

7. PROJECT DEMONSTRATION

AutoSage – AI Vehicle Expert Application using Gemini Flash

7.1 Introduction

The project demonstration explains how the AutoSage application works in real time and how users interact with the system. AutoSage acts as an intelligent automobile assistant that accepts user queries in natural language and provides vehicle recommendations, comparisons, and maintenance suggestions using the Gemini Flash AI model. The system demonstrates how Artificial Intelligence can simplify vehicle selection and ownership guidance.

7.2 Demonstration Setup

- Operating System: Windows 10/11
- Programming Language: Python
- Framework: Flask
- Frontend: HTML, CSS, JavaScript
- AI Model: Google Gemini Flash API
- Browser: Google Chrome
- Internet Connection: Required for API communication

7.3 Working Procedure

- The user opens the AutoSage application in a web browser.
- The homepage displays a search interface.
- The user enters a vehicle-related query in natural language.
- The backend server processes the request.
- The query is sent to the Gemini Flash API.
- The AI model analyzes the request and generates a response.
- The response is formatted and displayed to the user.

7.4 Demonstration Scenarios

Scenario 1: Vehicle Recommendation

User Query: "Best bike under 1.5 lakh with good mileage"

System Output: List of recommended bikes, mileage details, price range, key features, and pros/cons.

Scenario 2: Vehicle Comparison

User Query: "Compare Honda Activa and TVS Jupiter"

System Output: Engine, mileage, price comparison and performance analysis.

Scenario 3: Maintenance Guidance

User Query: "Maintenance tips for a car"

System Output: Tire pressure checks, battery inspection, oil change schedule, and brake maintenance advice.

