The Islamia University of Bahawalpur

Project Report

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Semester: 6th

Project Title: AI Assistant Using Flutter Flow

Introduction

This project demonstrates the integration of **FlutterFlow** and the **Google Gemini API** to build an interactive AI Assistant application. The application enables users to input prompts, interact with an AI pair programmer, and receive detailed responses within a user-friendly, scrollable interface.

Objective

The primary objective of this project is to provide users with an intuitive AI-driven interface that leverages the power of Google Gemini API to deliver intelligent assistance for programming tasks and more.

Features

1. Home Page Design

Header Section:

- A container wraps the header elements.
- Inside the header:
    - A row aligns elements horizontally, containing:
        - **Two icons:** A profile icon (aligned to the far-right) and a grid icon.
        - **A button:** Labeled **"Try Gemini Advanced"**, which redirects users to the Google Gemini Premium Plan page.

Header Details:

- Below the row, a column contains:
    - A text widget for **"Gemini"**.
    - Another text widget for **"Flash 1.5"**.

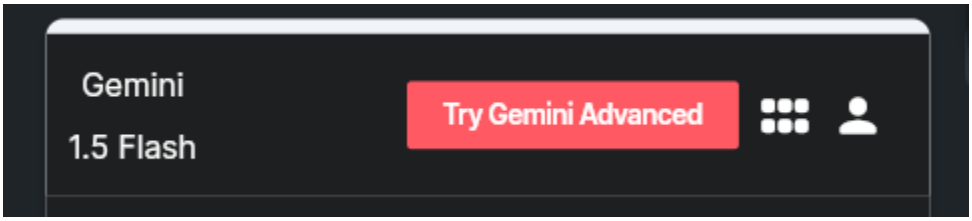

Figure 1: Header Design.

