
Software Test Result for **Workshop Management System**

Version 1.0 approved

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20/6/2025

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1.0 Document Control

1.1 System Identification

The Software Test Result (STR) belongs to the Workshop Management System.

System Title	Workshop Management System									
System Abbreviation	WMS									
System Identification Number	100 (SEP-SRS-WMS 1.1.25) The system identification number shows the identification number for Workshop Management System									
System Version Number	1.0 This is initial release number for Workshop Management System									
System Release Number	1.1.25 Start with number 1 as the major release number and middle with number 1 as the minor release number that this is initial version of the system. Number 25 as the service release that shows the system released in 2025									
Document Identification ID	<div>SRS-WMS-2025</div> <table><tr><td>SRS</td><td>Software Requirement Specification</td></tr><tr><td>WMS</td><td>Workshop Management System</td></tr><tr><td>2025</td><td>Year of document created</td></tr></table>		SRS	Software Requirement Specification	WMS	Workshop Management System	2025	Year of document created		
SRS	Software Requirement Specification									
WMS	Workshop Management System									
2025	Year of document created									
Use Case ID	<div>UC01-WMS-2025</div> <table><tr><td>UC</td><td>Use Case</td></tr><tr><td>01</td><td>Number of use case in the system</td></tr><tr><td>WMS</td><td>Workshop Management System</td></tr><tr><td>2025</td><td>Year of document created</td></tr></table>		UC	Use Case	01	Number of use case in the system	WMS	Workshop Management System	2025	Year of document created
UC	Use Case									
01	Number of use case in the system									
WMS	Workshop Management System									
2025	Year of document created									
Requirement ID	<div>REQ-WMS-2025-101</div> <table><tr><td>REQ</td><td>Requirement within Use Case</td></tr><tr><td>WMS</td><td>Workshop Management System</td></tr><tr><td>2025</td><td>Year of document created</td></tr></table>		REQ	Requirement within Use Case	WMS	Workshop Management System	2025	Year of document created		
REQ	Requirement within Use Case									
WMS	Workshop Management System									
2025	Year of document created									

	1	Use Case Number
	01	Requirement Number
Traceability ID	ReqTrac-WMS-2025-101	
	ReqTrac	Requirement Traceability
	WMS	Workshop Management System
	2025	Year of document created
	1	Use Case Number
	01	Requirement Traceability Number
Sequence ID	SEQ-WMS-2025-101	
	SEQ	Sequence
	WMS	Workshop Management System
	2025	Year of document created
	1	Use Case Number
	01	Sequence Number

1.2 System Overview

The Workshop Management System is designed to simplify and improve the daily operations of vehicle repair workshops. It provides an integrated platform that allows workshop owners, foremen, and customers to interact efficiently while ensuring smooth business operations.

Workshop owners can manage essential tasks such as tracking inventory, scheduling employees, requesting spare parts from other workshops, processing payroll, and updating personal profiles. Foremen have access to a scheduling system where they can select available work slots, ensuring fair task distribution and minimizing conflicts. Customers can share their experiences through a rating and review system, providing valuable feedback that helps improve service quality.

The system consists of several key features. The profile management feature ensures that user information is always up to date for effective communication. Inventory management prevents shortages and overstocking by allowing real-time tracking of spare parts and tools. The inventory request feature enables workshop owners to obtain necessary parts from other workshops quickly, reducing downtime. The foreman scheduling module helps allocate tasks

effectively, while the scheduling selection feature allows foremen to manage their work shifts efficiently. Payroll processing is automated, ensuring accurate salary calculations based on work hours, deductions, and bonuses. Lastly, the rating and review system captures customer feedback, helping workshops enhance their services and build trust with clients.

