The testing took place on 2/4/2023 (this information is needed for some test cases). Any definitions of words required for understanding this document are listed in the Glossary of the Software Requirements Specification; specifically, Annex A.

The following test cases are used to ensure the robustness of the software:
<mark>Please note: Due to time constraints, we were unable to resolve all bugs.</mark>

	Scenario	Actions Taken	Expected Outcome	Actual Outcome	Pass/ Fail
			Driver Account Creation		
1.	Create a new driver account	Enter the Account Sign Up page for Drivers, and create an account with the following fields: "jdoe@gmail.com/ John/ password1!" This account will now be referred to as John Doe's account.	The account should be created successfully. The website should redirect to the home page.	The account is logged in and the home page is rendered.	Pass
2.	Create a driver account with a used Email address	Enter the Account Sign Up page for Drivers, and create an account with the following fields: "jdoe@gmail.com/ Jane/ password1!"	The driver account should not be created and an appropriate error message should be shown.	An error message is shown, "An account has already been created with this email!".	Pass
3.	Create an account with an invalid password format	Enter the Account Sign Up page for Drivers, and create an account with the following fields: "janed@gmail.com/ Jane/ password".	The driver account should not be created and an appropriate error message should be shown.	An error message is shown, "Password should have at least 1 character, 1 digit and 1 special character!".	Pass
4.	Create an account with a different re-entered	Enter the Account Sign Up page for Drivers, and create an account with the following fields: "janed@gmail.com/ Jane/	The driver account should not be created and an appropriate error message should be shown.	An error message is shown, "Passwords don't match!".	Pass

	password	password1!/ password".			Pass
5.	Create a second valid driver account	Enter the Account Sign Up page for Drivers, and create an account with the following fields: "janed@gmail.com/ Jane/ password1!" This account will now be referred to as Jane Doe's account.	The account should be created successfully. The website should redirect to the home page.	The account is logged in and the home page is rendered.	Pass
COE Registration					
6.	Attempt to indicate interest before registering COE	Login to John Doe's account. Go to the map page and click on a car park.	There should be no option to indicate interest since the driver has not registered any COE.	There is no option to indicate interest in any selected carparks.	Pass
7.	Register a valid COE	Login to John Doe's account. Register a COE with the following fields: "John Doe/ SBC1234A/ 31.12.2025".	COE should be successfully registered. A list of registered COEs should be displayed.	A message stating "Vehicle registered successfully!" is shown. COE with the details as provided is registered and displayed in a list. No other COE is currently registered in the list.	Pass
8.	Register a COE with a used car plate number	Login to John Doe's account. Register a COE with the same fields as above.	A similar COE already exists. Drivers should not be allowed to do this and an appropriate error message should be shown.	A message stating "Vehicle with this car plate has already been registered!" is shown.	Pass
9.	Register a COE with an expired date	Login to John Doe's account. Register a COE with the following fields: "John Doe/ SBC1234B/ 1.4.2023".	The COE is expired (before the current date). Drivers should not be allowed to do this and an appropriate error message should be shown.	A message stating "COE date input has expired!" is shown.	Pass

10.	View Registered COE	Scenarios 7, 8, and 9 are needed. Proceed to "view" registered vehicles.	Following Scenarios 7 to 9, there should be only a COE with the following fields: "John Doe/ SBC1234A/ 31.12.2025". Invalid COE registrations should not show up.	Only 1 COE entry is shown on the registered vehicles page.	Pass
11.	Delete Registered COE	Login to John Doe's account. Register a COE with the following fields: "John Doe/ SBC1234A/ 31.12.2025". Delete this Registered COE.	Drivers should be able to delete this COE.	The COE can be deleted.	Pass
	Map Features/ Interested Carparks				
12.	Update current GPS location with GPS permission allowed for the browser.	Driver clicks the "Get Location" button on the map page with GPS permission already allowed or by allowing the GPS location access when a prompt pops up.	The driver's actual physical location should be indicated by a marker on the map.	The tester's actual physical location is indicated by a marker on the map correctly.	Pass
	Update current GPS location with GPS permission not allowed for the browser.	Driver clicks the "Get Location" button on the map page with GPS permission already denied or by denying the GPS location access when a prompt pops up.	The driver's location should be assumed to be at the centre of the map and should be indicated by a marker on the map.	A geolocation pin in the middle of the map is shown.	Pass
13.	Toggle colour vision deficiency mode	Driver clicks on the "Colour Vision Deficiency Toggle" button and clicks on it again.	The colours of the bubbles on the map should change when the button is clicked and change back when the button is clicked again.	The bubbles are initially using a red-green colour scale. Upon the first click, the bubbles change to a blue-orange colour scale. Clicking again changes the colour scale back to red-green.	Pass

