CAPSTONE PROJECT

RESTAURANT BOOKING CHATBOT

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OUTLINE

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

PROBLEM STATEMENT

Challenges in locating vacant tables that Customers face difficulties in locating suitable dining establishments and available time slots that align with their preferences, such as cuisine, location, and party size. Inadequate restaurant information that Customers do not have access to comprehensive restaurant details, such as menu, reviews, and during the reservation process. Inefficient communication that Restaurants encounter difficulties in managing customer inquiries and updates, resulting in missed reservations and dissatisfied customers. Lengthy waiting periods for Customers have to endure prolonged waiting periods for bookings, modifications, or cancellations. Unfulfilled reservations and late cancellations that Restaurants suffer financial losses due to a high volume of unfulfilled reservations and late cancellations.

PROPOSED SOLUTION

Instant Table Availability: Offer real-time updates on table availability, allowing customers to instantly book their desired time slot without delays.

Intelligent Restaurant Matching: Provide personalized dining suggestions based on user preferences, including cuisine, location, price range, party size, and dietary restrictions.

Intuitive Booking Experience: Create a seamless and user-friendly interface with clear navigation, multiple booking options, and progress indicators.

Omni-Channel Booking: Enable customers to book reservations across various platforms such as the restaurant's website, messaging apps, and voice assistants.

Pre-Order Convenience: Allow customers to order food or drinks in advance, streamlining the dining process and potentially reducing wait times.

Dynamic Waitlist Management: Efficiently manage waitlists, providing real-time updates to customers and offering alternative dining options.

SYSTEM APPROACH

Here the System Approach of Restuarant Booking Chatbot:

1) Cloud IBM

2) IBM Watsonx Assistant

ALGORITHM & DEPLOYMENT

Step 1 - Start

Step 2 - Open The website 'Cloud IBM'

Step 3 - Search a Resource Watsonx Assistant

Step 4 - Add on the resource in the cloud

Step 5 - Open the resource page

Step 6 - And Search the Watsonx Assistant

Step 7 - Click on the Watsonx Assistant

Step 8 - Launch the Watsonx Assistant on cloud

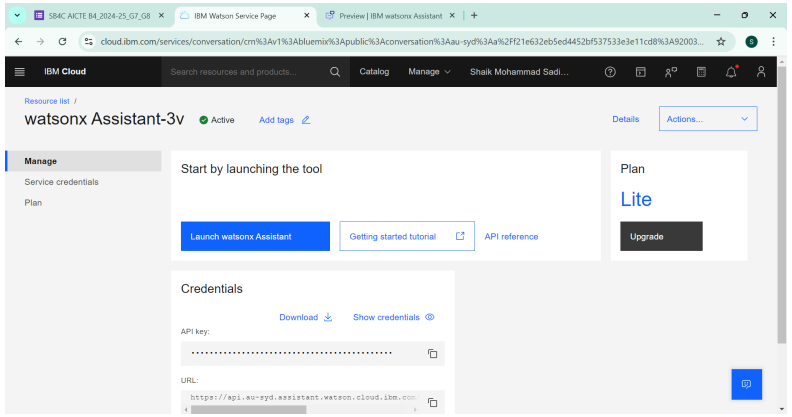
Step 9 - Create the Restaurant chatbot file

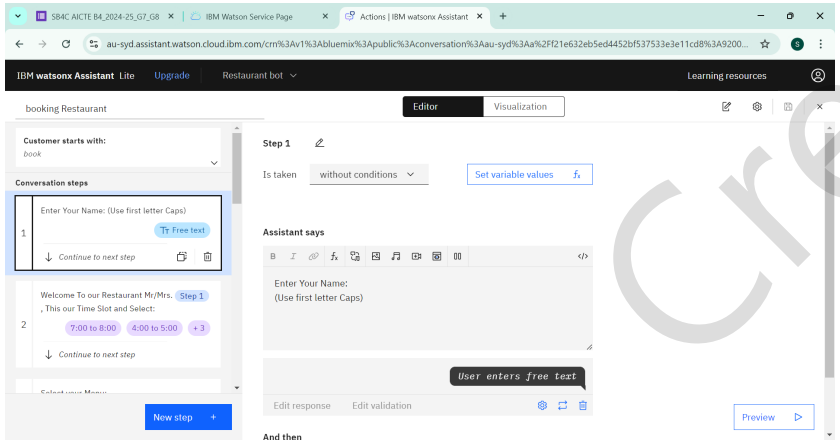
step 10 - Create the Conversation steps on the chatbot

