

Project Report: Customer Web



Duration: 2023 – 2024



Role: Software Engineer

✂ **Technologies Used:** CodeIgniter, PHP, MySQL, JavaScript, jQuery, AJAX, Bootstrap, RESTful APIs

1. Project Background

The **Customer Web** is a **user-friendly web platform** designed to cater to **non-technical users**, making **complex report generation and transaction management** seamless. It features **automated report generation, email notifications, and inventory tracking**, enabling businesses to **efficiently manage transactions and stock levels**. The system is **fully responsive**, ensuring seamless usability on both **desktop and mobile devices**.

2. Key Responsibilities & Contributions

◆ User-Friendly Interface Development

- Designed and developed a **simple, intuitive UI** for ease of navigation.
- Ensured a **responsive design** for optimal experience on both **desktop and mobile**.
- Integrated **real-time validation** to minimize user input errors.

◆ Automated Report Generation & Email Notifications

- Developed a **custom report generation system**, allowing users to generate reports in **PDF, Excel, and CSV formats**.
- Automated **scheduled report delivery** via **email notifications**.
- Integrated a **real-time notification system** for important updates (e.g., low stock alerts).

◆ Inventory Tracking & Stock Replenishment

- Implemented an **inventory management module** to track **stock levels and transactions**.
- Built an **automated stock replenishment workflow**, ensuring timely restocking.
- Designed an **audit trail system** to monitor inventory changes and prevent discrepancies.

3. Challenges & Solutions

Challenges	Solutions Implemented
Ensuring a non-technical user can generate reports effortlessly	Developed a step-by-step report builder with pre-set filters and export options.
Automating email notifications for report delivery	Integrated a cron job system to send scheduled emails based on user preferences.
Managing inventory efficiently with real-time updates	Used AJAX-based updates to reflect stock changes dynamically without page reloads.
Handling large amounts of data without performance issues	Optimized MySQL queries and implemented server-side pagination for reports.

4. Impact & Results

- ✔ **Increased Efficiency:** Automated reports and emails reduced **manual work by 60%**.
- ✔ **Enhanced User Experience:** A **simplified UI** made it easy for non-technical users to navigate.
- ✔ **Improved Inventory Control:** Automated stock replenishment prevented stockouts.
- ✔ **Faster Decision-Making:** Real-time data helped businesses **make informed stock decisions**.

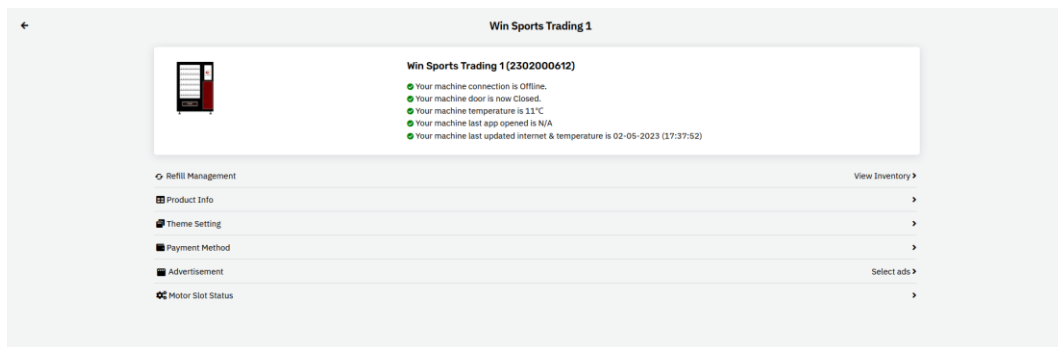
5. Screenshots & Visuals

(Disclaimer: All data shown in the screenshots is for testing purposes only.)

