A blue and black logo

AI-generated content may be incorrect.

Faculty of Computing

SE2030 – Software Engineering

Year 2 Semester 1(2025)

Web-based Car Rental System

Lab sheet 6

**Group ID:** 2025-Y2-S1-MLB-B1G1-07 **Batch Group No:** Y2. S1. WD.01.01 **Group members:**

|  |  |
| --- | --- |
| Rathnayake O.M | IT24103874 |
| Aruniya N. | IT24103971 |
| Weerakoon N.B | IT24103863 |
| Amarakoon M.B.V.B.A | IT24103878 |
| Wickramarathna W.G.S.A.S | IT24103988 |
| Walimuniarachchi W.A.K.S | IT24103947 |

Date of Submission

26/09/2025

## IT24103874 – Rathnayake O. M

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Title | Description | Preconditions | Test Steps | Test Data | Expected Output | Actual Output | Status |
| R1 | Viewing Reports | Users should be able to view reports. | User is a finance / manage person.  User is logged in. | User clicks on view reports.  User clicks on a report. | Username: admin123  Password: user567  Report name: ‘Test report’ | Report opens on a separate window. ‘Test report’ should contain 5 rows and 5 columns. | Reports open on a separate tab with expected columns and rows. | Pass |
| R2 | Searching for reports | Users should be able to view reports. | User is a manager.  User is logged in. | User clicks on search bar and enters a report name.  User clicks the search button. | Username: admin123  Password: user567  Report name: ‘Test report’ | Only the report ‘Test report’ should be returned in the list of reports. | Reports without the same name can be seen as well. | Fail |
| R3 | Downloading Reports | Users should be able to download the reports. | User is a manager.  User is logged in. | User opens a report.  User clicks on download report. | Username: manager123  Password: user567  Report name: ‘Test report’ | The report should be downloaded to the user’s device as a csv file and should contain all information that is in the report when viewed. | When clicked on the download button, the csv is downloaded, however the table does is empty. | Fail |
| R4 | Create reports with default parameters | Users should be able to create reports with default parameters. | User is a finance / manage person.  User is logged in. | User clicks on create reports.  User enters no information and clicks create report. | Username: admin123  Password: user567 | A report with named ‘report\_[date]’ should be created.  The report should contain a summary for total income, total cancellations and total rentals booked from exactly 30 days before the current date to present. | A report with default parameters with expected rows and columns are created. | Pass |
| R5 | Create reports with new parameters | Users should be able to create reports with custom parameters. | User is a finance / manage person.  User is logged in. | User clicks on create reports.  User enters from and to dates, parameters and clicks create report. | Username: admin123  Password: user567  Report: Report\_test1  From: 01/06/2025  To: 01/07/2025  Parameters:  Total income, booking, buyer, car rating | A report names ‘Report\_test1’ should be created.  The report should contain 8 rows and 3 columns with a summary of total income at the end. | A report with the given parameters and expected rows and columns are created. | Pass |
| R6 | Edit existing reports | Users should be able to edit the parameters of current reports. | User is a finance / manage person.  User is logged in. | User clicks on edit reports.  User will enter new parameters.  User clicks enter. | Username: admin123  Password: user567  Report: Test report’  Parameters:  Total income, booking, buyer, car rating | The report should be shown as ‘Test report’ The report should contain 8 rows and 3 columns with a summary of total income at the end. | When reopened, the report contains the expected output. | Pass |
| R7 | Delete reports | Users should be able to delete reports. | User is a manager.  User is logged in. | User clicks on report.  User clicks delete. | Username: manager123  Password: user567  Report: Test report’  Parameters:  Total income, booking, buyer, car rating | The report can no longer be found in all reports list. | Once delete is clicked, the report can no longer be found. | Pass |
| R8 | Access verification | Only managers should be able to delete and download reports. | User is a finance person.  User is logged in. | User clicks on report. | Username: admin123  Password: user567  Report: Test report’ | User does not have the button to delete or download the report. | Finance person can also access the download button, delete button however is not present. | Fail |
| R9 | Null return verifications | If a report from a period with no bookings is requested, it should handle the null return. | User is a finance / manager person.  User is logged in. | User clicks on create reports.  User adds dates to and from.  User adds parameters.  User clicks enter. | Username: admin123  Password: user567  Report: Report\_test2  From: 01/04/2025  To: 01/05/2025  Parameters:  Total income, booking, buyer, car rating | System alerts users that there are no records and does not create the report. | The system alerts user as to the lack of records. | Pass |
| R10 | Update reports with changes in bookings. | If a booking is deleted or changed within the duration of the report, it needs to be updated when it opens again. | User1 is a finance / manager person.  User1 is logged in.  User2 is a buyer. | User1 clicks on view report.  User writes down the current total income.  User2 cancels a booking.  User reopens the report.  User re-checks the total income. | User1: admin123  Password: user567  User2:  Buyer123  Password:  User567  Report: Test report’  Booking id: BK1234 | When the user1 checks the reports initially, the income should be 1500 USD.  After user2 cancels booking, and user1 reopens the report, the income should be 1450 USD. | When the booking is changed, at re opening, the report is updates as well. | Pass |