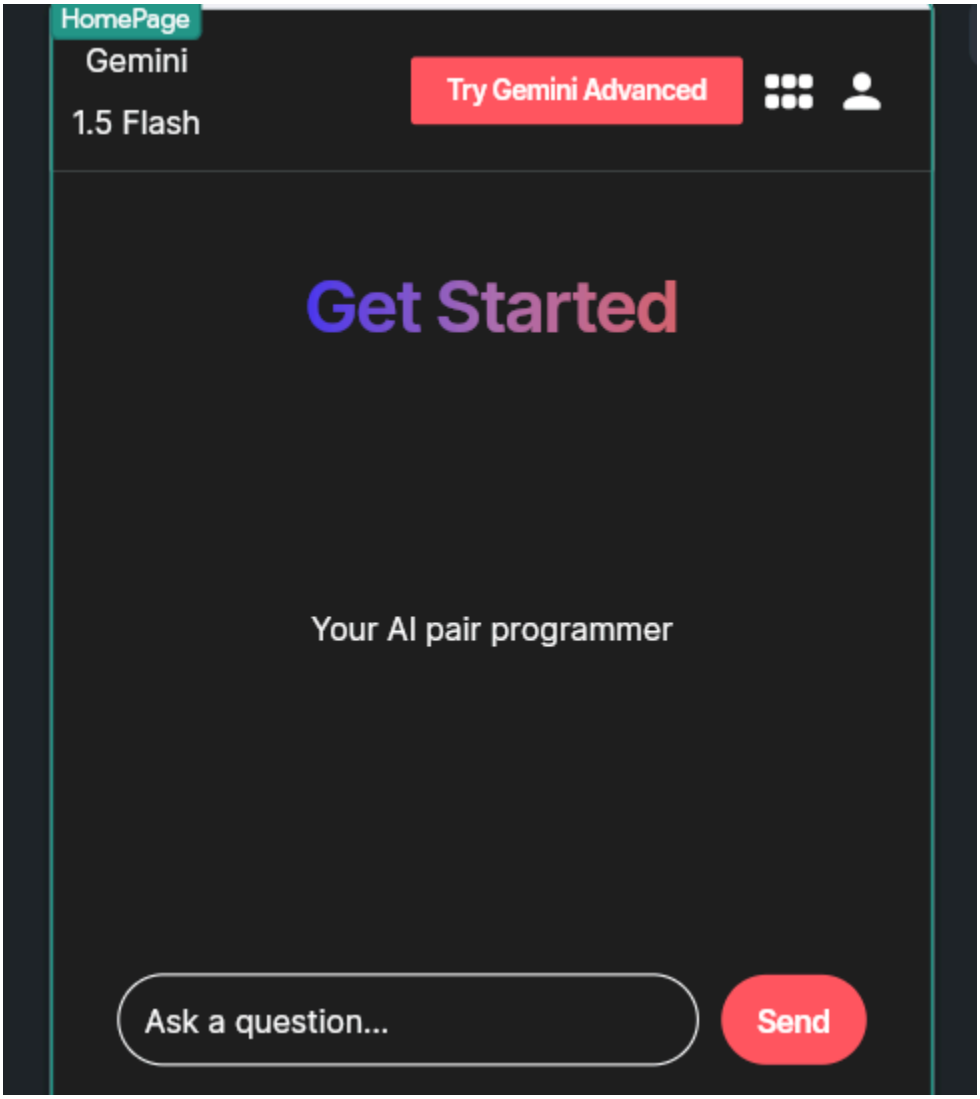

Figure 2: Home Page Layout.

2. Body Section

Container Layout:

- The body section is wrapped in a container, with a vertically arranged column containing:

Text Widget:

- Displays the text **"Get Started"**, styled with gradient colors inspired by the Google Gemini theme.

Output Text Box:

- Initially shows the placeholder text: **"Your AI Pair Programmer"**.
- Dynamically updates to display the response fetched from the Gemini API after the user submits a prompt.

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3. User Interaction

Input Row:

- Contains:
    - **Text Field:** Allows users to input prompts.
    - **Send Button:** Submits the prompt to the Gemini API and updates the output text box with the response.

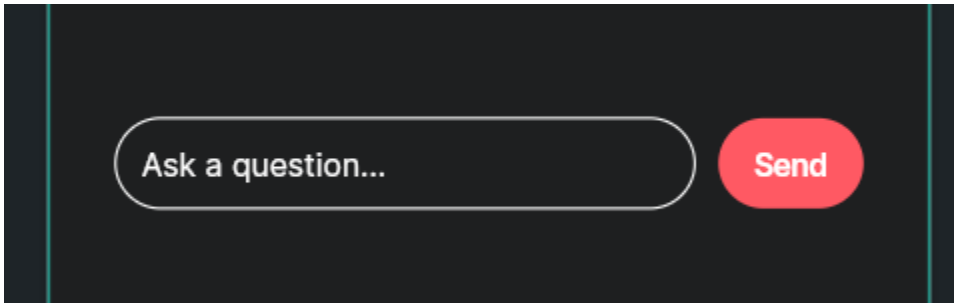

Figure 3: Input Field.

Scrollable Output:

- The output container is scrollable, enabling users to read long API responses comfortably.

