Test Plan and Results

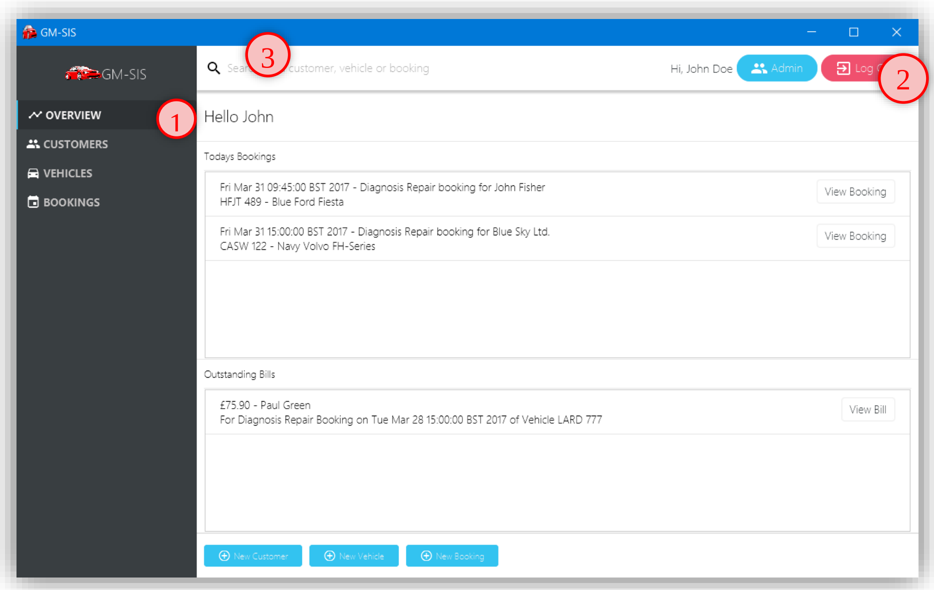

Figure 4 - The overview screen of GMSIS showing bookings for today and any outstanding bills. 1 – The sidebar menu allowing access to any module. 2 – The Admin and Log Out buttons, Admin only shows when the logged in user is an admin. 3 – Global search bar for all modules.

1.1 Test Cases - Authentication

1. Logon as existing system administrator - **PASSED**

   Precondition - Start the system and ensure the login screen is displayed and you are currently not logged in.

   Action - The user John Doe is a system administrator, with the ID “10000” and password “test”. Enter these into the fields then press the enter key or the blue “Login” button.

   Postcondition - Once logged in you can verify the user is an admin as a blue “Admin” button is visible in the top right. The “Admin” button is only visible for Administrators.

2. View list of existing users (all users of both types) - **PASSED**

   Precondition - You must be logged in as an administrator.

   Action - To view the list of all users, click the blue “Admin” button (Figure – Number 3) in the top right of the screen.

   Postcondition - All users including themselves are listed here.

3. Change password of existing day-to-day user - **PASSED**

   Precondition – Logged in as a system administrator and on the “Admin” page with the list of users.

   Action - To edit the password double click the password field for John Doe and the field will change into a text box. Enter the new password “hello”. Then press the enter key or click outside the box and the password will be changed and automatically saved.

Postcondition – John Doe's password in the user list shows as "hello" and you are able to login using ID "10000" and password "hello".

4. Create a new day-to-day user - **PASSED**

   Precondition - Logged in as a system administrator and on the "Admin" page with the list of users.

   Action - Click the blue "Add" button in the bottom right. This presents you with a form to create a new user. Enter a new ID (40000), Name (Sarah), Surname (Heart), Password (test) and select the role "User" for a day-to-day user. Click the "Add User" button to create the new user.

   Postcondition - You are now able to login as this user using ID "40000" and password "test", the user will also appear in the list.

5. Logout existing administrator - **PASSED**

   Precondition – Must be logged in a system administrators

   Action - To logout click the red "Logout" button in the top right of any screen.

   Postcondition – You are presented with the login screen in order to log back in or log in as a different user.

6. Login as the new day-to-day user - **PASSED**

   Precondition – Must be logged out and on the Login screen.

   Action - To login as the new day-to-day user (Sarah Heart), enter the newly created ID "40000" and password "test", then press the blue "Login" button.

   Postcondition - You will be presented with the overview screen, you can verify you are logged in as Sarah Heart as the message in the top left will say "Hi, Sarah Heart".

