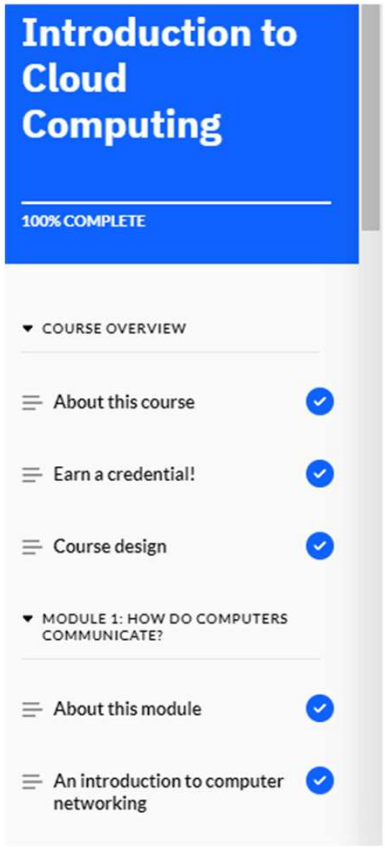
Issued by IBM

Verify: https://www.credly.com/go/3CsuxLaC

IBM

edunet foundation

COURSE CERTIFICATE 2



Congratulations

You're almost done!

Earn a credential!

Reminder: This course is one of several in the Cloud Computing Fundamentals series. Complete all of the courses in the Cloud Computing Fundamentals learning plan and earn the **Cloud Computing Fundamentals** digital credential from IBM!

edunet foundation

THANK YOU

edunet
foundation