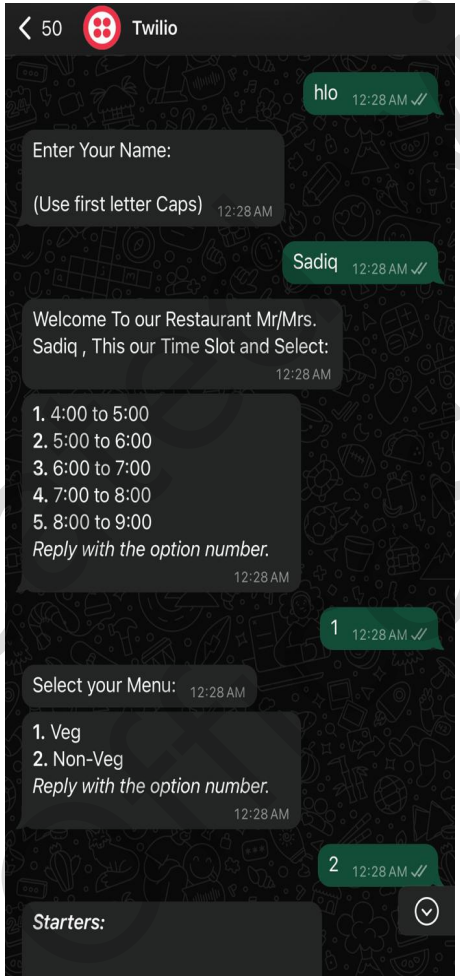
Step 11 - Then Preview the chatbot and Publish

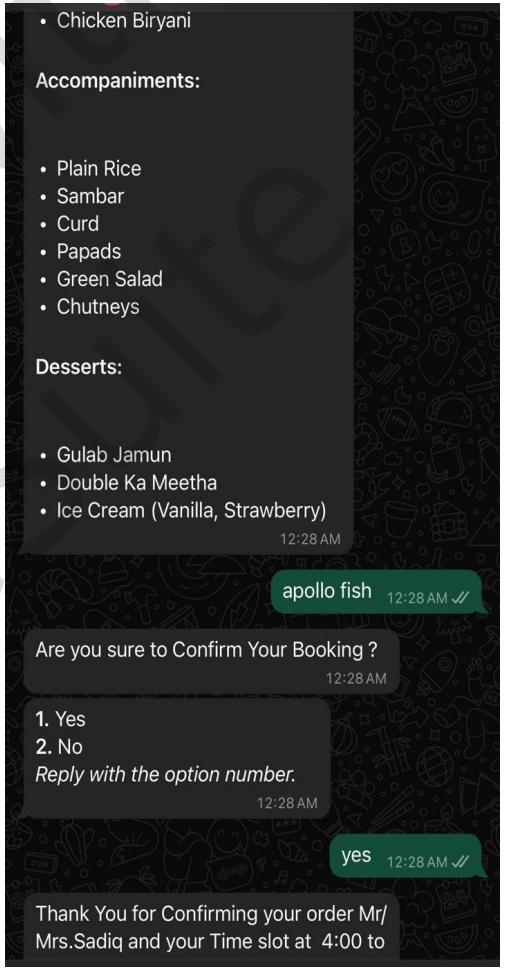
Step 12 - End

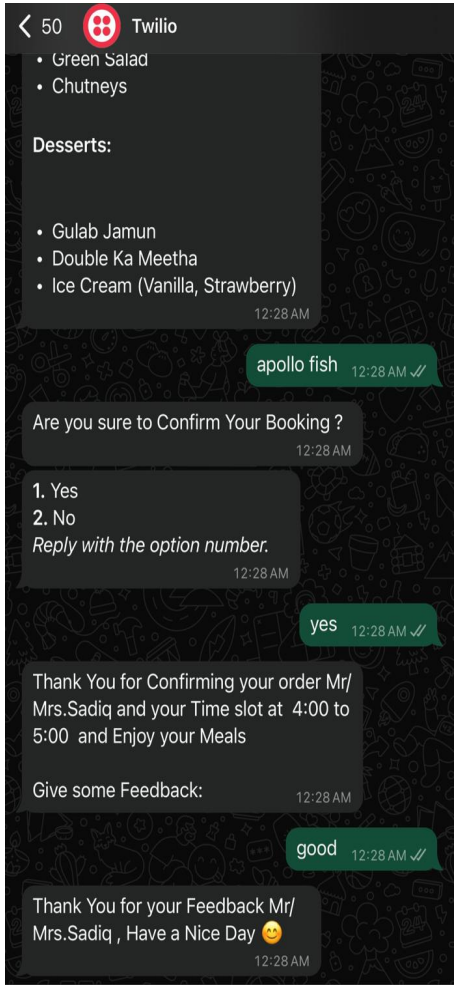
RESULT











CONCLUSION

Restaurant booking chatbots are game-changers for the dining scene. These digital concierges are revolutionizing how we secure a table, offering unparalleled convenience and efficiency. By automating the often tedious reservation process, chatbots free up both customers and restaurant staff, allowing them to focus on what truly matters: enjoying the dining experience.

FUTURE SCOPE

Hyper-personalized recommendations: Leveraging advanced AI algorithms, chatbots could offer highly tailored restaurant suggestions based on individual preferences, dietary restrictions, and past behavior.

Predictive booking: By analyzing customer data, chatbots could anticipate dining preferences and suggest suitable restaurants and times.

Food delivery integration: Seamlessly transitioning from reservation to ordering and delivery, providing a complete dining experience.