7. Logout as new day-today user - **PASSED**

   Precondition – Logged in as the new user (Sarah Heart)

   Action - To logout as the new user click the red "Logout" button in the top right.

   Postcondition – Presented with the Login screen in order to login again.

8. Attempt login as new day-to-day user with incorrect authentication - **PASSED**

   Precondition – Must be logged out and on the Login screen

   Action - When logging in as the new ID "40000" but using the wrong password "another".

   Postcondition - An error message is printed saying the ID or password is incorrect and the password field is reset.

9. Logon as existing system administrator - **PASSED**

   Precondition – Must be logged out and on the Login screen

   Action - To log back in as the system administrator John Doe, provide the same ID "10000" and password "test". Then click the blue "Login" button.

   Postcondition – In the top right the greeting text will say "Hi, John Doe".

10. Delete newly created day-to-day user - **PASSED**

    Precondition – Must be logged in as a system administrator and on the user list.

Action - Select the new day-to-day user (Sarah Heart). Then click the red “Delete” button in the bottom right.

Postcondition - The user will no longer be in the users list and you are unable to login as the user.

11. Login as existing day-to-day user - **PASSED**

Precondition – Must be logged out and on the Login screen.

Action - To login as the existing day-to-day user Lauren Green, enter the ID “20000” and password “test”. Then click the blue “Login” button.

Postcondition – The text greeting in the top right will say “Hi, Lauren Green”.

1.2 Test Cases - Customers

Test Description	Input	Expected Result	Actual Result	Fail/Pass
View existing business and private customers.	The only input needed to complete this operation is clicking the button “Customer” in the side bar.	The customer UI should be initialised displaying the table containing all the customer details (both types).	The customer UI is correctly initialised and the table containing customer records is displayed.	PASS
Search for a business customer, using partial name, and show contact details and list of vehicles.	Partial name is input in the relevant field (automatically lists all the possible match in the table). Customer’s contact details are in the same UI. To list the vehicles user must select the customer and click on the button ‘edit see vehicles’.	If any match is found, customer’s contact details should be displayed in the table. To see vehicles, after selecting the customer and clicking the button ‘edit see vehicles’, user should be redirected to another screen where al the vehicles of that customer are listed.	The business customer is found and the contact details are displayed in the table. The customer is then selected, and by clicking on “edit/see vehicles”, a new UI is initialised displaying all the customer’s vehicles.	PASS
For an existing customer show bills for past completed bookings and show settlement status.	A specific customer is selected and the button “see bills” is clicked.	The user should be redirected to another UI where all the bills’ details (including settlement status) for past completed booking are listed.	The screen where the bills are listed is correctly initialised showing the table where the bills are listed along side with the settlement status.	PASS

Edit a customer record.	The data is input directly into cell of the record to be edited. Following this, the new data is saved in the table by pressing enter and saved persistently into the database by pressing the save button.	The user should be able to edit from the record cell. The new data should also be persistently saved into the database. Validations should prevent the user to enter data in the wrong format.	User successfully edited customer records, which is saved persistently into the database. Validations prevented the user from entering data in wrong format.	PASS
For an existing customer initiate a new booking (don't make the booking just initiate the process)	A specific customer is selected and the button "make/see bookings" is clicked.	The user should be redirected to another UI where all the existing bookings are listed (if any), and here the user should be able to initiate a new booking by clicking "new booking, which should initialise another screen where the booking details are entered.	The user is successfully redirected to the booking screen and able to initiate a new booking.	PASS
For an existing customer initiate access to a vehicle record.	A specific customer is selected and the button "add/see vehicles" is clicked.	The user should be redirected to another UI where all the existing vehicles are listed (if any), and here the user should be able to see a vehicle records by selecting it and pressing " info/edit vehicle".	The user is successfully redirected to the vehicle screen and able to see the records for the selected vehicle.	PASS
Delete a customer record	A customer is selected from the list and deleted by pressing the button "delete".	The system should ask for confirmation and the customer should be deleted from the table as well as the database.	The customer' records are no longer present in the table and successfully deleted from the database.	PASS
Create a new customer account.	The "AddCustomer" is clicked and the new customer information is entered into the relevant fields.	After clicking on AddCustomer, a new screen should display allowing the user to enter the new customer information and by pressing add should save persistently the new customer into the database.	The UI screen responsible for the creation of a new customer is correctly initialised and user is able to add new customer. The new customer's details are persistently	PASS

			saved into the database.	
Logout, close application and log back in. Show created record is persistently stored.	The button logout is pressed and the login credentials are re-entered. To see the customer list including the new customer, the customer screen is initialised by clicking on “customer” in the side bar.	Assuming that the login was successful. the customer table should show the list of customers including the new customer entered previously.	The login was successful and the table shows all the customers of both types including the new customer. The data is persistently saved in the database.	PASS