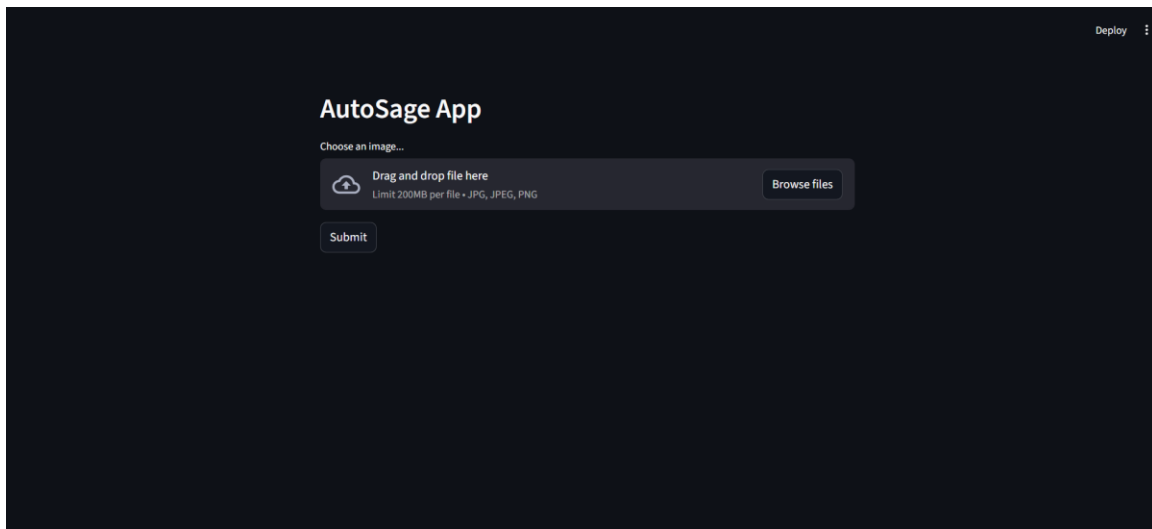
Scenario 4: Eco-Friendly Vehicle Search

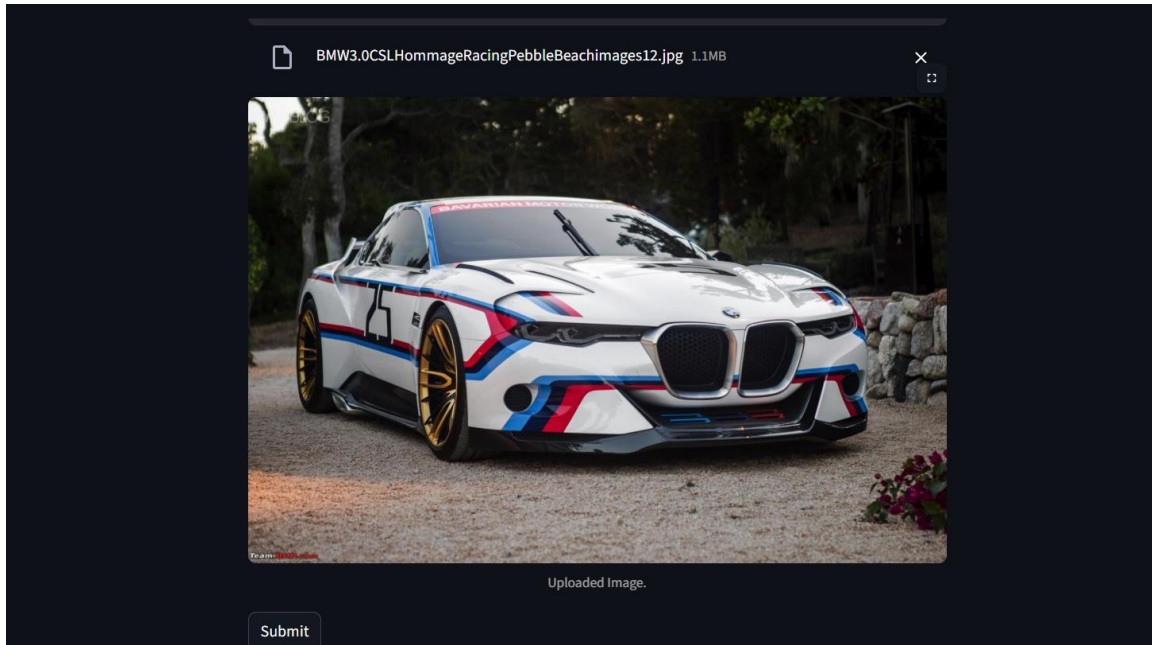
User Query: "Best electric scooter in India"

System Output: EV suggestions, battery range, charging time, and environmental benefits.

7.5 Output Screens

Insert screenshots of the following:





Deploy

The details about the Vehicle are as follow:

Based on the image provided, here is a detailed overview of this unique vehicle from an automobile expert's perspective.

Important Note: The vehicle pictured is the BMW 3.0 CSL Homage R, a one-off concept car created to celebrate the 40th anniversary of BMW North America and the racing success of the original 1975 3.0 CSL. It was never intended for mass production.

- **Brand:** BMW
- **Model:** 3.0 CSL Homage R (Concept)
- **Launch year:** Unveiled in August 2015 at the Pebble Beach Concours d'Elegance.
- **Key Features:**
 - **Engine & Type:** Concept Luxury Sport Coupe. While official specs were never fully released, it is designed around an inline-six engine with eBoost (hybrid technology) to mimic the spirit of the original "Batmobile" racer.
 - **Special Feature 1 (Lightweight Construction):** The entire body makes extensive use of Carbon Fiber Reinforced Plastic (CFRP), showcasing BMW's expertise in lightweight materials for performance.
 - **Special Feature 2 (AR Driver Integration):** It features a unique Augmented Reality (AR) system where vital racing information (speed, gear, etc.) is projected directly onto the visor of the driver's specialized helmet.
 - **Special Feature 3 (Aerodynamic Design):** The body features massive flared wheel arches, "Air Breathers" behind the front wheels, and a large rear spoiler integrated into the bodywork to optimize downforce.
- **Mileage:** As a one-off concept car not intended for road use, there is no official mileage rating. Based on similar high-performance BMW M engines, it would likely achieve approximately 5-8 km/l under performance driving conditions.
- **Average Price in INR:** This is a priceless, one-of-a-kind museum piece owned by BMW. It was never offered for public sale. If a production version had been released in limited numbers, the price would have likely ranged from **₹5.5 Crore to ₹8.0 Crore (ex-showroom)**.

- Home Page
- Query Input
- AI Response
- Comparison Output
- Maintenance Tips Output

7.6 Result Analysis

The demonstration shows that the AutoSage system correctly interprets user queries and provides accurate responses. The AI model understands natural language input and returns relevant vehicle information. The system is user-friendly and reduces the time required for vehicle decision-making.

7.7 Conclusion

The project demonstration proves that AutoSage functions as an intelligent vehicle expert assistant. The system effectively integrates web technology with generative AI to provide recommendations, comparisons, and maintenance support, helping users make informed purchasing decisions.