AI Engineer Assignment: Development of a Fitness Chatbot

Objective: The primary goal of this assignment is to design and implement a simple chatbot that can provide fitness-related advice, including workout recommendations and dietary guidance based on user inputs. This project will test your skills in AI model development, cloud services, DevOps practices, and your foundational knowledge in mathematics as applied to machine learning and AI.

Part 1: Chatbot Development

Task: Create a chatbot using a suitable language model (e.g., GPT-3 or an open-source alternative) that can answer queries related to fitness and nutrition.

Requirements:

The chatbot should understand questions about workout routines, dietary advice, and general fitness tips.

Integrate any free fitness-related data or APIs available online to enhance the chatbot's responses.

Develop a basic interface for interacting with the chatbot. A simple command-line interface or a basic web application is acceptable.

Part 2: Personalization

Task: Extend the chatbot's functionality to offer personalized workout and diet plans based on user inputs such as body type, fitness goals, and dietary restrictions.

Requirements:

Utilize any freely available dataset for workout routines and nutritional information or leverage free APIs that provide such data.

The system should ask the user a set of questions to gather their preferences and restrictions before making recommendations.

Explain the logic behind how recommendations are personalized in your documentation.

Part 3: Deployment and DevOps

Task: Deploy your chatbot application to a cloud platform using any available free credits (Google Cloud, AWS, Azure, etc.). If cloud deployment is not feasible, prepare a detailed walkthrough of your application running locally. and make a loom video.

Requirements:

Set up a basic CI/CD pipeline for your application. This can be documented if actual deployment is not possible.

Include instructions for setting up and running your application both locally and on the cloud (if applicable).

Prepare a brief video (using tools like Loom) demonstrating the functionality of your chatbot, including the deployment process and any cloud services used.

Evaluation Criteria:

Functionality: How well does the chatbot perform its intended tasks? Is it able to handle a variety of fitness-related queries?

Personalization: Effectiveness of the chatbot in providing personalized advice. Clarity of the personalization logic.

Technical Implementation: Quality of code, use of AI/NLP principles, and integration with data sources or APIs.

Deployment and DevOps: Understanding of cloud services, and the implementation (or planning) of CI/CD pipelines.

Documentation: Clarity of instructions for setup and use, and the quality of the video walkthrough.

Submission Instructions:

Provide a GitHub repository link containing all source code, documentation, and any additional resources required to run your chatbot.

Include a README file with detailed setup instructions and a link to your video demonstration.

Submit your assignment and fill this google form with your name matching with your Internshala name, github, phonenumber, email.

Make sure to provide us with a working loom video, where you are asking customised plans to the app. And also url of webapp, where we ask questions and tailored plans to the webapp.

After all this fill out the google response form please with your details, url of webapp, your github code, loom video. <https://forms.gle/PaEGh4GvDtfiZ43Z8>

Note - please dont ask us for a deadline, the sooner you submit, the better the odds of getting in. Historically, only 3-5% candidates are able to do this test well. So if you are attempting it, good chances you will get in. Prefer not to ask questions in the chat, as after sending this test, we are flooded with messages in internshala chat and hard to spot, where the question is genuine (most candidates message us back saying “ok”, “they will get it done”, etc). Please try to do your best, in case you have a question, message us, but there is a chance we wont be able to answer. And we may have hired somebody by that time.