1.3 Test Cases - Vehicles

Test Case	Steps	Expected Result	Actual Result	Status
Search for vehicles by type (car, truck, van)	1. Once logged in, enter car type in the search field at the top	- Display list of vehicles with matching type	- Displays a list of vehicles with matching type	Pass
Select vehicle and show parts used, past and future booking dates, and the total cost per booking (warranty and non-warranty)	1. Click on vehicle from side menu 2. Select a vehicle from the top list to view future booking date and total cost 3. To view parts and past bookings press on Edit vehicle booking	- Once a vehicle is selected show parts used, past and future booking dates, and total cost per booking	- When a vehicle from top list is selected - Bottom list displays customer name, next booking date - Edit vehicle booking button shows past booking and parts used	Pass
Search for vehicles by manufacturer	1. Enter car manufacturer in the top search field	- Display list of vehicles with matching manufacturer	- Displays a list of vehicles with matching manufacturer	Pass

Select vehicle and show details	1. Click on vehicle from side menu 2. Select a vehicle from the top list 3. Click on Edit button	- Show information about selected vehicle	-Displays entry form with selected vehicle's information	Pass
Edit an existing vehicle record	1. Click on vehicle from side menu 2. Select a vehicle from the top list 3. Click on Edit button 4. Edit desired field	- Show information about selected vehicle - Editable fields - Update information	- Displays entry form with selected vehicle's information - Fields can be edited - Save button updates the vehicle information	Pass
Edit the warranty details of a vehicle under warranty	1. Click on vehicle from side menu 2. Select a vehicle from the top list 3. Click on Edit button 4. Edit warranty details	- Show information about warranty of selected vehicle - Editable fields - Update information	- Displays entry form with warranty details of selected vehicle - Fields can be edited - Save button updates the vehicle information	Pass
Delete a vehicle record	1. Click on vehicle from side menu 2. Select a vehicle from the top list 3. Click on Delete button	- Display a pop up to confirm deletion - Delete vehicle - Update list of existing vehicles	- Confirmation pop-up displayed - Vehicle deleted - List gets updated	Pass
Create a new vehicle record	1. Click on vehicle from side menu 2. Click on Add button 3. User redirected to customer screen to select a customer	- Display empty entry form - Add vehicle - Show added vehicle	- Empty entry form displayed - Vehicle is added when Save button is clicked. -Added vehicle displayed	Pass

	4. Once customer selected, press Edit Vehicle button 5. Click on Add button 6. Fill in vehicle information 7. Save			
Logout, close application and log back in. Show created record is persistently stored	1. Click on vehicle from side menu 2. Add vehicle 3. Logout 4. Login 5. Click on vehicle from side menu 6. Check added vehicle is in the list	- Display list of existing vehicles, including newly added vehicle	- Shows updated list of existing vehicles, including newly added vehicle	Pass

1.4 Test Cases - Diagnosis and Repair booking

1. View existing “diagnosis and repair” bookings - **PASSED**

   Precondition – Must be logged in as any user of the system.

   Action - Once logged in, to view all bookings click the “BOOKINGS” button in the left sidebar menu.

   Postcondition – This presents you with bookings in a calendar view which defaults to showing this week’s weekly bookings. Bookings are shown for a single mechanic; this can be changed in the drop down in the top right.