## IT24103863 – Weerakon N.B

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Title | Description | Preconditions | Test Steps | Test Data | Expected Output | Actual Output | Status |
| TC-01 | Login and Receive Booking Confirmation Notification | Verify that a logged-in customer receives a booking confirmation notification. | Customer has a valid account and has made a booking. | 1. Login to the car rental system with valid credentials. 2. Navigate to 'My Bookings' or wait for system confirmation. 3. Check in-app notifications, email, or SMS for booking confirmation. | User: student@example.com Password: Pass123 Booking ID: 101 | Notification: 'Booking Confirmed' is delivered via chosen channel (app/email/SMS). | As Expected | Pass |
| TC-02 | Receive Car Availability Update | Verify that a customer is notified when a booked car becomes unavailable and prompted to rebook or cancel. | Customer has an active booking; admin changes car status to 'unavailable'. | 1. Admin updates car status to 'Unavailable' for the booked car. 2. System generates an update notification for affected bookings. 3. Customer receives notification and sees options (Rebook / Cancel). | Car ID: C202 Booking ID: 204 | Notification: 'Car unavailable for your booking — please rebook or cancel' is delivered. | As Expected | Pass |
| TC-03 | Receive Return Reminder | Verify that the system sends a reminder notification before the scheduled return time. | Customer has an ongoing booking with a scheduled return time. | 1. System scheduled job checks bookings 24 hours and 1 hour before return time. 2. System sends return reminder notification to customer. 3. Customer receives reminder and can confirm or request extension. | Booking ID: 110 Return Time: 2025-09-01 18:00 | Notification: 'Return due at 6:00 PM today' delivered at configured reminder times. | As Expected | Pass |
| TC-04 | Notification Delivery After Internet Reconnect | Verify that notifications triggered while the customer is offline are delivered after reconnecting to the internet. | Customer is logged in on the device but currently offline. | 1. Simulate customer's device losing internet connectivity. 2. Trigger a notification event (e.g., admin changes booking). 3. Reconnect device to internet. 4. Check that pending notifications are delivered to the device/app. | Booking ID: 105 Device: Mobile (offline) | Pending notifications are delivered once the device reconnects. | As Expected | Pass |
| TC-05 | Reminder for Ignored Notification (Limit Reminders) | Verify that the system sends reminders for unread notifications and respects the maximum reminder limit. | Customer has an unread notification and reminders setting enabled. | 1. Send initial notification. 2. Customer ignores/does not open the notification. 3. System sends reminder notifications at configured intervals up to the maximum allowed. 4. Verify no more reminders after reaching the limit. | Booking ID: 120 Reminder limit: 3 times (system setting) | System sends at most 3 reminders and stops further reminders. | As Expected | Pass |
| TC-06 | Rate Rental Experience (Stars Only) | Verify customer can submit a star rating (1–5) without adding a text comment. | Customer has completed a rental and is authenticated. | 1. After rental return, system sends rating prompt. 2. Customer opens rating screen. 3. Select star rating (e.g., 4 stars) and submit without comment. 4. Confirm rating saved in system. | Rating: 4 stars Booking ID: 130 | Rating saved (4) and available for admin review; comment field empty. | As Expected | Pass |
| TC-07 | Rate Rental with Comment | Verify customer can submit a star rating along with a text comment and that both are stored correctly. | Rental completed and customer is logged in. | 1. Customer receives rating prompt after return. 2. Opens rating screen, selects 5 stars and enters comment 'Excellent service, clean car'. 3. Submits rating and comment. 4. Verify both star value and comment saved and displayed to admin. | Rating: 5 Comment: 'Excellent service, clean car' Booking ID: 132 | Rating (5) and comment stored and visible in admin dashboard. | As Expected | Pass |
| TC-08 | Skip Rating (Record 'No Rating Given') | Verify system records a 'no rating given' entry if the user dismisses or skips the rating prompt. | Rental completed and rating prompt shown. | 1. Customer receives rating prompt after return. 2. Customer closes or skips the prompt without submitting. 3. System records an entry indicating 'no rating given' for that booking. | Booking ID: 140 | System stores a 'no rating given' record linked to the booking. | As Expected | Pass |
| TC-09 | Admin Views Ratings and Feedback | Verify admin can access ratings, see comments, and view aggregated metrics for analysis. | At least one rating/comment exists and admin account is available. | 1. Admin logs into the admin panel. 2. Navigate to Ratings/Feedback dashboard. 3. Filter by date or car and review list of ratings and comments. 4. Check aggregated metrics (average rating, number of responses). | Admin user: admin@example.com Date range: Last 30 days | Admin sees list of ratings, comments, and summary metrics. | As Expected | Pass |
| TC-10 | Anonymous Rating Not Allowed | Verify system rejects rating submissions from unauthenticated/anonymous users. | User is not logged in; attempt to access rating API or UI anonymously. | 1. Open rating URL or API endpoint without authentication. 2. Try to submit a rating (e.g., 3 stars). 3. Observe system response. | Rating: 3 User: not logged in (anonymous) | System returns an authentication error and does not record the rating. | As Expected | Pass |