**AI Book Recommender – Project README**

**Overview**

This project is a user-friendly, AI-powered web application designed to help users discover books based on their personal interests or reading preferences. By leveraging natural language processing through OpenAI’s GPT model, the app interprets free-form inputs such as topics, themes, or concepts the user wants to explore and returns a curated list of book recommendations that best match the request.

In place of rigid filters or predefined categories, the application uses AI to analyse the user's intent and map it to relevant titles from the dataset. This approach allows for a more flexible and intuitive book discovery experience, ensuring that users receive personalized suggestions regardless of how they choose to describe what they want to read.

**Features**

* Understand free-text input using AI
* Maps 500+ book tags to 10 simplified categories:

Romance, thriller, mystery, sad, funny, dark, hopeful, fantasy, adventure, drama

* Matches and scores books based on category overlap
* Built using Python, Gradio, OpenAI, and Pandas

**Files included**

* Books.csv – Raw dataset of books with rich tags
* Data\_preprocessing.ipynb – Notebook to simplify book tags using OpenAI
* App.ipynb – Gradio app that runs the recommender

**How to Run the App**

1. Run the preprocessing notebook

This converts your book categories into simplified ones:

* Open data\_preprocessing.ipynb in Jupyter Notebook
* Run all cells
* It will create or update a column called simplified\_categories in the dataset

1. Run the app

Open app.ipynb and run it. It will launch the Gradio Interface in your browser

**Technologies Used**

* Python
* OpenAI GPT-3.5
* Gradio
* Pandas
* Jupter Notebook

**Contributors**

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