Tinder AI guidebook

JAVA BRAINS CODE-WITH-ME

Overview

Welcome to the Tinder AI App Development Project! In this fun tutorial, you'll build a full-stack dating application that uses Spring Boot, React as well as leverages the power of artificial intelligence to create a unique and engaging project.

What We're Building

This Tinder AI app combines the familiar swipe-and-match mechanics of popular dating apps with advanced AI capabilities:

Robust Backend with Spring Boot:

- RESTful API development using Spring Boot, showcasing best practices in API design and implementation.
- Integration of AI services (GPT-4, Stable Diffusion) into our backend architecture.
- Implementation of efficient data management using MongoDB, demonstrating NoSQL database integration.

Interactive Frontend with React:

- Responsive single-page application (SPA) development using React and modern JavaScript.
- State management using React hooks for a smooth user experience.
- Integration with backend APIs, handling asynchronous operations and real-time updates.

AI-Generated Profiles:

Instead of real user profiles, our app will use GPT-4 to generate diverse and interesting fictional profiles. This feature showcases how AI can be used to create dynamic content in applications.

AI-Powered Conversations:

When users match, they can engage in conversations with AI-driven chatbots, each with a unique personality based on the generated profile. This demonstrates advanced natural language processing in action.

Dynamic Content Generation:

Profile pictures will be created using Stable Diffusion, showing how different AI models can work together in a single application.

Instructions

First watch the video!

How to use the download bundle

To use the profiles in this bundle, you'll need to properly set up the files from the download bundle. Follow these step-by-step instructions to ensure everything is in the right place:

Step 1: Download the profiles

Download the profile bundle. There are two files: “men” and “women”, containing profiles of men and women respectively. Download the file based on your preference.

Men profiles: Click here

Women profiles: Click here

Step 2: Clone the Git Repository

You'll need to clone the two project repositories. One for frontend and one for backend.

```
git clone https://github.com/koushikkothagal/tinder-ai-backend
```

```
git clone https://github.com/koushikkothagal/tinder-ai-frontend
```

Step 3: Set Up the Profile Data in the backend application

1. Extract the download bundle.
2. Copy the `profile.json` file to the root directory of the cloned **tinder-ai-backend** project.
    - The root directory is the main folder of the project, where you'll find files like `README.md` or `pom.xml`.
3. Verify that `profile.json` is directly in the root directory, not in any subfolder.

> Note: If you're following the tutorial and want to code along the remainder of the video from this specific point, switch to the commit:
>
> https://github.com/koushikkothagal/tinder-ai-backend/commit/54f99cae7c49caf5bae9759a5dde60c1b2b0960e
>
> Commit message: Add AI profile creation functionality
>
> Refer to the README on the project for updated instructions

Step 4: Copy all the images

Copy all the images in the images directory to the resources/static/images directory of your tinder-ai-backend project

Step 5: Change the “user” details

Change the “user” details to your own in the resources/application.properties file

```
# User's profile - change this to yours
tinderai.character.user={id:'__', ... }
```

Leave the `id:` part as-is and change other values to match your profile.

Step 6: Setup OpenAI API key

Save your OpenAI API key in the `SPRING_AI_OPEN_AI_API_KEY` environment variable. This is used in application.properties to supply Spring AI with your OpenAI API key. Generate an API key if you don’t already have one. If you prefer to use Ollama, check out the supplementary videos on the Java Brains YouTube channel that walks you through how to do this.

Step 7: Start the servers

Start the backend Spring Boot app, the frontend React app and hit the local React app URL. Start using the app. Have fun!

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