GARAGE MANAGEMENT SYSTEM

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TEAM ID: NM2025TMID27821

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1.INTRODUCTION

A Garage Management System is a modern software solution developed to automate and streamline the daily operations of automobile garages and service centers. Traditionally, garages rely on manual record-keeping for customer details, vehicle service history, spare parts inventory, and billing processes. While this approach may work for small-scale garages, it often results in challenges such as misplaced records, human errors, longer service times, and poor customer satisfaction. With the continuous growth of the automobile industry and the increasing number of vehicles on the road, the workload of garages has expanded significantly, creating the need for a reliable and efficient digital system. A Garage Management System addresses these issues by integrating essential functions such as vehicle tracking, customer management, inventory control, automated billing, and employee task monitoring into a single platform. This allows garages to save time, reduce paperwork, improve service accuracy, and maintain transparency with customers. For customers, the system provides clear communication regarding service updates, costs, and expected delivery times, which enhances trust and loyalty. For garage owners and staff, it offers better productivity, improved data management, and easy access to service history and reports. Overall, a Garage Management System represents a crucial step toward modernization and professional service delivery.

1.1.PROJECT REVIEW

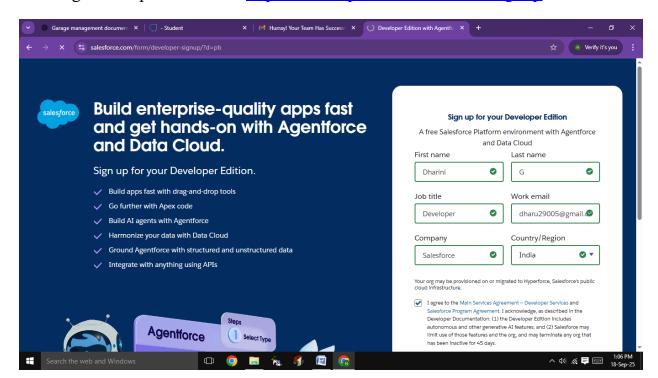
The Garage Management System project focuses on creating a digital platform to simplify and organize the operations of an automobile service center. Traditional garages often face issues such as misplaced records, calculation errors, and time delays due to manual processes. This project addresses these problems by integrating key functions like customer and vehicle management, service history tracking, inventory monitoring, and automated billing into a single system. It ensures better accuracy, reduces paperwork, and saves time for both staff and customers. The system also helps maintain transparency, as customers can clearly view service costs and updates. Overall, the project demonstrates how automation can improve efficiency, enhance customer satisfaction, and support the smooth functioning of garage services.

1.2. PURPOSE

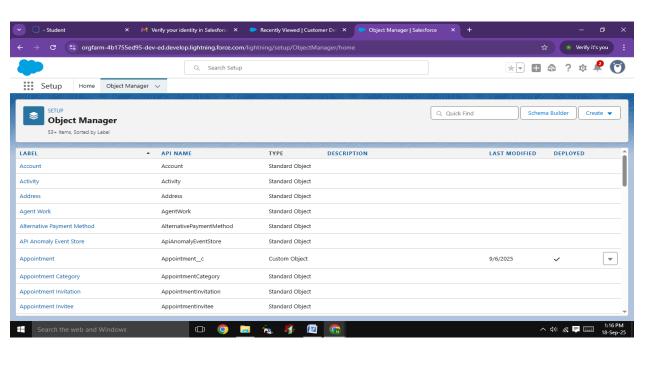
The purpose of the Garage Management System is to provide an efficient, reliable, and organized way of handling the daily activities of a garage or automobile service center. The system is designed to replace traditional manual methods, which are often time-consuming, error-prone, and difficult to manage as customer demands grow. By introducing automation, the project aims to simplify tasks such as recording customer details, tracking vehicle services, managing spare parts inventory, and generating accurate bills. It also seeks to improve communication between the garage staff and customers, ensuring transparency and faster service. Ultimately, the purpose of this project is to enhance productivity, reduce paperwork, and deliver a more professional and customer-friendly service environment.