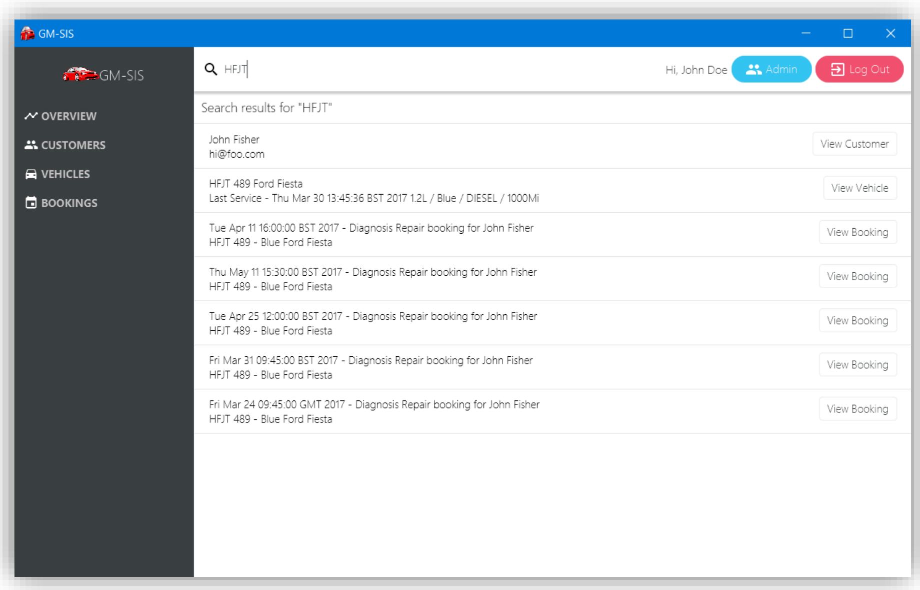

Figure 1 - Search results screen for "HFJT" showing matches for the customer, vehicle and bookings of the vehicle "HFJT 489"

2. Search for a booking by partial vehicle registration number - **PASSED**

   Precondition – Must be logged in as any user of the system.

   Action - Using the search bar at the top of any screen, enter the partial registration“HFJT” for the vehicle “HFJT 489”. Then press enter (the results will also update as typed)

   Postcondition – A list of search results is shown for the query along with the bookings for the vehicle matching “HFJT”

3. Search for a booking by vehicle template - **PASSED**

   Precondition – Must be logged in as any user of the system.

   Action – Using the search bar at the top of any screen, enter the make and model or any other attributes, for example “Audi A4”. Then press enter.

   Postcondition – A list of search results is shown for the query including all bookings for Audi A4’s

4. Search for a booking by customer surname - **PASSED**

   Precondition – Must be logged in as any user of the system.

   Action – Using the search bar at the top of any screen, enter the name of a customer “John Fisher”. Then press enter.

   Postcondition – A list of search results is shown for the customer “John Fisher” and all of the bookings for “John Fisher”.

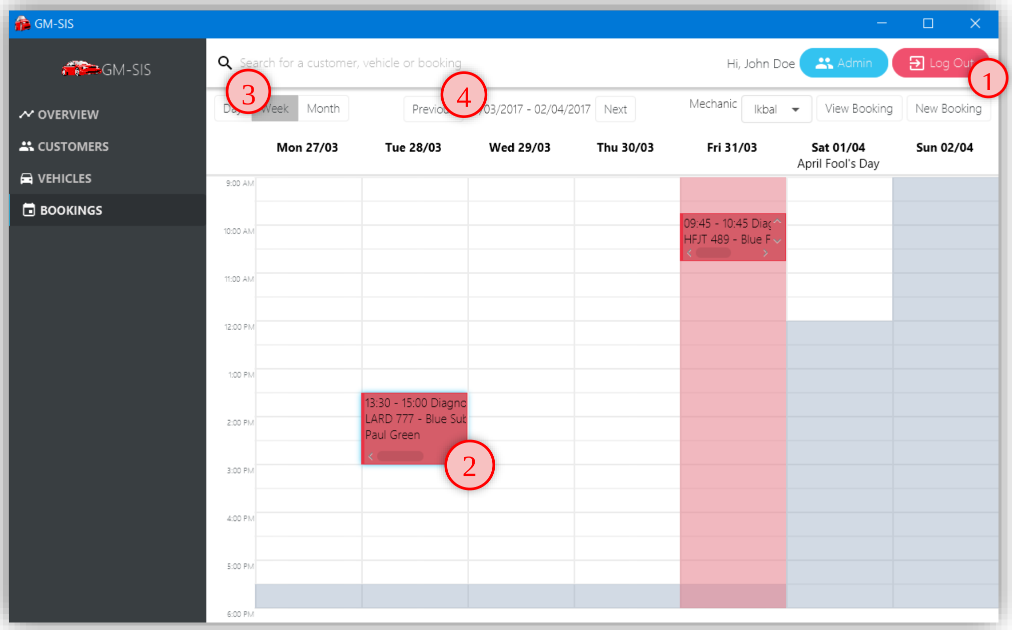

Figure 2 - Weekly booking view in Diagnosis Repair module, the day with red background is today, grey background is out of hours. Showing bookings for the mechanic Ikbal. 1 – "View Booking" and "New Booking" buttons. 2 – A selected booking has a faint outer glow, when selected you can "View Booking". 3 – Toggle buttons for changing between Day/Week/Month views. 4 – Buttons for changing the visible week, month or day depending on view.