By integrating these features, the Workshop Management System enhances efficiency, reduces delays, and improves overall customer satisfaction. The platform is designed to be user-friendly and scalable, ensuring it meets the evolving needs of modern workshops

Here are the modules for our system and explanation in detail:

i. Manage Profile (NUR ALYA SYAKIRAH BINTI NASARUDIN CB22141)

In this module, Workshop Owners and Foremen can manage their profiles by updating personal information, credentials and other relevant details. Users are allowed to edit and save changes to their profiles with input validation to maintain data accuracy. They can view and update details such as names, contact information, address and login credentials when needed. The system also applies role-based access control where users have specific permissions based on their role, helping to protect sensitive information. This module helps keep user data organized, accurate and easily manageable within the Workshop Management System.

ii. Manage Shop Inventory (VARSHINI JAGARAJAN, CB22139)

This module allows the Workshop Owner to effectively oversee and manage the shop's inventory. The Workshop Owner has the ability to add new inventory items, modify details of current items, and independently monitor stock levels. When specific items fall to low stock levels, the Workshop Owner can directly initiate a new inventory request using the Request Inventory extension module. All inventory operations, such as addition, modification, and stock changes, are logged and stored in the database for later tracking and reference. In conclusion, this module enables only the Workshop Owner to monitor and handle inventory availability, guaranteeing the seamless and ongoing function of the workshop.

iii. Request Inventory (VARSHINI JAGARAJAN, CB22139)

This extension module enables the Workshop Owner to request extra inventory items when stock levels are running low. The Workshop Owner is able to create and send a request detailing the needed items and amounts. When submitted, the request is logged in the system, and the Workshop Owner can manually adjust the inventory when the requested stock is received. This Request Inventory module helps the Workshop Owner in proactively managing inventory shortages, ensuring a well-stocked and efficient workshop setting.

iv. Manage Foreman Schedule (Amala Karthigayan, CB23116)

Manage Foreman Schedule module is for the Workshop Owners to possess an easy control and management of the allocation of available gig slots to foremen. Under this module, owners can create, read, update, and delete gig slots, such as setting the date, setting the time, setting the type of gig, and setting the number of foremen required. It supports dynamic scheduling requirements adjustments. Foremen are notified upon slot updates. This module plays a critical role in resource utilization at the best level and balanced distribution of workload among the workshop workforce.

v. Select Available Schedule (Amala Karthigayan, CB23116)

Select Available Schedule module allows Foremen to browse a list of available work schedules and select a preferable gig slot. The module gives an easy-to-use interface showing only valid, non-conflicting gig slots. Once a slot has been selected by a foreman, the system checks real-time availability to prevent over-allocation. Once verified, the system validates the selected schedule and updates the status accordingly. This mechanism ensures effective task allocation, minimizes schedule conflicts, and facilitates transparent open-task allocation among Foremen and Workshop Owners.

vi. Manage Payroll (NUR NABIHAH FATINY BINTI ISMAILCB23101)

This module allows the Workshop Owner to manage all payment-related activities in the workshop system. The owner can monitor, track, and handle every payment of staff salaries. The workshop owner can add the payment amount meanwhile the foreman, however, has limited access. They can only view their own payroll details payment history. This module helps keep all financial records organized, secure, and

easy to manage, ensuring smooth and transparent payment operations within the workshop.

vii. Manage Rating (NUR NABIHAH FATINY BINTI ISMAIL CB23101)

In this module, Customers are allowed to rate the services provided by the workshop. They can give feedback based on their experience, which helps the workshop understand how well they are performing. The Workshop Owner and Foreman only can view all the ratings submitted by customers. This module helps improve service quality by collecting honest feedback and allows the workshop team to identify areas that need improvement.

1.3 References



- [1] IEEE 830-1998, IEEE Recommended Practice for Software Requirements Specifications, IEEE Computer Society, 1998.
- [2] IEEE 1016-2009, IEEE Standard for Information Technology—Systems Design—Software Design Descriptions, IEEE Computer Society, 2009.
- [3] IEEE 1058-1998, IEEE Standard for Software Project Management Plans, IEEE Computer Society, 1998.
- [4] IEEE 1028-1997, IEEE Standard for Software Reviews, IEEE Computer Society, 1997.
- [5] ISO/IEC/IEEE 29148:2011, Systems and Software Engineering – Life Cycle Processes – Requirements Engineering, ISO/IEC/IEEE, 2011.
- [6] “Workshop Management System – POMEN.” Accessed: Mar. 30, 2025. [Online]. Available: <https://www.pomen.io/workshop-management-system/>




