Car Service Tests

General

Test Case	Input	Expected Outcome	Actual Outcome	Notes
View Toolbar Navigation	Select item from View dropdown	View changes to Manage selection	Matches expected outcome.	
Create Toolbar Navigation	Select item from Create dropdown	View changes to Manage selection and Add New selection form pops up.	Matches expected outcome.	
File Toolbar Actions	Select dashboard or exit	Selecting dashboard brings up dashboard view and exit closes the app	Matches expected outcome.	
Help Toolbar Action	Select About option	About dialogue page pops up	Matches expected outcome.	
Shortcut Navigation	Use any of the shortcuts as displayed in the toolbar dropdowns	Behaves the same as clicking the toolbar option.	Matches expected outcome.	
Table Sorting	click on a column in any view	Entries are sorting in ascending or descending order from that particular column	Matches expected outcome	

Dashboard

Test Case	Input	Expected Outcome	Actual Outcome	Notes
Launch application	n/a	Application loads in dashboard view, customer, cars, active jobs and garages counts are loaded and recent activity is displayed. Local time displayed at the bottom.	Matches expected outcome.	
Navigate to "Manage Customers"	Click Manage Customers button	View changes to Manage Customers view	Matches expected outcome.	
Navigate to "Manage Cars"	Click Manage Cars button	View changes to Manage Cars view	Matches expected outcome	

Test Case	Input	Expected Outcome	Actual Outcome	Notes
Navigate to "Manage Jobs"	Click Manage Jobs button	View changes to Manage Jobs view	Matches expected outcome.	
Navigate to "Manage Garages"	Click Manage Garages button	View changes to Manage Garages view	Matches expected outcome.	
New Customer Quick Action	Click New Customer quick action button	View changes to Manage Customers and Add New Customer form pops up.	Matches expected outcome	
New Car Quick Action	Click New Car quick action button	View changes to Manage Cars and Add New Car form pops up	Matches expected outcome.	
New Job Quick Action	Click New Job quick action button	View changes to Manage Jobs and Add New Job form pops up	Matches expected outcome.	
New Garage Quick Action	Click New Garage quick action button	View changes to Manage Garages and Add New Garage form pops up	Matches expected outcome.	

Customers

Test Case	Input	Expected Outcome	Actual Outcome	Notes
Search by existing customer's surname	Existing surname	Customers table only shows customers matching that surname	Matches expected outcome	Filtering isn't case sensitive and can do partial match.
Search by non existing customer's surname	Non existing surname	Customers table should be empty "no contents in table"	Matches expected outcome.	
Clear Filters	Click Clear Filter button	Customers table goes back to showing all customers	Matches expected outcome.	If there are no filters applied the users will re-render in the back but the user won't notice anything.
Add New Customer with valid details	Forename, Surname, Address = Any String, Postcode 5-7 Alphanumeric	Customer is stored in the database and UI refreshes to include them.	Matches expected outcome.	

Test Case	Input	Expected Outcome	Actual Outcome	Notes
	and phone 10 digits long			
Add New Customer with invalid postcode	wrong postcode i.e: special character or space	Popup stating "please correct following errors: invalid postcode format (5-7 alphanumeric characters)"	Matches expected outcome	
Add New customer with invalid phone	wrong phone: not digits and less or more than 10	Popup stating "please correct following errors: invalid phone number (must be 10 digits)"	Matches expected outcome	
Edit Customer Action	Click edit for a customer	Form with customer's details pre-populated shows up. Can alter fields with valid data as defined earlier. Clicking save updates the user in the database.	Matches expected outcome	Invalid data has the same effect as adding a new customer with invalid data.
Delete Customer Action	Click delete for a customer	Delete customer confirmation window pops up, clicking okay deletes customer from the database. Customer deleted successfully pops up. UI refreshes.	Matches expected outcome.	Deleting a customer deletes all their cars and any jobs registered to those cars.
Loading Customers	none	Customers table contains columns of all customer info including ID (PK in the db), an actions column containing edit and delete buttons and Avg. Service column that calculates average cost of customer's jobs across all vehicles under their name.	Matches expected outcome.	Avg Service isn't stored in the database, it is calculated dynamically based on jobs

Cars

Test Case	Input	Expected Outcome	Actual Outcome	Notes
Filter By Customer	Select Customer's name from dropdown	Table displays cars registered to the specific customer, if they have any.	Matches expected outcome	Dropdown shows all customers stored in the db.

