**Title: Final Year Project - Automobile Industry Web App**

**Introduction:**

The final year project aims to create a comprehensive web application targeting the automobile industry. The standout feature of the product is an integrated chatbot that offers users instant solutions to their vehicle-related problems, eliminating the need to spend their weekends troubleshooting. The project incorporates various features and technologies to enhance user experience and convenience within the automobile domain.

**Key Features:**

1. *Chatbot:* The central feature of the web app, providing users with quick solutions to their vehicle problems.
2. *Nearest Mechanic Recommendation*: If the chatbot responses are unsatisfactory, users receive recommendations for nearby mechanics.
3. *Vehicle Listings*: A platform for users to browse and explore different vehicle options.
4. *User Accounts:* User profiles for personalized experiences and interactions.
5. *Portals:* Different access points for users, mechanics, and administrators.
6. *Vehicle Comparison:* Enables users to compare multiple vehicles based on various attributes.
7. *Advanced Search and Filtering:* Enhances vehicle search through advanced filters and search options.
8. *Payment and Checkout:* Integrates secure payment gateways for seamless transactions.
9. *User Reviews and Ratings*: Allows users to share feedback and rate vehicles.
10. *Messaging and Notifications*: Incorporates real-time messaging and notifications for improved communication.
11. *Vehicle History Reports:* Displays vehicle history reports using third-party APIs.
12. *Mobile Responsiveness:* Ensures the web app works well on various screen sizes and devices.
13. *Customer Support:* Implements a live chat feature and customer support integration.
14. *Recommendation Engine:* Uses machine learning to suggest vehicles based on user preferences.
15. *Secure and Scalable Infrastructure:* Hosted on a reliable cloud platform with SSL certificates for security.
16. *Testing and Quality Assurance*: In-depth testing using frameworks like Jest and Mocha to ensure code quality.

**Tech Stack:**

Front-End Development:

* Programming Language: JavaScript
* Framework: React or Angular for a component-based architecture
* State Management: Redux or MobX for predictable state management
* Styling: CSS, Tailwind, MUI, React-strap

Back-End Development:

* Programming Language: Node.js for non-blocking I/O
* Framework: Express.js for routing and middleware management
* Database: MongoDB with Mongoose as an ODM for data management

Authentication and User Accounts:

Libraries like Passport.js, Auth0, Okta, or Firebase Authentication

Payment and Checkout:

Integration of payment gateways like Stripe or PayPal

Search and Filtering:

Libraries like ElasticSearch, Algolia, or Fuse.js for advanced search and filtering

Messaging and Notifications:

Technologies like WebSockets, Socket.IO, or push notification services

Vehicle History Reports:

Integration with third-party APIs for vehicle history information

Mobile Responsiveness:

Responsive design principles and CSS media queries

Recommendation Engine:

Machine learning using TensorFlow.js or Brain.js

Customer Support:

Live chat with tools like Intercom or integration with customer support platforms

**Conclusion:**

The final year project revolves around a feature-rich web app catering to the automobile industry's needs. With a cutting-edge tech stack and an array of functionalities, including the innovative chatbot and recommendation engine, the project aims to revolutionize how users interact with and benefit from the automobile industry.