2.0 Introduction

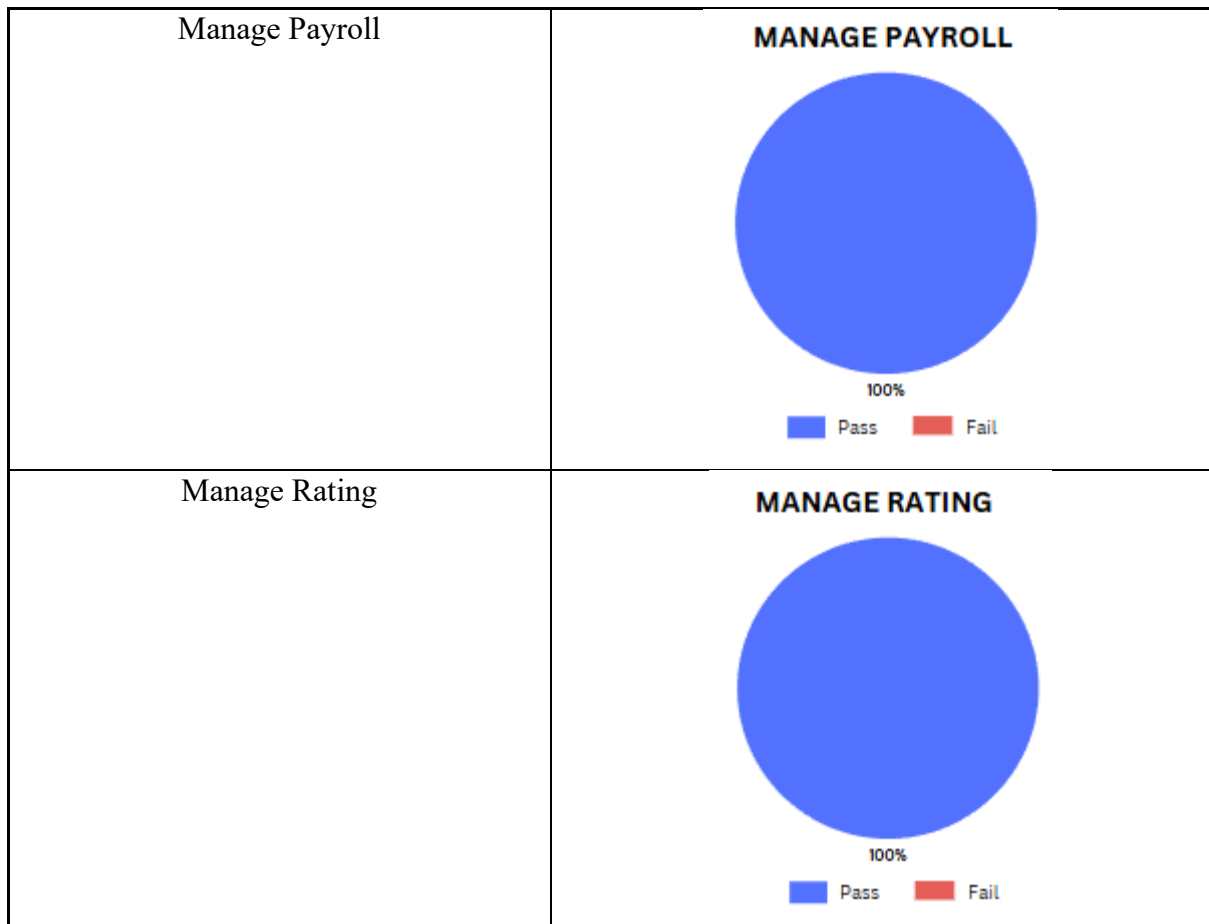
2.1 Formal Qualification Test of System

The Formal Qualification Test for the Workshop Inventory Management System is performed to ensure that the system has been developed and executed according to the specified Software Requirement Specifications (SRS) and Software Design Documentation (SDD). This formal evaluation verifies that the created features operate as expected and that all necessary elements are functioning properly and consistently. Every module undergoes thorough testing to verify that it meets both the functional and non-functional requirements.