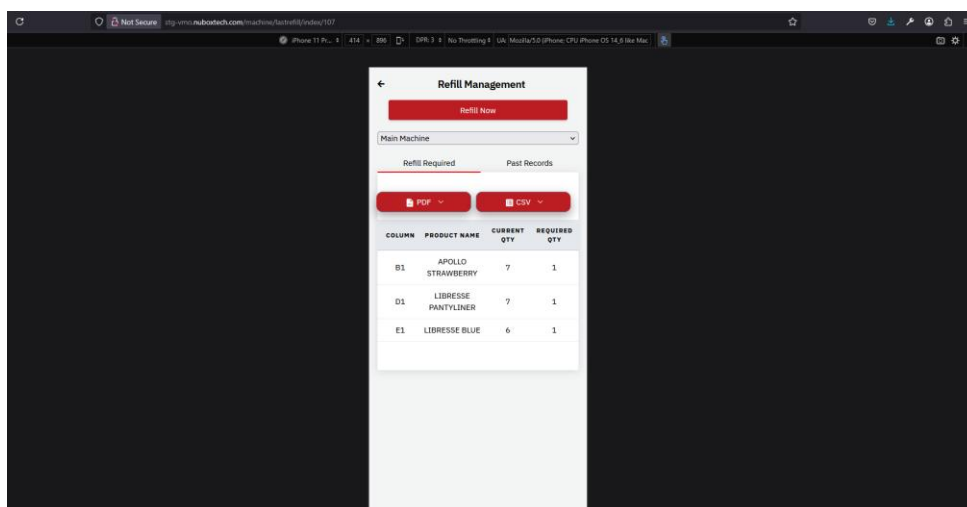
1) Dashboard



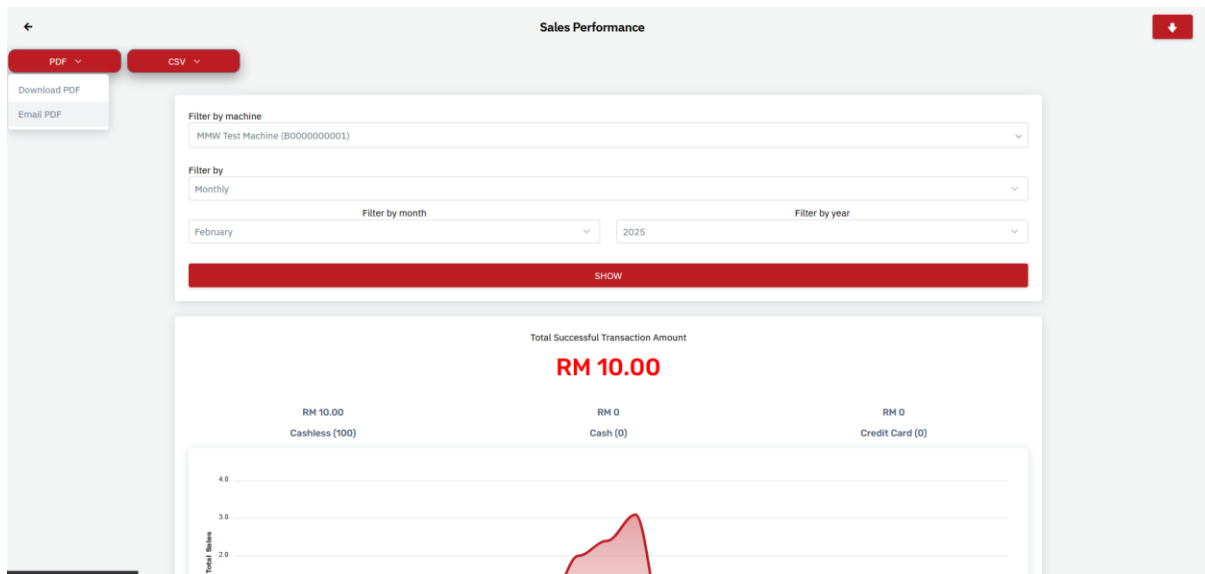
2) Detail of selected machine



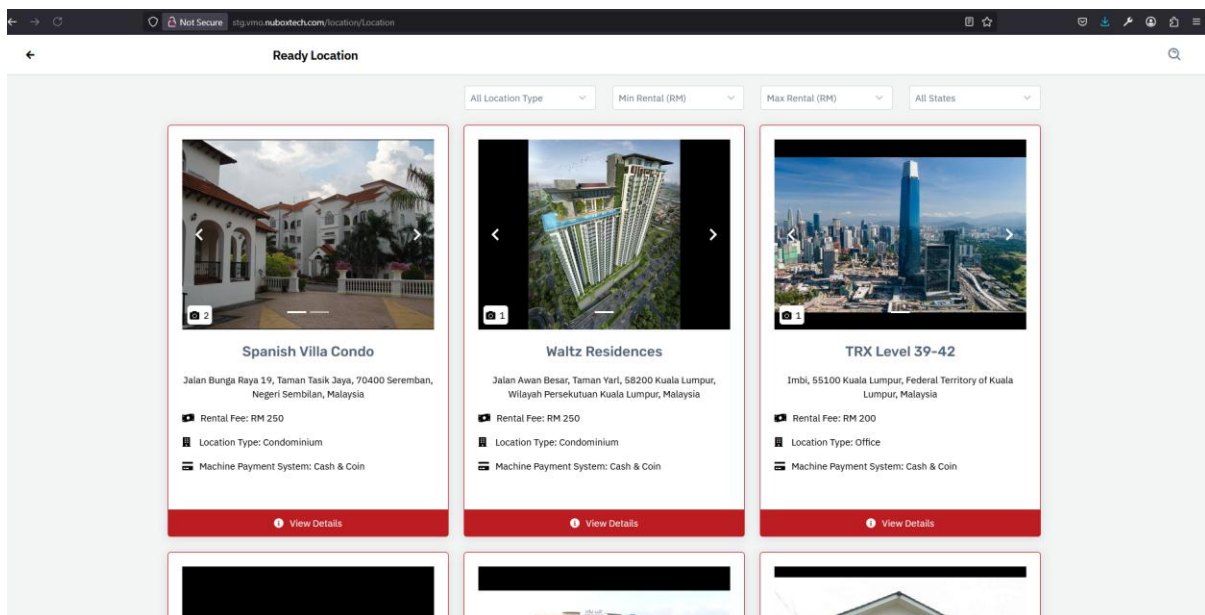
3) Refill Management (show in mobile device)



4) Sale Report can be sent through email.



5) List of all available location with filtering function.



6. Conclusion

The **Customer Web** successfully streamlined **transaction management, reporting, and inventory control** for non-technical users.