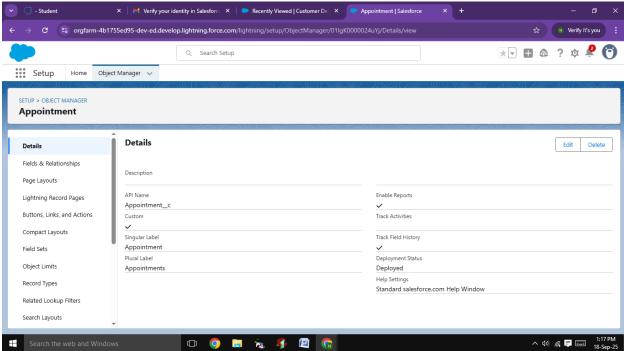
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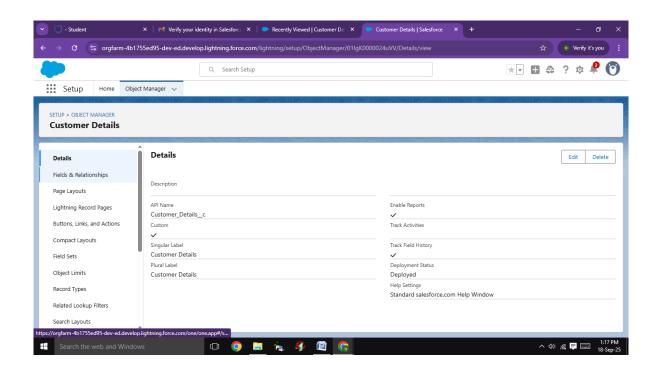
Creating Developer Account: https://developer.salesforce.com/signup

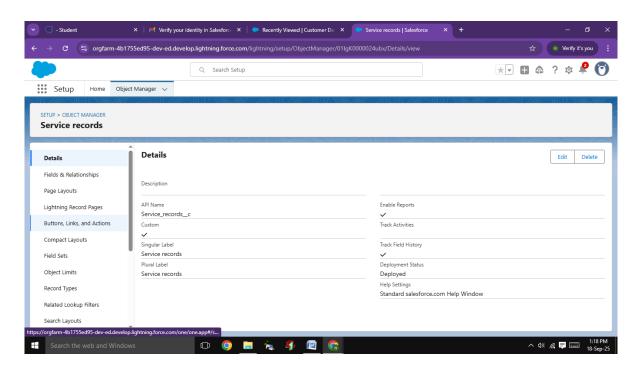


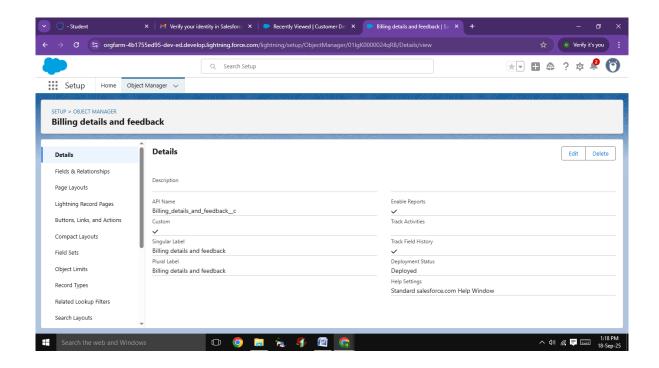
Created Object : Customer Details, Appointment, Service Records Object, Billing details and Feedback Object.