2.2 Summary of Charting

Modules	Summary of Charting
Manage Profile	<p>MANAGE PROFILE</p>  <p>100%</p> <p>■ Pass ■ Fail</p>
Manage Shop Inventory	<p>MANAGE SHOP INVENTORY</p>  <p>100%</p> <p>■ Pass ■ Fail</p>

Request Inventory	<p>REQUEST INVENTORY</p>  <p>100%</p> <p>Pass Fail</p>
Manage Foreman Schedule	<p>MANAGE FOREMAN SCHEDULE</p>  <p>100%</p> <p>Pass Fail</p>
Select Available Schedule	<p>SELECT AVAILABLE SCHEDULE</p>  <p>100%</p> <p>Pass Fail</p>



2.3 Formal Qualification Test of STD Requirement Summary

Number of Test Cases	Remaining Test Cases	Test Cases Completed
45	0	45

Modules	Summary of Charting
Manage Profile	7
Manage Shop Inventory	6
Request Inventory	3
Manage Foreman Schedule	8
Select Available Schedule	9
Manage Payroll	7
Manage Rating	5

3.0 Test Result

3.1 Manage Profile (Alya Syakirah – CB22141)

Test Case ID	Expected Outcome	Actual Outcome	Result
TC-WMS-101	Workshop Owner and Foreman shall be able to register with all required details	User registered successfully and data saved to Firestore.	Pass
TC-WMS-102	User shall be able to log in using valid credentials.	Login successful and user redirected to dashboard	Pass
TC-WMS-103	User shall be able to view and access profile edit form.	Profile edit form displayed with pre-filled data	Pass
TC-WMS-104	User shall be able to update profile details with valid input.	Profile updated successfully and changes reflected in Firestore.	Pass
TC-WMS-105	System shall display error messages for empty or invalid required fields.	Alert messages shown when submitting incomplete or invalid data	Pass
TC-WMS-106	Cancel button shall discard unsaved profile changes.	Profile remained unchanged after clicking Cancel.	Pass
TC-WMS-107	System shall send a password reset link when user requests Forgot Password.	Reset link sent successfully to user's email.	Pass

3.2 Manage Shop Inventory (Varshini Jagarajan – CB22139)

Test Case ID	Expected Outcome	Actual Outcome	Result
TC-WMS-201	Owner shall be able to add a new inventory item by entering all required details.	Item added successfully and saved to Firestore.	Pass
TC-WMS-202	Inventory items shall be listed correctly on the View Inventory page.	Items displayed correctly with accurate details.	Pass
TC-WMS-203	Owner shall be able to edit and update an existing inventory item.	Item updated successfully and changes reflected in Firestore.	Pass
TC-WMS-204	Owner shall be able to delete an inventory item from the system.	Item removed from Firestore successfully.	Pass
TC-WMS-205	Supplier dropdown shall fetch and display supplier names from Firestore.	Supplier names loaded and displayed correctly in dropdown.	Pass
TC-WMS-206	System shall validate required fields and show alert if fields are left empty.	Alert message displayed when required fields are missing.	Pass

3.3 Request Inventory (Varshini Jagarajan – CB22139)

Test Case ID	Expected Outcome	Actual Outcome	Result
TC-WMS-301	Owner shall be able to submit a request for low stock inventory by entering valid quantity and supplier.	Request submitted and stored in Firestore with Pending status.	Pass
TC-WMS-302	Owner shall be able to change the status of an inventory request.	Status updated successfully in Firestore.	Pass
TC-WMS-303	System shall show alert message when quantity or supplier is not filled.	Alert message appeared when attempting to submit with missing fields.	Pass

