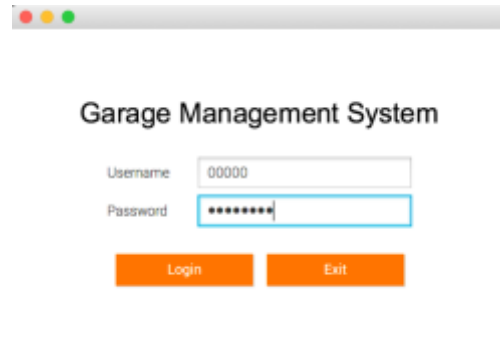
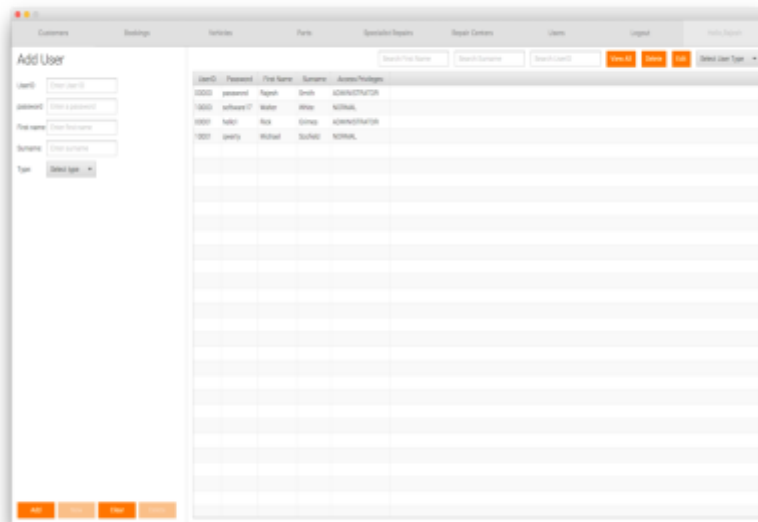


User module screen shots and test cases:



The screenshot shows a login window titled "Garage Management System". It contains two input fields: "Username" with the value "00000" and "Password" with masked characters "*****". Below the fields are two orange buttons labeled "Login" and "Exit".

This is the login screen. The user must enter some valid credentials in order to access the system. The user must enter the relevant credentials in the labelled text and password fields.



The screenshot shows the "Users" tab in the Garage Management System. On the left is an "Add User" form with fields for "User ID", "Username", "First Name", "Surname", "Address", and "Type". The "Type" field has a dropdown menu. On the right is a table with columns: "User ID", "Username", "First Name", "Surname", and "Address". The table contains three rows of data:

User ID	Username	First Name	Surname	Address
00000	admin	Admin	Admin	ADMINISTRATOR
00001	admin01	Admin	Admin	ADMIN
00002	admin	Admin	Admin	ADMIN

At the bottom of the window are three orange buttons labeled "Add", "Edit", and "Delete".

This is the user management tab. From this tab the user is able to search for a user by their forename, surname, type and user ID. The user, if logged in as an admin is able to add, modify and delete existing day to day users. To add a new user, the user must populate the relevant fields on the left handside of the field with legal input (e.g. 5 numerical values for userID) and then click on the add button located on the bottom left handside of the window. If the user wishes to modify an existing user, they must simply click the relevant row displaying the information of the user and click on the button labelled "Edit" on the top right handside of the window. This will populate the respective fields on the left hand side of the window, allowing the user to modify data (granted that all changes are *legal* i.e. do not break the constraints set by the system). The user must perform a similar action for delete; they must select a relevant row representing a user and then click on the delete button located on the top right handside of the window. The user will be asked for a confirmation and if confirmed, the user will be deleted.