Loyalty program integration: Rewards and incentives can be offered directly through the chatbot, increasing customer engagement.

Social media integration: Allowing users to share their dining experiences and recommendations within the chatbot platform.

Virtual waitlist: Implementing a virtual waitlist with real-time updates and estimated wait times.

Table management: Empowering restaurant staff with chatbot tools to manage table assignments and optimize seating arrangements.

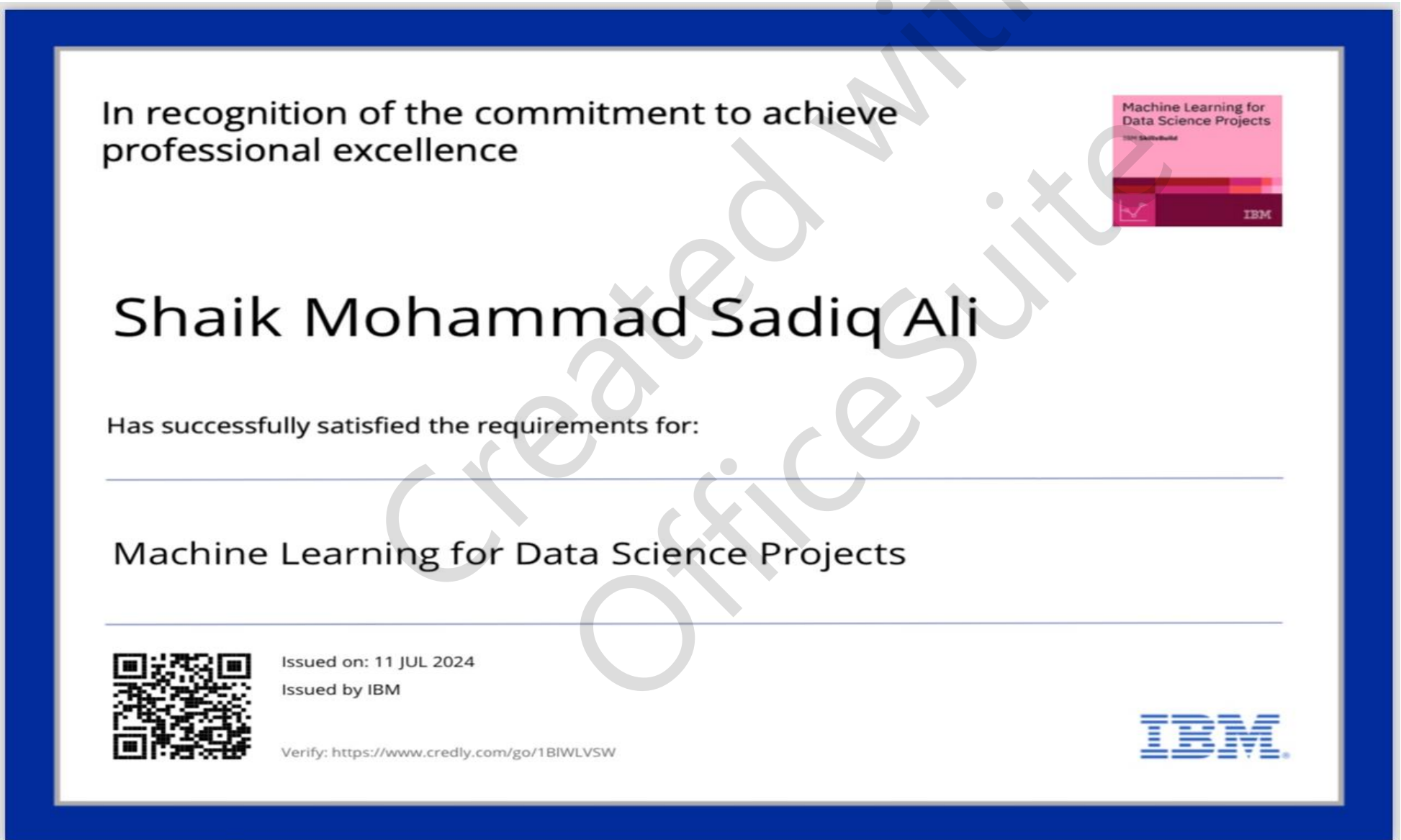
Multilingual support: Expanding chatbot capabilities to cater to a global audience.

REFERENCES

Creating a restaurant booking chatbot involves a few key components: understanding user requirements, managing reservations, and ensuring smooth communication, This paper delves into the development of a chatbot capable of recommending restaurants and handling reservations.

{https://web-chat.global.assistant.watson.appdomain.cloud/preview.html?backgroundImageURL=https%3A%2F%2Fau-syd.assistant.watson.cloud.ibm.com%2Fpublic%2Fimages%2Fupx-920036e3-ecde-4769-91d2-3288acb80910%3A%3A0dd24bae-5783-4a63-86fb-d1c06d26756f&integrationID=a98451cb-ae1f-4754-a1e5-4bd1d778f811&region=au-syd&serviceInstanceID=920036e3-ecde-4769-91d2-3288acb80910)

COURSE CERTIFICATE 2



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