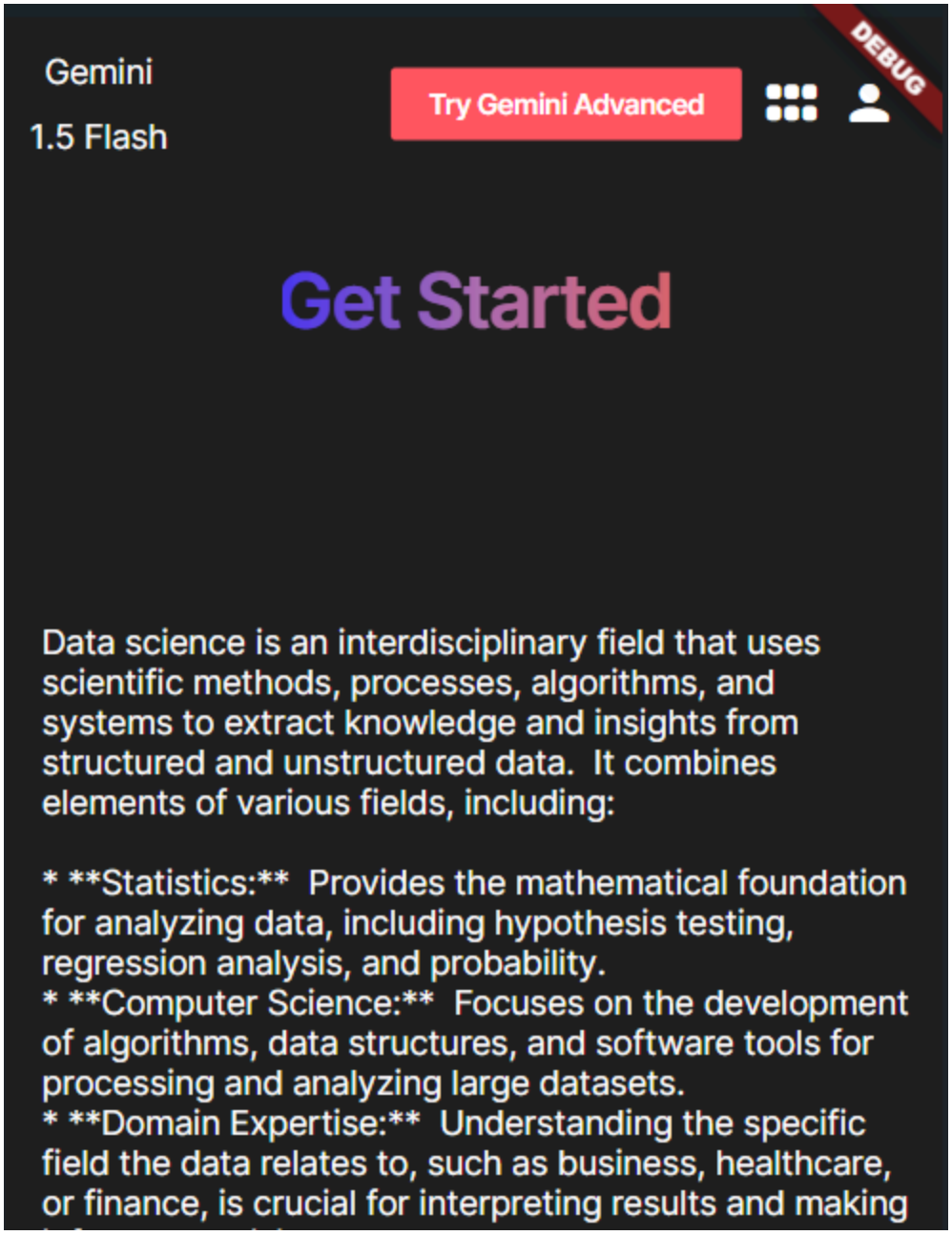

Figure 4: Output Field with Example Prompt.

Technical Implementation

Frontend:

- Built using **FlutterFlow** to create a seamless and visually appealing user interface.

Backend Integration:

- Google Gemini API processes user prompts and generates intelligent responses.

Navigation:

- The **"Try Gemini Advanced"** button redirects users to the Google Gemini Premium Plan page.

User Interaction:

- Prompts are entered via a text field and submitted using the "Send" button.
- Responses are displayed dynamically in the output field.

Challenges Faced

1. **Layout Responsiveness:** Ensuring consistent design across various devices.
2. **API Integration:** Handling errors gracefully for invalid or unsupported prompts.
3. **Scrollable Responses:** Implementing a scrollable column to display large outputs effectively.

Conclusion

The project successfully integrates FlutterFlow's design capabilities with the Google Gemini API to deliver an engaging AI-powered application. This app can be extended further with features such as:

- Voice Input for prompts.
- User authentication.
- Additional AI functionalities for broader use cases.