Statement:

Tourism and City Exploration: We had to design a website or mobile app using HERE Location Services and Mobile SDKs that offers guided tours, historical information, and interactive maps for tourists exploring a city.

Why we chose this problem?

In recognizing the gap in real-time, interactive mapping solutions for city exploration and tourism, we were driven to innovate. Thus, we introduced a chatbot feature to our website and mobile app, designed to not only navigate but engage users by suggesting must-visit spots and enriching their journey with historical insights. This integration with HERE Location Services and Mobile SDKs ensures travelers have a multitude of features to choose from which not just includes giving them the right route but also giving them the dynamic calculation of distance as they add their stops. Our aim is to make exploration not just about the destination but about experiencing the journey and discovering hidden gems along the way. This became our inspiration to choose this problem statement

Our Solution Flow

- **Introduction to AsWeGo**: Our website, AsWeGo, combines a detailed overview of our services with an interactive chatbot and real-time mapping on the homepage, creating a comprehensive platform for users.
- **Interactive Chatbot Utilization**: Leveraging the "ChatGPT 3.5 Turbo" API from OpenAI, our chatbot interacts with users by accepting source and destination inputs, and suggests places such as restaurants, hotels, and tourist attractions, enriching the travel experience for those without predetermined plans.
- **User-Friendly Input Forms**: To streamline the planning process, users can specify their journey details—including source, destination, and up to five stops—through an intuitive form, enhancing the usability of our platform.
- **Geocoding and Mapping with HERE API**: Responses from the chatbot, formatted in JSON, undergo geocoding. We then use the HERE API to pinpoint all chosen locations on the map, visually representing the user's travel itinerary.
- **Route Creation with Polylines**: A meticulous route is plotted through the marked locations, employing polylines encoded from the geocoded data, ensuring a seamless navigation experience from start to finish.
- **Dynamic Detour Calculation**: Our solution features advanced detour visualization, dynamically assessing distances from the source to the destination, including any user-added stops. This functionality guarantees an optimized travel route, tailored to the user's unique journey preferences.

Tech Stack

- HERE APIs (Maps, Geocoding, Multi-Modal, Detouring distance calculation, Polyline)
- HTML, CSS and Javascript
- Flask
- ChatGPT 3.5 Turbo - OpenAI

Innovation

Our approach revolutionizes user interaction by seamlessly integrating a Large Language Model (LLM) chatbot within the map interface. This allows users to engage directly with the map through the chatbot, receiving tailored suggestions for exploration, adding personal stops, and benefiting from dynamic distance visualization for an enriched travel experience.