3.4 Manage Foreman Schedule (Amala Karthigayan – CB23116)

Test Case ID	Expected Outcome	Actual Outcome	Result
TC-WMS-401	New gig slot appears in the slot list; success message is shown.	New gig slot appears and a success message is shown.	Pass
TC-WMS-402	Error message “Duplicate slot ...” and prevent saving.	Error message is displayed stating that the slot already exists.	Pass
TC-WMS-403	Slot is updated; list reflects new details.	Changes are made and listed successfully.	Pass
TC-WMS-404	Fields are read-only / disabled; no change possible.	The fields are disabled and can’t make any changes.	Pass
TC-WMS-405	Slot is removed from list; success message shown.	Slot is successfully deleted and a message is shown.	Pass
TC-WMS-406	Prompt “Are you sure?” appears before deletion.	Confirmation message is displayed before the deletion.	Pass
TC-WMS-407	List shows each application with correct foreman details.	List of application with correct foreman details is shown.	Pass
TC-WMS-408	Status changes to Approved/Rejected; foreman notified.	Foreman receives notification upon successful approval or rejection.	Pass

3.5 Select Available Schedule (Amala Karthigayan – CB23116)

Test Case ID	Expected Outcome	Actual Outcome	Result
TC-WMS-501	List displays open slots only.	Available gig slots are displayed successfully.	Pass
TC-WMS-502	Application status “Pending”; confirmation shown.	Foreman can successfully apply for the gig slot and a confirmation is shown.	Pass
TC-WMS-503	Error “Slot is full” displayed; no application created.	Error message is displayed and no application created.	Pass
TC-WMS-504	Confirmation “Application submitted”.	Confirmation message is displayed along with a notification in the system.	Pass
TC-WMS-505	List displays status of each application.	The list of applied gigs is displayed with the application status (approved/rejected).	Pass
TC-WMS-506	Status changes to Cancelled; owner notified.	Cancellation is successful and the owner receives a notification.	Pass
TC-WMS-507	Error “Cannot cancel within 24 h” shown; no status change.	Error message is displayed.	Pass

TC-WMS-508	Notification “Foreman X cancelled slot Y”.	Notification is received by the respective owners.	Pass
TC-WMS-509	Notification “Application Approved” or “Application Rejected”.	Foreman successfully receives notification upon the decision made by the owners and the application status changes accordingly.	Pass

3.6 Manage Payroll (Nabihah Fatiny – CB23101)

Test Case ID	Expected Outcome	Actual Outcome	Result
TC-WMS-601	The system displays a list of foremen with pending payments.	List of pending foremen appears successfully on the screen.	Pass
TC-WMS-602	The system displays a payment form with fields (Bank, Name, Account No., Amount, Date, Reference).	Payment entry form is shown with all fields visible and ready for input.	Pass
TC-WMS-603	The system displays a success message and updates status to “Successful”.	Payment submission successful and confirmation message appears with status marked as “Successful”.	Pass
TC-WMS-604	The system displays an error message: “Invalid payment details. Please check and try again.”	System displays validation error and prevents submission due to incorrect account details.	Pass
TC-WMS-605	The system displays the updated payment amount in the form.	Modified payment amount is updated and displayed in the form successfully.	Pass
TC-WMS-606	The system cancels the payment process and displays no submitted record.	Payment action is aborted and no data is recorded in the system.	Pass
TC-WMS-607	The system displays the foreman's payroll records and payment status.	Payroll history and statuses are successfully shown to the foreman.	Pass

3.7 Manage Rating (Nabihah Fatiny – CB23101)

Test Case ID	Expected Outcome	Actual Outcome	Result
TC-WMS-701	The system displays a list of completed bookings to the customer.	Completed bookings are displayed clearly for rating selection	Pass
TC-WMS-702	The system displays a rating form with stars and a feedback text field.	Star rating interface and feedback text area appear successfully	Pass
TC-WMS-703	The system saves the submitted rating and displays it on the Rating Page.	Submitted rating and comment are recorded and shown properly.	Pass
TC-WMS-704	The system displays all customer feedback and star ratings to the Workshop Owner.	A compiled list of customer feedback and ratings	Pass
TC-WMS-705	The system displays customer-submitted ratings in read-only mode to the Foreman.	Foreman can successfully view ratings and feedback	Pass

4.0 Acronyms and Abbreviations

Acronyms / Abbreviation	Description
STR	Software Test Result
WMS	Workshop Management System
TC	Test Case
REQ	Requirement