Test case:	Expected:	Outcome:	Pass/Fail:	Test plan
Logon as existing system administrator – provide id and password.	System should accept credentials and allow me to log in.	I have logged in with the correct credentials.	PASS	Enter an administrator UserID into the Username text field, and the correct password for that userID, the user can press the ‘Enter’ button from the password field and the system will login.
View list of existing users (all users of both types).	System displays lists of all users.	System displayed list of all users.	PASS	The user must navigate the tab menu on the top to the menu labelled ‘users’, this will display all users.
Change password of existing day-to-day user.	System allows me to change the password.	System allowed me to change password of day-to-day user.	PASS	The user must select an existing day-to-day user and click on the edit button, the user can then change the password and click on the button labelled ‘edit’ on the bottom left handside of the window and must confirm the changes.
Create a new day-to-day user.	Allows system administrator to add new user.	System allowed new user to be created.	PASS	The use must populate the fields on the left handside of the interface with relevant data (userID, name(s) and password), the user must also set the user type as ‘NORMAL’.
Logout existing administrator.	Allowed user to log out.	Successfully logged out.	PASS	The user must select the logout button from the navigation tab menu and confirm the log out.
Login as the new day-to-day user.	Allowed user to log in with newly made user with correct credentials.	Successful login.	PASS	Enter the new day-to-day UserID into the Username text field, and the correct password for that userID, the user can press the ‘Enter’ button from the password field and the system will login.
Logout as new day-to-day user.	Allowed user to log out of new day to day user account.	Successfully logged out.	PASS	The user must select the logout button from the navigation tab menu and confirm the log out.

Attempt login as new day-to-day user with incorrect authentication.	System denied access and asked to reenter credentials.	System denied access and showed a relevant error message.	PASS	The user must enter some incorrect or invalid credentials and attempt to log in.
Logon as existing system administrator.	System should accept credentials and allow me to log in.	I have logged in with the correct credentials.	PASS	Enter an administrator UserID into the Username text field, and the correct password for that userID, the user can press the 'Enter' button from the password field and the system will login.
Delete newly created day-to-day user.	System allows administrator to delete day to day user.	System confirmed deletion of user.	PASS	The user must select the newly created user from the table of users, then click on the delete button located on the top right handside of the window. The user must then the deletion.
Login as existing day-to-day user	System allows existing day-to-day user to log in.	System allowed user to log in using correct day-to-day user credentials.	PASS	Enter an existing day-to-day UserID into the Username text field, and the correct password for that userID, the user can press the 'Enter' button from the password field and the system will login.

Repair Centres User Guide.

Repair centre management

Specialist repair centre details

Operation ID:

Operation Name:

Operation Address:

Operation Phone:

Buttons: , , , ,

SPC ID	SPC Name	SPC Phone	SPC Address	SPC Email
1	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
2	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
3	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
4	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
5	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
6	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
7	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
8	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
9	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
10	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk

This is the specialist repair centre management interface. From this section, a system administrator can manage (add, edit and delete) existing SPCs. When the page is loaded, the user can view all the existing SPCs in the garage system. The user can view the details of a selected SPC in depth by clicking on any of the rows in the table view. Upon clicking on any row, the fields located on the left-hand side of the pane will be populated with the details of the row the user has clicked on. From this. The user can change any fields and click on the 'update spc' button to update the existing SPC. The system will ensure that the modifications are legal and then proceed to update and if the changes are not, a relevant message will be shown to the user explaining the illegal update. The user is also able to delete an SPC by simply clicking on a selected row and pressing the 'Delete spc' button. This will then ask for a confirmation, upon receiving a confirmation, the system will delete all relevant bookings linked to that SPC and then delete that SPC. The user can add a new SPC, by simply populating the editable fields such as the name, address and postcode fields, and then clicking on the 'Add spc' button. This will ask for a confirmation before proceeding to add. The system will also ensure that all fields entered when creating a new SPC are legal (i.e. no letters in phone numbers and an '@'. If at any time the user wishes to clear all relevant fields, they can click on the 'Clear' button at any time, this will cause all relevant buttons to disappear and reset all textfields. The user is also able to view a list of all vehicle repairs, for a given SPC. This is done by clicking on the 'Show repairs' button after selecting a row from the table view of repair centres. This list will show ALL the related vehicle repair bookings for that specific SPC. The user can then click on a list of those vehicles, and view the customer details of that vehicle.

