

Your project is a Vehicle Service Booking System, which is a web application designed to help users book vehicle service appointments and allow administrators to manage these appointments. Here's a breakdown of what your project does:

1. ****User Management****:

- Users can register and log in to the system
- The system supports both regular users and administrators
- User authentication is handled securely with password hashing

2. ****Vehicle Management****:

- Users can add and manage their vehicles
- Each vehicle has details like make, model, year, and license plate number

3. ****Service Management****:

- The system offers various vehicle services (oil change, brake service, etc.)
- Each service has a name, description, price, and duration
- Administrators can manage available services

4. ****Appointment Booking****:

- Users can book service appointments for their vehicles
- The system shows available time slots for booking
- Users can select a service, date, and time for their appointment

5. ****Time Slot Management****:

- Administrators can create and manage available time slots
- Time slots can be marked as available, booked, completed, or cancelled
- The system prevents double-booking of time slots

6. ****Admin Features****:

- Administrators can view all appointments
- They can manage time slots and services
- They can update appointment statuses

7. **Technical Features**:

- Built with Flask (Python web framework)
- Uses MySQL database for data storage
- Implements user authentication with Flask-Login
- Has a responsive frontend using Bootstrap
- Includes form validation and error handling

The project follows a typical web application architecture with:

- Frontend: HTML templates with Bootstrap for styling
- Backend: Flask routes and controllers
- Database: MySQL for data persistence
- Authentication: User sessions and login management

This system helps streamline the process of booking vehicle services, making it easier for both users to book appointments and for service providers to manage their schedule.