5. Select a "diagnosis and repair" booking and view details. - **PASSED**

   Precondition – Must be logged in as any user of the system, and must be on the calendar screen.

   Action – Select a booking from any view of the calendar (Day/Week/Month) and click the "View Booking" button in the top right. Alternatively, double click the booking.

   Postcondition – The booking details will be displayed; the screen is for any bookings for the selected bookings customer. It will be pre-filtered by the vehicle registration and the booking that was selected will also be pre-selected.

6. View list of future bookings - **PASSED**

   Precondition – Must be logged in as any user of the system, and must be on the calendar screen.

   Action – To view any future booking use the next arrows from either the Day, Week or Month view at the top of the screen. The month view provides a quick overview for the number of bookings per day (coloured dots represent bookings for a mechanic) and double clicking on a day takes you to the Day view for the selected day.

   Postcondition – You can see future bookings by month, week or day.

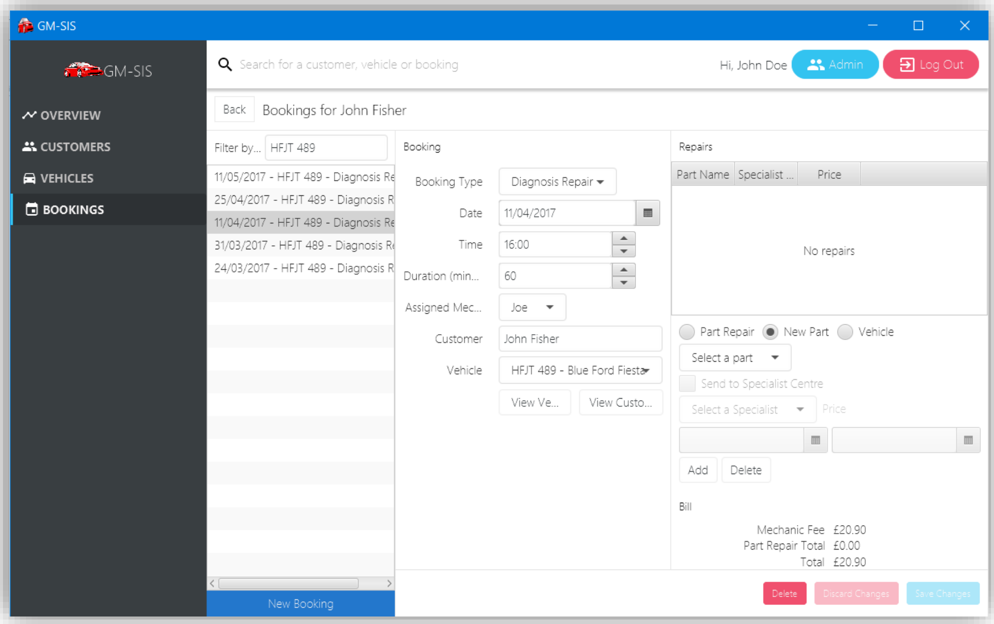

Figure 3 - View bookings screen, shows details for a booking. Other bookings for the same vehicle and customer can be accessed from the left filtered list

7. Select a future "diagnosis and repair" booking and view details - **PASSED**

   Precondition – Must be logged in as any user of the system and viewing future bookings in either the Day or Week view.

   Action – Todays date is highlighted with a red background in both the Day and Week view, select any booking after the current date. Once selected click the "View Booking" button in the top right or alternatively double click the booking.

   Postcondition – The booking details will be displayed for the selected booking.

8. Attempt to make a booking outside of working hours or work day - **PASSED**

   Precondition – Must be a logged in user and viewing the calendar or viewing a booking.