14.	Indicate interest and view Navigation	Login to Jane Doe's account. Driver clicks on the "**BLK 201/218 PETIR ROAD (BJ8)**" car park and clicks on the "I'm interested" button on the carpark's information popup.	The pop-up information should change to show that there is one more interested driver and a route is shown from the driver's current location to "**BLK 201/218 PETIR ROAD (BJ8)**" carpark.	The pop-up information changes to show that there is an additional (1) interested driver and a correct route is shown.	Pass
15.	Change carpark of interest	Scenario 14 is needed. Login to Jane Doe's account. Driver clicks on a different car park: "**BLK 219/233 PETIR ROAD (BJ4)**" car park and clicks on the "I'm interested" button on the carpark's information popup.	The pop-up information should change to show that there is one more interested driver and a *different* route is shown from the driver's current location to "**BLK 219/233 PETIR ROAD (BJ4)**" carpark.	The pop-up information changes to show that there is an additional (1) interested driver and a correct route is shown.	Pass
16.	Verify the number of interested drivers at a given carpark is retained.	Scenario 15 is needed. Login to Jane Doe's account. Visit the map page.	The driver's interested carpark should be "**BLK 219/233 PETIR ROAD (BJ4)**" carpark.	The driver's interested carpark is correctly shown to be "**BLK 219/233 PETIR ROAD (BJ4)**" carpark.	Pass
	Corporate Account Creation/ Rewards Creation				
17.	Obtain points for successfully parking at the interested carpark	Scenario 16 is needed. Click on the "I'm parked" button. Submit an image of the parked car on the parking verification page.	The driver should receive points.	A message stating "You have received one point" shows up. The driver's point increases from 0 to 1.	Pass
18.	Create a new corporate account	Enter the Corporate Sign Up page and create an account with the following fields: "123456789A/ FoodieFood/ foodiefood1!" This account will now be referred to as Co. A's account.	The account should be created successfully and the corporate employee should be redirected to the "Rewards Creation" page.	The account is logged in and the Rewards Creation page is rendered. A message stating "Corporate Account successfully created!" is shown.	Pass

19.	Create a corporate account with a used UEN	Enter the Corporate Sign Up page and create an account with the following fields: "123456789A/ ScamCity/ foodiefood1!"	The account should not be created and an appropriate error message should be shown.	A message stating "An account has already been created with this UEN! Is shown.	Pass
20.	Create a valid reward	Login to Co. A's account. Create a reward with the following fields: "Delicious Donuts 10% off/ 31.12.2023/ Food/ Delicious Donuts 10% off, takeaway only/ 2/ 1".	The reward should be created successfully.	A message stating "Reward Created!" is shown.	Pass
21.	Create a reward that is expired	Login to Co. A's account. Create a reward with the following fields: "Delicious Donuts 20% off/ 01.04.2023/ Food/ Delicious Donuts 20% off, takeaway only/ 2/ 1".	The reward should not be created and an appropriate error message should be shown.	The expired reward is created.	Fail
22.	Create a reward with 0 quantities for redemption	Login to Co. A's account. Create a reward with the following fields: "Deli Donuts 5% off/ 31.12.2023/ Food/ Delicious Donuts 10% off, takeaway only/ 0/ 1".	The reward should not be created and an appropriate error message should be shown.	The reward is created with 0 quantities for redemption.	Fail
23.	View posted rewards.	Scenarios 20, 21, and 22 are needed. Proceed to the "View Rewards" Page.	Following Scenarios 20 to 22, there should be only a reward with the following fields: "Delicious Donuts 10% off/ 31.12.2023/ Food/ Delicious Donuts 10% off, takeaway only/ 2/ 1". Invalid rewards should not show up.	3 rewards are shown on the "View Rewards" page. Partial failure due to failure of Scenarios 21 and 22.	Partial Fail
24.	Delete an existing reward	Login to Co. A's account. Proceed to view posted rewards. Delete only the existing reward.	Deletion should be successful. The deleted reward should no longer be displayed.	A prompt is displayed for deletion confirmation. Upon confirmation, the deleted reward is no longer displayed.	Pass

25.	Create another valid reward	Login to Co. A's account. Create a with the following fields: "Delicious Donuts 10% off/ 31.12.2023/ Food/ Delicious Donuts 10% off, takeaway only/ 2/ 1".	The reward should be created successfully.	A message stating "Reward Created!" is shown.	Pass
			Claiming & Using Rewards		
26.	Claim a reward	Login to John Doe's account. Go to the "/points" page (intended for testing) and give 1000 points to the account. Claim a reward created in Scenario 25 ("Delicious Donuts 10% off").	The reward should be claimed successfully and the appropriate amount of points should be deducted from the driver.	A message stating "You have successfully claimed the reward!" is shown. 10 points have been deducted from the driver. The driver can use the reward.	Pass
27.	Claim the last item of an available reward	Login to John Doe's account. Claim a reward created in Scenario 25. This should be the last quantity since the reward is created with 2 quantities only (1 claimed in Scenario 26).	The reward should be claimed successfully and the appropriate amount of points should be deducted from the driver. The reward should now be removed from the list of available rewards.	A message stating "You have successfully claimed the reward!" is shown. 10 points have been deducted from the driver. The driver can use the reward. The reward is no longer displayed in the list of available rewards,	Pass
28.	View the updated quantity of rewards available by the corporate account	Scenarios 25 to 27 are needed. Login to Co. A's account. View the posted rewards.	The reward "Delicious Donuts 10% off" should have no more available quantity.	The "No. of Rewards" for the reward of interest displays a value of "0".	Pass
29.	Use a claimed reward	Login to John Doe's account. Use the reward claimed in 26 ("Delicious Donuts 10% off").	The reward should be used properly. The claimed reward should be removed from the driver.	A prompt containing the QR code is shown for the driver to scan (to use the reward) and the reward is removed from the driver's claimed rewards.	Pass