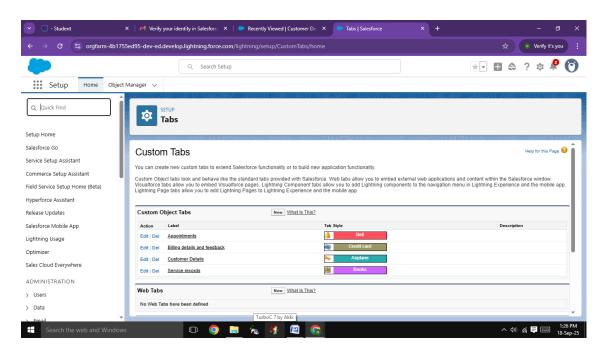


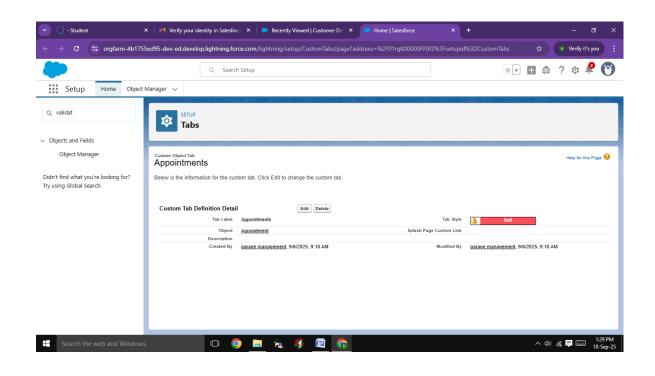


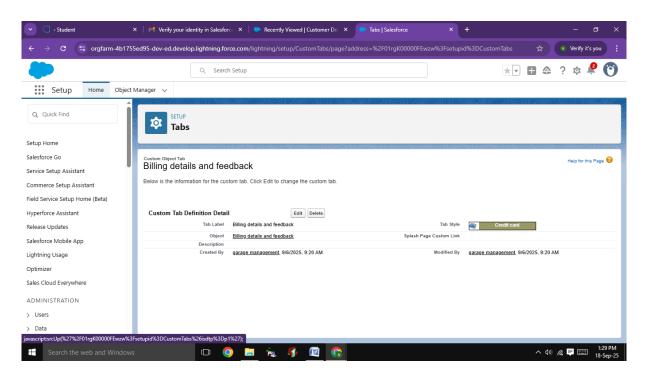


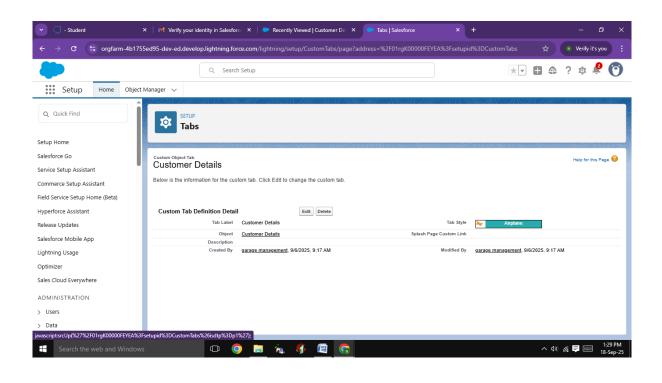


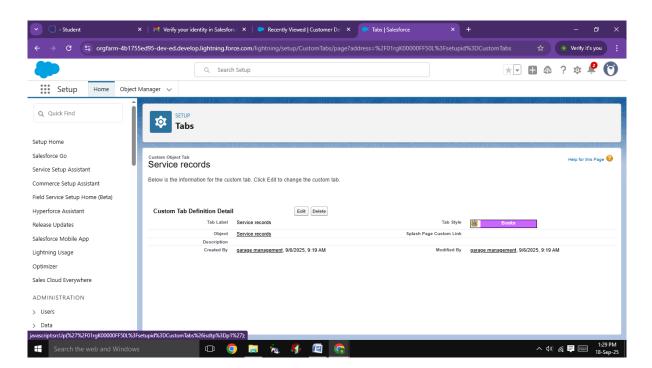
Created Tabs : Customer Details, Appointment, Service Records Object, Billing details and Feedback Object.