Repair centre management

Specialist repair centre details

Operation ID:

Operation Name:

Operation Address:

Operation Phone:

Buttons: , , , ,

SPC ID	SPC Name	SPC Phone	SPC Address	SPC Email
1	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
2	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
3	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
4	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
5	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
6	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
7	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
8	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
9	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
10	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk

Vehicle Repairs

Vehicle ID:

Vehicle Name:

Vehicle Address:

Vehicle Phone:

Vehicle Email:

Buttons: , , , ,

Vehicle ID	Vehicle Name	Vehicle Address	Vehicle Phone	Vehicle Email
1	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
2	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
3	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
4	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
5	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
6	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
7	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk
8	Advanced Repair Centre	0121 123 456	123 Main Road, London	info@advanced.co.uk
9	Specialist Repair Centre	0121 123 456	123 Main Road, London	info@specialist.co.uk
10	General Repair Centre	0121 123 456	123 Main Road, London	info@general.co.uk

Specialists Repairs User Guide.

The image displays three screenshots of the 'Specialist Bookings Management' interface. The top screenshot shows a table of bookings with columns: Item ID, Delivery Date, Return Date, Cost, SPC ID, and Booking ID. The middle screenshot shows a form for adding or editing a booking, with fields for Item ID, Delivery Date, Return Date, Cost, SPC ID, and Booking ID. The bottom screenshot shows a form for adding a new booking, with fields for Part Description, Part ID, Vehicle Registration, and SPC ID.

Item ID	Delivery Date	Return Date	Cost	SPC ID	Booking ID
TW0101	08-May-2017	08-May-2017	0.0	0	04
TW0102	08-May-2017	08-May-2017	0.0	0	14
UL309	08-May-2017	08-May-2017	0.0	0	00
UL309	08-May-2017	08-May-2017	0.0	0	10
UL309	08-May-2017	08-May-2017	0.0	0	00
UL309	08-May-2017	08-May-2017	0.0	0	00
UL309	08-May-2017	08-May-2017	0.0	0	00
UL309	08-May-2017	08-May-2017	0.0	0	00
UL309	08-May-2017	08-May-2017	0.0	0	00
UL309	08-May-2017	08-May-2017	0.0	0	00

This is the Specialist Bookings management interface. From here the user can add, edit and delete specialist repair bookings. By default, the page will load all vehicle repairs. From this list, the user can sort the table entries by clicking on a column. This is a built-in feature of FX table views. The user can view all the relevant details of a selected booking by clicking on the row displaying the booking they wish to view the details of; this will populate the related fields in the text fields below. Each textfield has a clear label indicating what information it is showing. There are a series of buttons on the left side of the table view. The edit button is used to modify a booking which has not yet been completed, the user must select the booking they wish to modify from the table view, and then click on the 'Edit' button. This will allow users to modify the fields (ensuring that the modifications are legal) and then the user is able to update the modifications or cancel the update. The user can also delete a relevant booking. This is done by selecting a row from the table view, then clicking the 'Delete' button. The system will ask for a confirmation and then upon receiving the confirmation will delete that booking. This will also reduce the cost of the related diagnosis and repair booking. The user can view a list of installations for vehicle by clicking on a relevant row from the table view. This can only be done if the selected row is a VEHICLE as only vehicles can have installations. The user is also able to query just a list of ONLY part repairs. This will display all past and coming part repairs. Of course, the user, at any given time can search for a part repair by entering either a customer's firstname, surname, vehicle registration or part ID. The user can search for repairs by partial vehicle registration and customer name entry. The user need not click the search button each time they enter a new input as the system will update the table based on each key input. However, because part IDs are integers the user must enter the exact serial number of the part they wish to view the part repair of. The user can query a list of returned repair items by clicking on the 'Returned' button. This will check for a list of repair items which are either being returned the current date or earlier. Conversely the user can view a list of 'outstanding' items at all SPC's. This is done by clicking on the 'Outstanding' button. This will display a list of items which have a return date which is AFTER the current date. The user can add a specialist booking by first searching for a valid (incomplete) diagnosis and repair booking. If the selected booking is valid a label confirming this will display. The user must then search for a relevant item to send to the SPC. This MUST be either a registered vehicle of the garage or a part which has previously been installed by the garage. The user must then click the find button located near the Item

ID text field. If the system finds a valid Vehicle or Part (that has been installed), it will display a relevant label indicating the search is successful. The user must then select a delivery and return date. Delivery date must be today or a future date, the return date must be after the delivery date. The user must then search for a SPC by entering a valid SPC ID, the user can then click the find button and if the ID returns a valid SPC, the name of that SPC will populate the textfield under the label 'SPC Name'. The user must then enter a cost of the booking. This cost may not always be added to the cost of the booking; this is dependent on if the item being sent is under warranty. Finally, the user must select the item type they are trying to create the booking for, this is either a vehicle or part. The user must then click the 'Add booking' button. This will add the booking. The user can clear the textfields at any given time by clicking the 'Clear' button at any time.

