**SYSTEM REQUEST**

**ONLINE CHATBOT BASED TICKETING APPLICATION**

**Project Name:** Online ChatBot Based Museum Ticketing System

**Project Sponsor:** No one

**Business Need:**  
Traditional ticketing systems often require manual booking, long queues, and limited accessibility. There is a need for a modern, interactive solution that allows users to seamlessly search museums, check availability, and book tickets online.

**Business Requirements:**

* **Museum Search:** Users should be able to search for museums by city or location.
* **User Accounts & Profiles:** Provide secure signup/login, profile management, and booking history.
* **Ticket Booking:** Allow users to select dates and shifts (Morning, Afternoon, Evening) and reserve tickets.
* **Availability Check:** Display real-time ticket availability for selected museums and dates.
* **Payment Integration:** Support secure online payments (e.g., Razorpay).
* **Chatbot Assistance:** Integrate Dialogflow chatbot to guide users through booking and FAQs.
* **Booking History:** Maintain a log of previous bookings for registered users.

**Business Value:**

* Reduces waiting time and provides a modern, user-friendly way to book tickets.
* Automate ticket booking, payment, and confirmation, reducing manual workload for museum staff.
* Ensures more ticket sales by offering real-time availability and easy access through web and chatbot.
* Visitors can book tickets anytime, from anywhere, improving convenience and inclusivity.
* Museums can track booking patterns, visitor preferences, and peak hours for better planning.
* Museums positions as tech-savvy and visitor-focused, enhancing their reputation.

**Special Issues or Constraints:**

* The system requires reliable internet connectivity for chatbot interactions, booking, and payment processing.
* Payment security must be ensured through encrypted transactions and compliance with industry standards.
* The application depends on third-party integrations (Dialogflow for chatbot, Razorpay for payments, Google login), which may have limitations or downtime.
* Museums must be digitally onboarded into the system; traditional or small museums without digital infrastructure may not be supported.
* Regular maintenance and updates are necessary for both backend (Django) and frontend (React).
* Initial adoption may face resistance from users accustomed to traditional ticketing methods.

**Topic Selection reason:**

During a visit to a museum in New York, the lack of a modern ticketing solution became clear. Tickets were unavailable on the outdated website, forcing visitors to wait in long lines. This highlighted the need for a user-friendly, automated system to streamline the ticketing process and improve visitor experience.