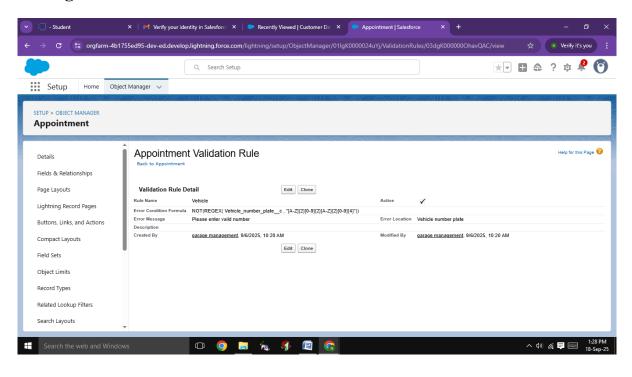


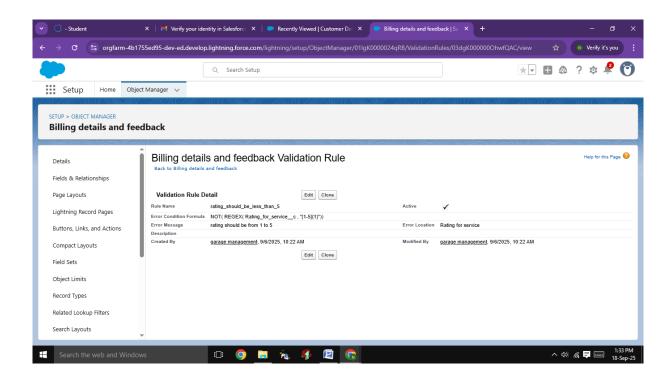


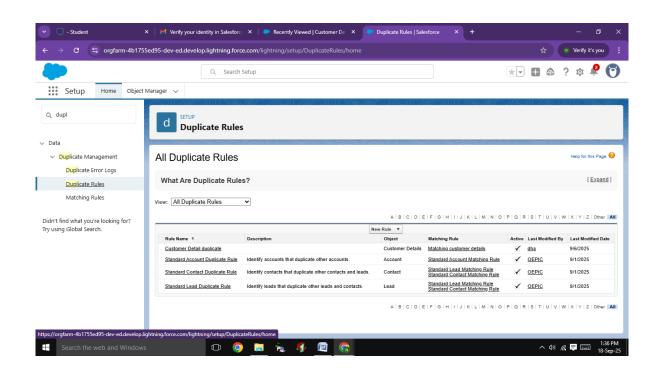


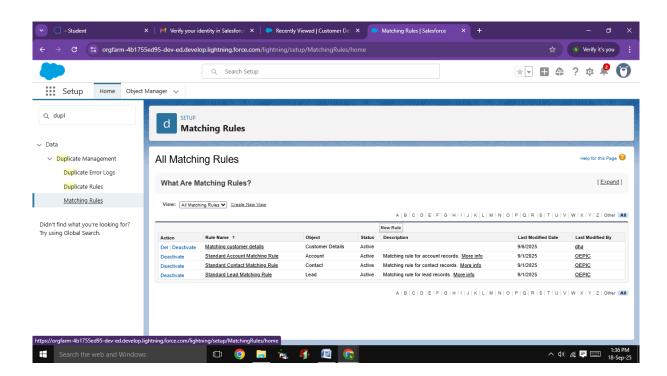


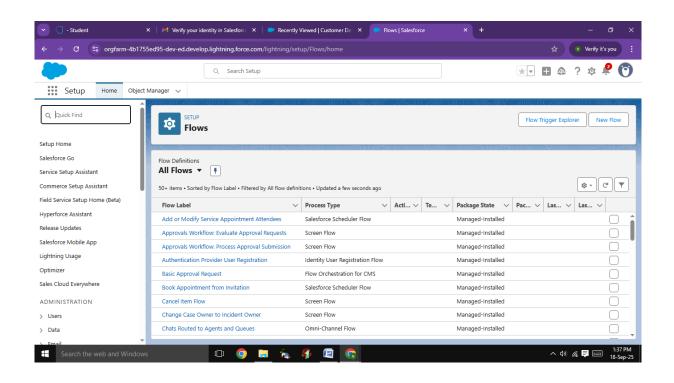
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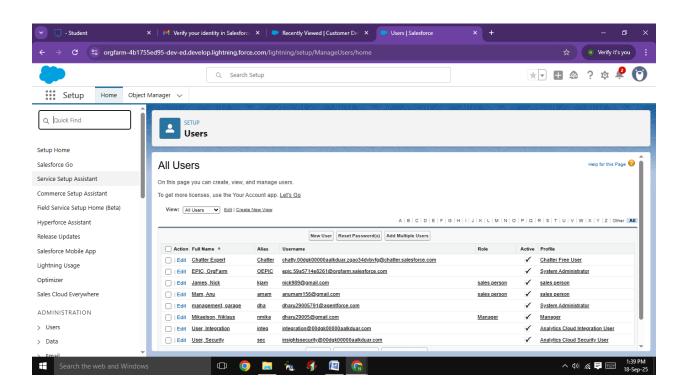


