MIS 6349.002.23F - Digital Consulting Project

Deliverable 1 – Project Charter

Conversational and generative AI chat solution for agency clients to inquire on details of a particular booking

Team 1.2

| | Team Members |
|---|----------------------------|
| 1 | Hashmeet Kaur Behal |
| 2 | Ming Hu |
| 3 | Kavita Nokku |
| 4 | Venkata Varshini Pamireddy |
| 5 | Min Shi |
| 6 | Aditya Praveen Yewankar |

Document History

| Project Charter | | |
|-----------------|--------------|--------------------------------------|
| Version | Date Revised | Comments |
| 1.0 | 09-13-2023 | Creation of first iteration |
| 2.0 | 09-19-2023 | Modification of Project Charter |
| 3.0 | 09-20-2023 | Revision of modified Project Charter |
| 4.0 | 09-21-2023 | Finalization of Project Charter |

Stakeholders

| Stakeholders | | | |
|----------------|----------------------------|------------------------------|--|
| Name | Title | Role | |
| | Principal Cloud | | |
| Irving Padilla | Infrastructure Architect | Client Advisor / Stakeholder | |
| | Director of Data | | |
| | Engineering, Analytics and | | |
| Raju Pillai | Architect | Client Advisor / Stakeholder | |
| Kevin Short | Professor | Manager | |

Team Members & Roles

| Team Roles | | | |
|------------------|-----------------|-----------------|--|
| Name | Title | Role | |
| Aditya Yewankar | Product Manager | Product Manager | |
| Hashmeet Behal | Tech Lead | Tech Lead | |
| Kavita Nokku | Tech Engineer | Tech Engineer | |
| Ming Hu | Tech Engineer | Tech Engineer | |
| Min Shi | Project Manger | Project Manger | |
| Venkata Varshini | | | |
| Pamireddy | Tech Engineer | Tech Engineer | |

Project Problem Statement

- Onyx grapples with commission payment delays due to factors like late data from hotels, funding delays, and incomplete information, causing agency concerns and increasing customer service workload.
- Querying payment status by Onyx's customer service would be burdensome, leading to manual investigations and operational inefficiencies.
- The existing self-service tool is inconvenient to use, agencies often bypass it, Onyx needs an automatic tool to respond to the queries from agencies.

Project Purpose

The expected benefits of the project are as follows:

- Create a conversational AI chat tool for Onyx's cloud chat service.
- Enable travel agencies to inquire about payment status with booking ID provided, especially agency's commission payout.
- Provide accurate and timely responses to customer inquiries using SQL queries and predictive models.
- Streamline the commission payment inquiry process for agencies and OTA partners.
- Improve customer satisfaction, encourage customer self-service adoption and enhance customer experience using a chat bot with basic conversational abilities and predictive models

Project Deliverables and/or Outcomes

The project aims to deliver a conversational and generative AI chat solution that enhances customer self-service adoption within Onyx's cloud chat service. This tool will allow agencies to inquire about the details of a specific booking by providing confirmation numbers, guest first names, and last names.

The project's successful implementation will result in:

- Improved customer self-service adoption, reducing the need for manual inquiries.
- Enhanced efficiency in addressing customer questions and concerns related to commission payouts.
- Increased user satisfaction through timely and accurate responses.
- Valuable data for analyzing customer interactions and optimizing the AI chat solution.
- A user-friendly tool that streamlines the commission payment inquiry process for travel agencies and OTA partners.

Project Resources Required

| Resource Budget | | | | |
|-----------------|----------------------|----------|--------------|----------|
| Resource Type | Resource | Quantity | Rate/Unit \$ | Spend \$ |
| People | Hours | 600 | 100 | 60000 |
| Tools | Python | 6 | 0 | 0 |
| | MySQL | 6 | 0 | 0 |
| | Microsoft Office 365 | 6 | 0 | 0 |
| | GitHub | 1 | 0 | 0 |

Project Scope

| In-Scope | Out-of-Scope |
|--|---|
| Create an end-to-end chatbot solution for specific | Development of a Onxy architecture or integration of |
| customer concerns. | the chat bot is not expected |
| Data is given by the client to be used for chatbot | |
| solution | Data extraction, gathering and cleaning |
| For the payment status querying part, only payment | |
| status to be returned as a response | Queries that are unrelated to payment status |
| | Not responsible for resolving the issue, just providing |
| | a standalone interface between the agency client and |
| For the payment delivery date part, prediction | Onyx system to check payment status and get |
| models will be built based on training data | anticipated payment delivery date |
| Build a user-friendly interface for agency client to | |
| chat with our Al Chatbot | Handle travel agency questions in different languages |

Project Constraints

| Constraints | Description |
|-------------|---|
| | |
| Time | Project must be completed by Nov. 15 for presentation to the client |
| | Only 6 team members with totally approximately 60 hours per week to |
| People | devote to the project |
| | Not all team members are familiar with Python programming language; |
| | Not all team members have experience with model building and |
| | analytics; |
| | Not all team members have generative AI related skills; |
| Skills | Not all team members have UI design experience |
| Tools | AWS Sagemaker has limited free resources |