   Action – If on the calendar view click the "New Booking" button in the top right, if already viewing a booking click the blue "New Booking" on the left below the list of bookings. From this screen fill in the booking type as Diagnosis Repair; pick any Sunday for the date; pick any time and any duration; pick Ikbal as the mechanic; type "John Fisher" as the customer and select from the auto-complete; and finally select "HFJT 489" as the vehicle. Then click the blue "Save Changes" button in the bottom right.

   Postcondition – An error message will show when attempting to save saying "The selected time are not available" as they are out of working hours.

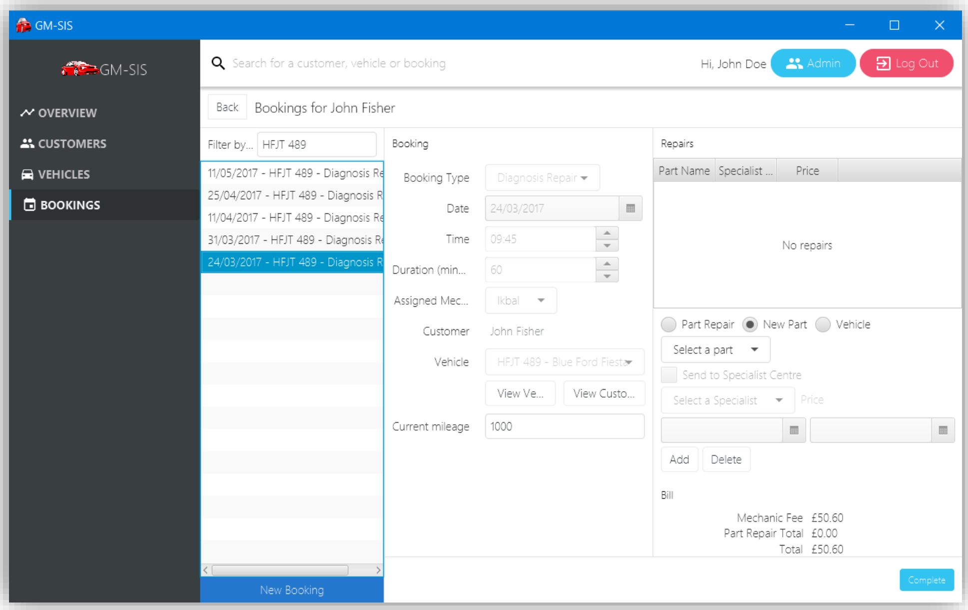

Figure 4 - View booking details for an uncompleted booking, when uncompleted there is a blue "Complete" button in the bottom right and only the current mileage and repair parts are editable. Once completed the booking is no longer editable.

9. Edit the mileage of a vehicle associated with a past booking - **PASSED**

   Precondition – Must be a logged in user. View details of any past booking that has not yet been completed (The blue "Complete" button is not greyed out).

   Action – From any non-completed past booking, update the current mileage of the vehicle and optionally any repaired items. Then click the "Complete" button, which saves the mileage, repaired items and generates the bill for the customer.

   Postcondition – The booking shows as completed and the new mileage is visible.

10. Create a new "diagnosis and repair" booking – **PASSED**

    Precondition – Must be a logged in user and viewing the calendar or viewing a booking.

    Action - If on the calendar view click the "New Booking" button in the top right, if already viewing a booking click the blue "New Booking" on the left below the list of bookings. From this screen fill in the booking type as Diagnosis Repair; pick any open day for the date; pick any time within the opening hours and any duration (within opening hours); pick Ikbal as the mechanic; type "John Fisher" as the customer and select from the auto-complete; and finally select "HFJT 489" as the vehicle. Then click the blue "Save Changes" button in the bottom right. (If you have selected a time in which the mechanic is busy or a time outside of working hours an error message will occur, adjust the times accordingly).

    Postcondition – The booking will now show on the specified date on the calendar, and also appear in the list of bookings on a vehicle or customer.

11. Logout, close application and log back in. Show created record is persistently stored – **PASSED**

    Precondition – Must be logged in and created a new booking.

Action – Click the red “Logout” button in the top right, close the application and reopen it. Log back into the system using any user e.g. John Doe, ID “10000” and password “test”. Navigate to the booking calendar by clicking the “BOOKING” section in the left sidebar. Navigate to the date of the booking using the “Next” and “Previous” buttons above the calendar to change weeks.

Postcondition – The new booking will be visible in the calendar and in the list of bookings for that vehicle or customer.