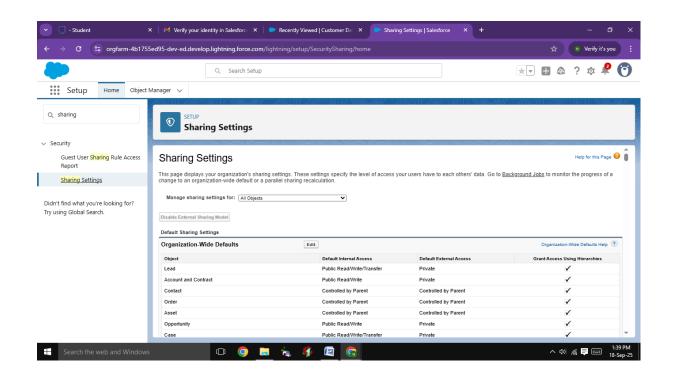


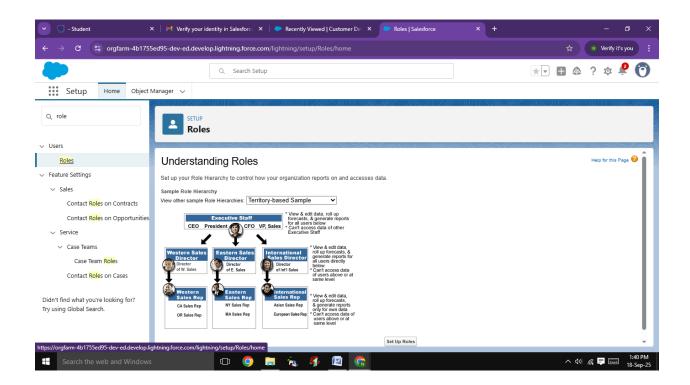


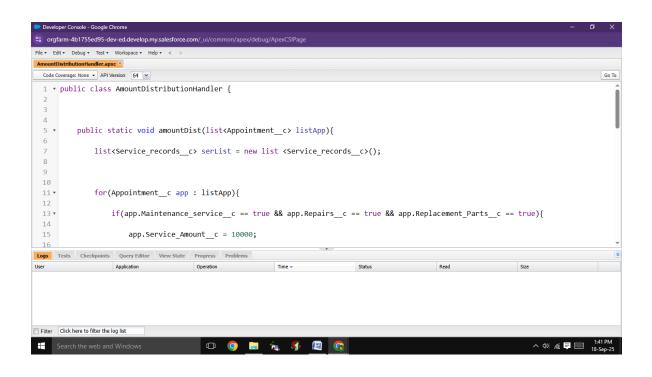


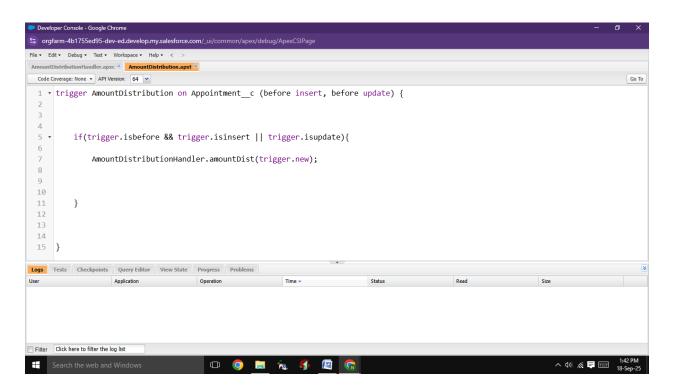


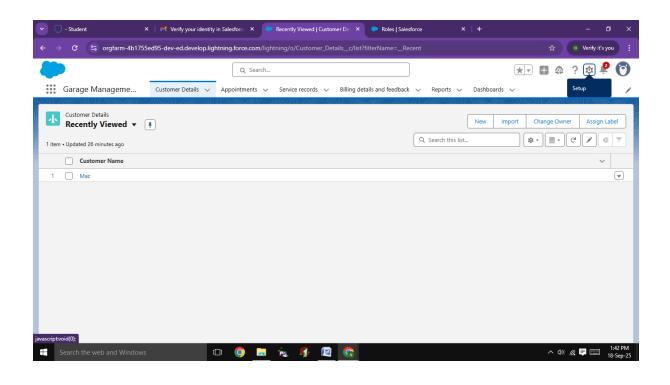


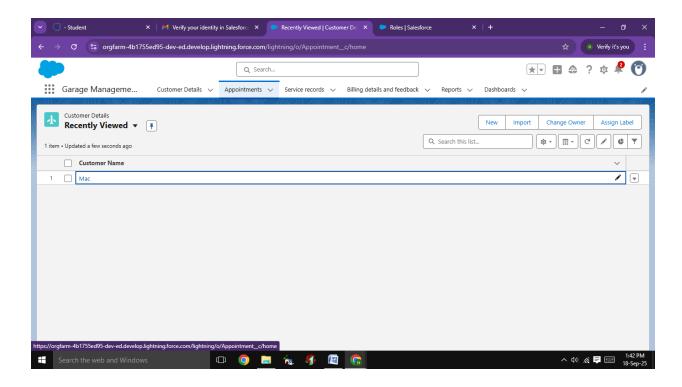


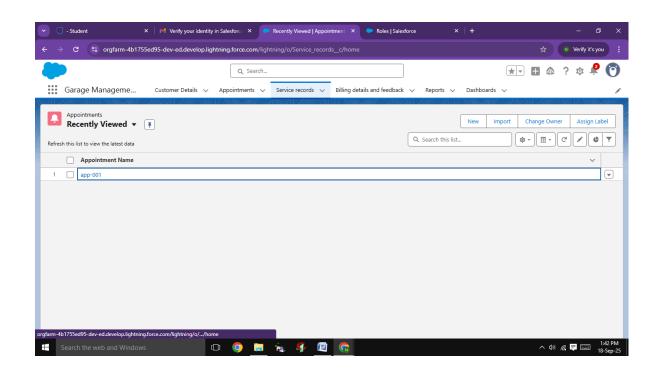


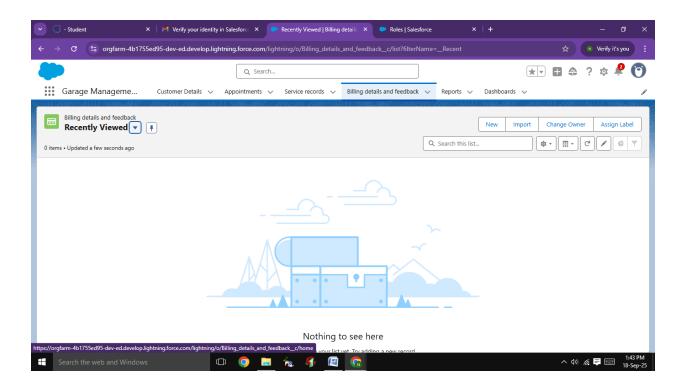


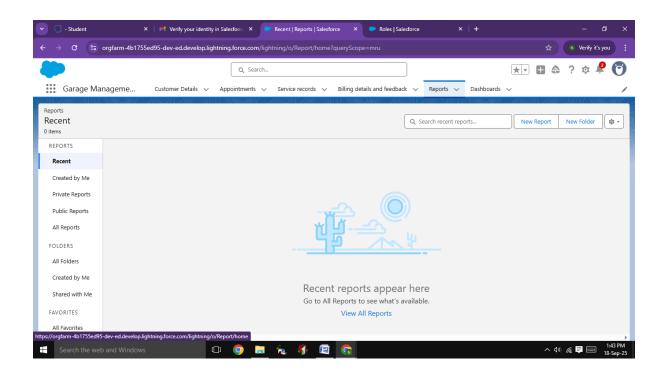


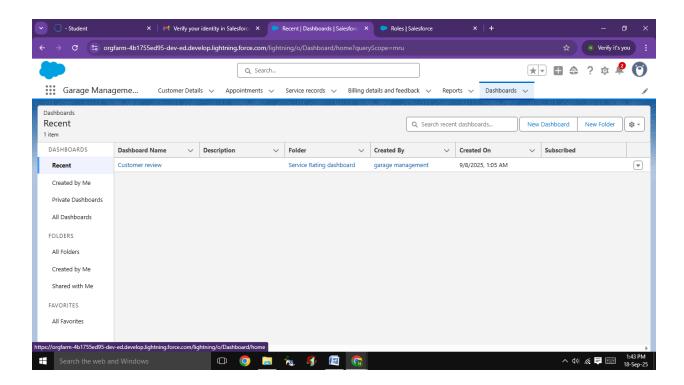












Advantages and Disadvantages:

Advantages

1. Time-Saving

The system automates regular tasks such as billing, record-keeping, and service tracking, which reduces manual effort and saves valuable time for both staff and customers.

2. Accuracy

By minimizing human involvement in calculations and data entry, the system ensures accurate service records, billing details, and inventory management.

3. Easy Data Access

All customer, vehicle, and service information is stored digitally, allowing quick retrieval of records whenever required. This improves organization and efficiency.

4. Transparency

