PROJECT PLAN DOCUMENT

Project Number	14		
Project Title	Gemini API Integrated With HTML UI		
Document	Project Plan		
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Client	Patenti Technology Solutions		

Brief problem statement

To develop a web interface for a chatbot utilizing Google's Gemini LLM through an API service. The web application should accept text prompts from users and showcase the corresponding responses generated by Gemini. Additionally, the prompts must be saved in a database, and the entire system, including both the service and the database, should be hosted on AWS using EC2 instances and an S3 bucket.

Team Members

The proposition of distribution of work is tentative but is as follows:

- 1) Chat Bot Divyansh
- 2) **Html+CSS** Rahul
- 3) JS Implementation: Ayush and Divyansh
- 4) Django Backend Harshit and Rahul
- 5) SQL Database Linkage Harshit

Team Communication

The Team shall meet once a week to discuss their progress. The day has been decided to be Wednesday. Recently due to client unavailability, it is been held on Sundays.Besides that, for remote discussions we have a Whatsapp Group.

Development Environment

Our Project will be briefly divided into 5 modules:

1) Gemini integrated Chatbot:

In this module, the focus will be on comprehending the Gemini API, followed by the development of a Python script. This script is designed to seamlessly interface with the Gemini API, accepting input and generating corresponding outputs. Also the chatbot will follow NLP based approach ,understanding context of the prompt to synthesize an output and keep track of conversation history and context.

2) HTML + CSS (Bootstrap):

The second module concentrates on the aesthetic aspect of the project. It involves the creation of a user interface (UI) through the utilization of HTML and CSS, with Bootstrap integration. The primary objective is to design a visually appealing and responsive interface. All features have been styled using Bootstrap components with slight customisation.

3) Django Backend:

This pivotal phase is dedicated to the establishment of the backend infrastructure of the project. It encompasses adding the GET and POST requests along with the integration of the UI and the ChatBot Python script, ensuring a cohesive and functional project foundation.

4) SQL Database Linkage:

The fourth module involves the critical task of linking the project with a MySQL-powered database. This linkage will facilitate the storage of prompts, dates, and region-related data, ensuring a robust and efficient data management system.

5) Deployment to AWS:

The final phase centers on the deployment of the entire project onto the AWS platform. Special attention will be given to ensuring compatibility with Linux platforms to guarantee seamless functionality, as per the requirements of the client.

Milestone Schedule

Milestone	Due Date	Release	Deliverable?
Finalise Requirements	25/01/23	R1	Yes
Finalise Timelines	01/02/24	R1	No
Finalise and HTML creation	23/02/24	R1	Yes
Django Framework	28/02/24	R1	Yes
Gemini API Integration	6/03/24	R1	Yes
SQL Integration	13/03/24	R1	Yes
Deployment on AWS	20/04/24	R2	Yes