PROJECT DESIGN PHASE PART 2

Date	03 October 2022
Team ID	NM2023TMID09402
Project Name	Project – Indian Food EDA

DETERMINE THE REQUIREMENTS (CUSTOMER JOURNEY MAP)

Customer Journey Map for Indian Food EDA PROJECT

This customer journey map provides a detailed analysis of the customer experience when exploring Indian food for an EDA project.

REQUIREMENT ANALYSIS

TECHNICAL REQUIREMENTS

Technical Requirements	Content
Programming Language	Python
Web Framework	Flask
Data Visualization Tools	Matplotlib, Seaborn
Database Management System	SQLite (for simplicity)
Web Hosting Service	Local Hosting for Development, Deployment on Cloud (e.g., Heroku) for Release

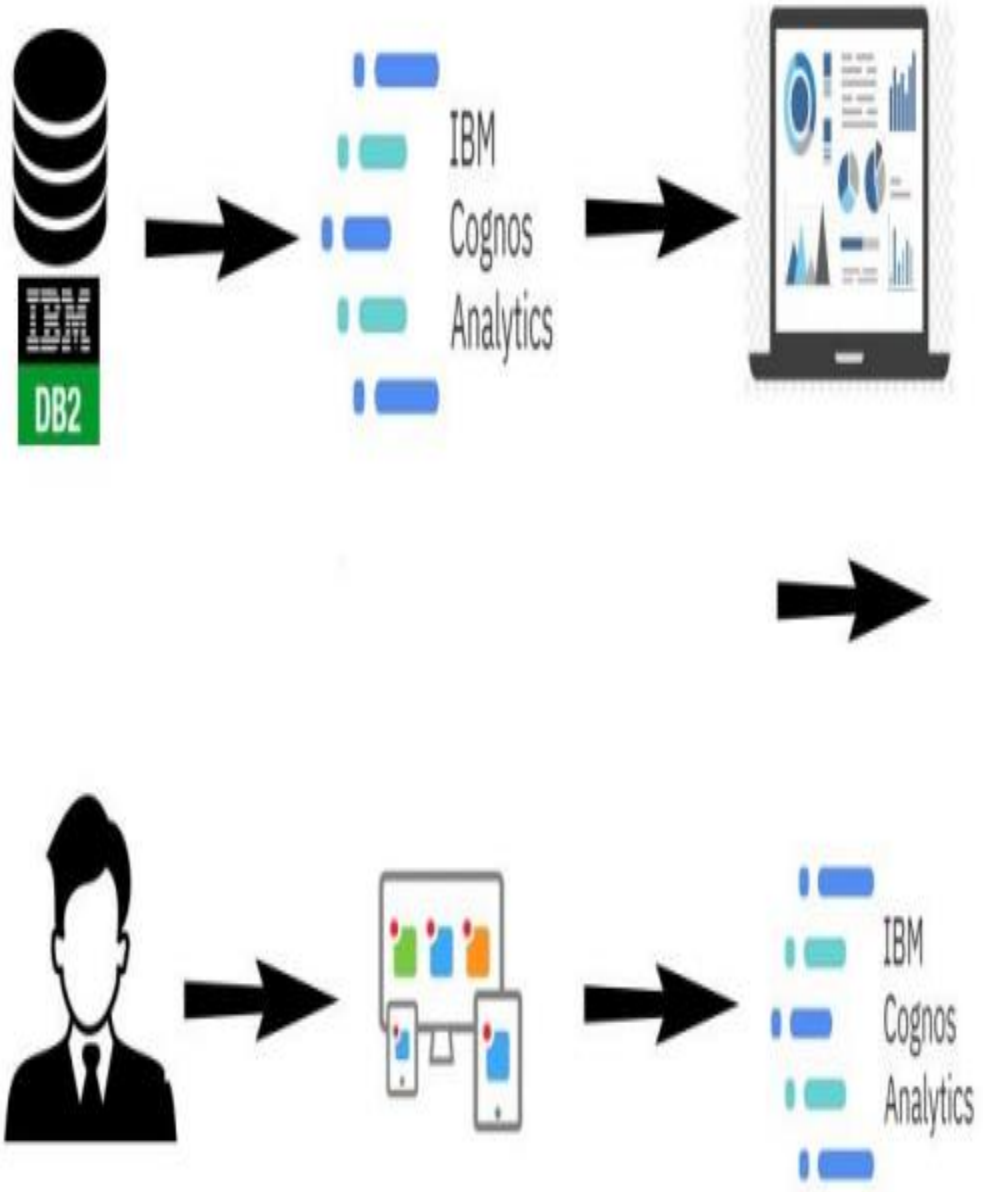
OPERATIONAL REQUIREMENTS

Operational Requirements	Content
Accessibility	Web-based platform should be accessible to all users, including those with disabilities.
User Registration and Authentication	Users should be able to register and log in securely to the platform.
Platform Reliability and Scalability	The platform should be reliable and scalable to accommodate increasing user interactions.
Data Privacy and Security	Ensure the privacy and security of user data.

FUNCTIONAL REQUIREMENTS

Functional Requirements	Content
Dataset Acquisition	Acquire a comprehensive dataset on Indian food.
User Authentication	Implement a secure authentication system.
Explore Indian Cuisine	Provide functionalities for exploring various aspects of Indian cuisine such as ingredients, recipes, regional variations, and popularity.
User Feedback Mechanism	Implement a feedback system for users to share their thoughts and suggestions.
Personalized User Experience	Provide a personalized experience based on user preferences and interactions.

TECHNICAL ARCHITECTURE



OPEN SOURCE FRAMEWORKS

Framework	Purpose
Flask	Web framework for building the application and handling HTTP requests.
Matplotlib	Data visualization library for creating static, interactive, and animated plots in Python.
Seaborn	Statistical data visualization library based on Matplotlib, providing a high-level interface for drawing attractive and informative statistical graphics.
SQLite	Lightweight, file-based relational database management system for storing and retrieving data.

These open source frameworks play crucial roles in developing, visualizing, and managing data for the Indian Food EDA project. Flask serves as the web framework, Matplotlib and Seaborn assist in creating visualizations, and SQLite is used for database management. These frameworks contribute to the project's efficiency, functionality, and user experience.

THIRD PARTY API

API	Purpose
Kaggle API	Used for accessing the Indian Food 101 dataset, providing a comprehensive collection of Indian food recipes for the EDA project.
IBM Cognos Analytics	Integrated for embedding dashboards and stories, enhancing data visualization and analytics capabilities in the web application.

The project leverages two key third-party APIs. The Kaggle API facilitates access to the Indian Food 101 dataset, enriching the project with diverse Indian food recipes. Additionally, the IBM Cognos Analytics API is integrated to embed dashboards and stories, enhancing the data visualization and analytics capabilities within the web application.

CLOUD DEPLOYMENT

Cloud Service Provider	Service Offered	Purpose
IBM Cloud	Virtual Servers	Hosting the web application and associated services for seamless accessibility.
IBM Cloud Object Storage	Object Storage	Storing and retrieving dataset and project-related files, ensuring scalability and data persistence.

The project is deployed on IBM Cloud, utilizing virtual servers to host the web application and associated services. Additionally, IBM Cloud Object Storage is employed for storing and retrieving the dataset and project-related files. This cloud deployment ensures scalability, reliability, and efficient data management for the Indian Food EDA project.