Customers are provided with clear information about service charges, spare part usage, and expected delivery times, which builds trust and satisfaction.

5. Inventory Tracking

The system helps monitor spare parts availability, prevents shortages, and ensures that the garage is always prepared for services.

6. Scalability

The system can be easily expanded to handle larger workloads, making it suitable for both small garages and larger service centers as the business grows.

Disadvantages:

1. Initial Cost

Developing and implementing the system requires an initial investment, which may be a challenge for small garages with limited budgets.

2. Training Requirement

Garage staff may need training to understand and use the system effectively, which could take time and effort during the transition.

3. Technical Issues

Like any digital system, it may face technical problems such as software errors, slow performance, or downtime, affecting daily operations.

4. Dependence on Technology

The garage becomes heavily dependent on the system, and any failure could temporarily disrupt services.

5. Data Security Risks

Since sensitive customer and financial data is stored digitally, it is vulnerable to hacking or unauthorized access if not properly protected.

6. Maintenance Needs

The system requires regular updates and technical support to ensure smooth functioning, which may involve additional costs.

Conclusion

The Garage Management System is an effective solution for modernizing the operations of automobile service centers by replacing traditional manual methods with automated processes. It improves efficiency, accuracy, and transparency, ensuring that both customers and garage owners benefit from faster and more reliable services. Although the system involves challenges such as initial setup costs, training, and maintenance, its long-term advantages—such as time-saving, better record-keeping, and improved customer satisfaction—make it highly valuable. Overall, this project highlights the importance of digital solutions in streamlining garage operations and demonstrates how technology can support the growth and professionalism of the automobile service industry.

Appendix