Test case:	Expected:	Outcome:	Pass/Fail:	Test plan
View existing Specialist Repair Centres (SPCs).	View a list of all existing out	Show a list of all active SPCs the garage uses.	PASS	The user must login to the GMSIS application and click on the navigation tab and select the tab labelled 'Repair Centers'. This will load the window displaying a table of all the active SPCs.
Search for a vehicle at a selected SPC by partial registration number.	View a list of vehicle repairs where the vehicle(s) registrations matching the user the input.	Display a list of all vehicle repairs where the vehicle registration contains the user input (partial registration).	PASS	Navigate to the tab labelled 'Specialist Repairs'. The user must then begin entering a registration number and the table will keep updating the items shown based on the user input.
View list of parts at selected SPC.	The system will display a list past and future part bookings.	The system displayed a list of part bookings.	PASS	Navigate to the tab labelled 'Specialist Repairs'. Click on the button labelled 'Part Repairs'. This should display all the part repairs.
Select part from this list and view details.	The system should load all the details of a selected part repair.	The system displayed the relevant details of the part booking.	PASS	Navigate to the tab labelled 'Specialist Repairs'. Select a part repair from the list of part repairs in the table view. Click on the row displaying the part wish to view the details of. This will populate the fields.
Add a part to be sent to a SPC and record details.	The system should make all validation checks, and upon success, add the part repair to the database.	The system ensured all user inputs are valid and then confirmed the addition of the new part repair.	PASS	Navigate to the tab labelled 'Specialist Repairs'. Enter the relevant booking ID to which you wish to add the part repair to. Click find, upon success proceed to enter the part ID of the part you wish to send. Click find, upon success, select a delivery and return date. Search for a SPC by entering a SPCID, click find. Upon success select 'Part' from the combo box and click 'Add booking'.
View list of returned items from SPC.	The system should show a list of all items where the return date is BEFORE the current date.	The system displayed all past part and vehicle repair bookings.	PASS	Navigate to the tab labelled 'Specialist Repairs'. Click on the button labelled 'Returned' on the left handside of the window.
Select item done from SPC and show SPC costs on customer bill.	The system should display the total cost of the booking which the	The system displayed the total cost of the booking, including the diagnosis and	PASS	Navigate to the tab labelled 'Specialist Repairs'. Find a booking where the cost of repair is >0. Copy the vehicle registration. Navigate to the customer screen. Paste the registration to the search

	selected repair is linked to.	repair cost and the SPC repair cost.		bar. Select the relevant customer shown. Click on vehicle which matches the one you entered, the total bill should appear.
View list of outstanding items at all SPCs.	The system should display a list of items, to the table view, all items which have a return date AFTER the current date.	The system displayed all the items which have a return date after TODAY'S date.	PASS	Navigate to the tab labelled 'Specialist Repairs'. Click on the button labelled 'Outstanding'. This will display all outstanding items.
Delete a part sent to an SPC.	The system should delete the selected part repair, and remove the cost of the SPC booking from the related booking.	The system deleted the pair repair and removed the cost of the SPC booking from the related booking.	PASS	Navigate to the tab labelled 'Specialist Repairs'. Query a part repair using the search field. Select a part repair. Click on the button labelled 'Delete'. Confirm the delete.
Edit details for existing SPC.	The system should check that all modifications made to the SPC are legal, and then update the SPC details.	The system ensured that all modifications made to the SPC are legal, and then updated the SPC details.	PASS	Navigate to the tab labelled 'Repair Center'. Select a SPC you wish to modify from the table displaying all the SPCs active. Modify some fields, ensuring that they are legal changes (i.e. numbers only for phone numbers, emails containing an '@'). Click the 'Update' button located on the bottom left handside of the window.
Logout, close application and log back in. Show edited record is persistently stored and accurate.	The system saves the changes made.	The system saved the changes.	PASS	After successfully updating the system, select the log out button from the navigation menu. Log out. Log back in to the system and navigate to the 'Repair Center' tab. Select the SPC you changed and check if the change has been saved.