Test Case	Input	Expected Outcome	Actual Outcome	Notes
Clear Filters	Click Clear Filter button	Table re-renders back to displaying all cars	Matches expected outcome	
Add New Car, Valid Data	RegNo: 1-10 digit Alphanumeric, capital letters only Year: 1900-2025	Car is saved in the database, UI refreshes and new car can now be seen.	Matches expected outcome	Cars must belong to a customer, customer dropdown shows all available customers from the db.
Add New Car, Wrong RegNo	RegNo: symbols, spaces etc.	Popup "please correct the following errors: invalid registration number format"	Matches expected outcome	
Add New Car, Wrong year	Year 1821	Popup "please correct the following errors: year must be between 1900 and 2025"	Matches expected outcome	2025 is hard- coded, could be set to current year for future-proofing.
Edit Car Action	Click edit button	Car form pops up pre- populated with the car's details. Can make edits, if values are valid the db will update and UI will refresh. RegNo will be un-editable	Matches expected outcome	
Delete Car Action	Click delete button	Pop up asking if you wish to delete, clicking okay deletes the car from db, popup confirming the deletion appears and UI updates.	Matches expected outcome	Deleting a car deletes all jobs for that car
Loading Cars	None	Cars table contains all cars with their details. An extra column shows how many days a car has spent in total across all garages.	Matches expected outcome	Total Service Days is not stored as part of the car table in the db, it is dynamically calculated when the UI renders.

Garages

Test Case	Input	Expected Outcome	Actual Outcome	Notes
Search by name	existing garage name, click search	Garages table only displays entries matching search	Matches expected	

Test Case	Input	Expected Outcome	Actual Outcome	Notes
		term	outcome	
Search by name, non existing	non existing garage name, click search	Garages table displays 0 entries	Matches expected outcome	
Clear Filter	click clear filter	Garages table re-renders and displays all garages	Matches expected outcome	
Add New Garage, Valid data	name,address,town = any string, postcode 5-7 alphanumeric, phone 10 digits	Garage is saved in the database, UI refreshes and new entry is in the table.	Matches expected outcome	
Add New Garage, Invalid data	poscode: !!! phone: number6	Popup "please correct the following errors: invalid postcode format(5-7 alphanumeric character), invalid phone number(must be 10 digits)"	Matches expected outcome	
Edit Garage Action	Click edit button	Pop up form with the garage details pre-populated. Edit with valid values and save updates the database, re-renders the UI	Matches expected outcome	
Delete Garage Action, no active jobs	Click delete button	Pop up asking if you wish to delete, clicking okay deletes the garage from db, popup confirming the deletion appears and UI updates.	Matches expected outcome	
Delete Garage Action, has active jobs	Click Delete button	Pop up asking if you with to delete, clicking okay bring up an "error deleting garage, cannot delete garage with ID X, Has Y active jobs. Please reassign or complete all jobs"	Matches Expected outcome	
Loading Garages	None	Garages table should load all the garages from their ID, their columns and the edit and delete actions under the actions column		

Test Case	Input	Expected Outcome	Actual Outcome	Notes
Search by car	dropdown = car search = existing car regno	Jobs table only shows jobs for car with searched for regno	Matches expected Outcome	RegNo has to be exact matched
Search by garage	dropdown = garage search = existing garage ID	Jobs table only shows jobs for with the searched for garage id	Matches expected outcome	
Search for any non existing item	non existing car or garage	Jobs table shows no result	Matches expected outcome	
Clear Filter	Click clear filter	Job table re-renders and displays all jobs	Matches expected outcome	
Add New Job, Valid data	Existing garage ID and RegNo, valid date in, date out and cost optional	Popup stating job was added successfully, job saves in the database, UI re-renders and new job is now visible	Matches expected outcome	
Add new Job, Invalid data	hour in being a random string	Pop up error saving job: invalid time format. Use HH:mm	Matches expected outcome	
Edit Job	Click edit action button	Pop up form pre-populated with job details, altering and saving (if valid data) updates the db	Matches expected outcome	
Delete Job	Click delete action button	Pop up asking for confirmation. Pop up stating job deleted, job deletes from the database as well	Matches expected outcome	
Complete job	Click complete action button on a job without a date out	Popup asking for confirmation followed by popup asking for payment method followed by success popup. Date out is set to current date and time, job updates in db and a new entry is created in payment table as well.	Matches expected outcome	
Loading jobs	none	Jobs table loads all job columns from db. Action column with edit delete and complete buttons also renders	Matches expected outcome	

Test Case	Input	Expected Ooutcome	Actual Outcome	Notes
Recent Activity in Dashboard	Perform and action in any of the manageable collections	Timestamp, type, action and description of the activity is added to the top of recent activity (first saves in db then renders in recent activity from newest to oldest)	Matches Outcome	