

Section 1 - Test Evidence:

Section 1.1 Test Case Table:

Test case #	Selenium Test Case #	Objective	Steps	OP #	Expected results
1	TC01	Test first set of Register system user.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from homepage. 2) Press the register button without entering any data. 3) Check expected errors messages against actual error messages displayed on the register page. 4) Select the “Go back to login page” link. 	1	errMsg = Please correct the following errors. usernameError = You must provide a username. utalIDError = You must provide a UtaID. roleError = passwordError = You must provide a password. phoneError = You must provide a phone number. emailError = You must provide an email. licence_plateError = You must provide a license plate number.
2	TC01	Test second set of Register system user.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from homepage. 2) Enter the following data into the registration form fields: <i>username = seven77, utalID= notANumber, role = user, password= seven77, phone = notANumber, email = seven6, licence_plate = 12345678.</i> 3) Press the register button. 4) Check expected errors messages against actual error messages displayed on the register page. 5) Select the “Go back to login page” link. 	1	errMsg = Please correct the following errors. usernameError = Your username should be 8 characters minimum and 16 characters maximum. utalIDError = UTA ID should be a number. roleError = passwordError = Your password should be 8 characters minimum and 16 characters maximum. phoneError = Phone should be a number. emailError = Your email should be 7 characters minimum and 45 characters maximum. licence_plateError = License plate should be exactly 7 characters.

3	TC01	Test third set of Register system user.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from homepage. 2) Enter the following data into the registration form fields: <i>username = eight///, utalID =123456789, role = user, password= paord!++, phone = 123456789, email = /@ok.co, licence_plate = 1234567.</i> 3) Press the register button. 4) Check excepted errors messages against actual error messaged displayed on the register page. 5) Select the “Go back to login page” link. 	1	<p>errMsg = Please correct the following errors.</p> <p>usernameError = Only lowercase letters numbers and _ are allowed. First character must start with a letter.</p> <p>utalIDError = UTA ID should be 10 digits exactly.</p> <p>roleError =</p> <p>passwordError = Allowed : letters numbers and one or more of the following characters: !@#\$%</p> <p>phoneError = Phone should be 10 digits exactly.</p> <p>emailError = .edu domain only. Alphanumeric and . only</p> <p>licence_plateError = Format is : AAANNNN . A for letter and N for number.</p>
4	TC01	Test fourth set of Register system user.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from homepage. 2) Enter the following data into the registration form fields: <i>username = premium_account, utalID =1001111111, role = user, password= testpassword, phone = 9987654321, email = email@uta.edu, licence_plate = ABC1234.</i> 3) Press the register button. 4) Check excepted errors messages against actual error messaged displayed on the register page. 5) Select the “Go back to login page” link. 	1	<p>errMsg = Please correct the following errors.</p> <p>usernameError = Username already in database</p> <p>utalIDError =</p> <p>roleError = You have reached the maximum number of accounts you can create with your UTA ID.</p> <p>passwordError =</p> <p>phoneError =</p> <p>emailError =</p> <p>licence_plateError = You already have a user account associated with this license plate number.</p>

5	TC01	Test fifth set of Register system user.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from homepage. 2) Enter the following data into the registration form fields: <i>username = eight888, utalID = 1002222222, role = user, password= testpassword, phone = 9987654322, email = email@uta.edu, licence_plate = AAA7676.</i> 3) Press the register button. 4) Check excepted errors messages against actual error messaged displayed on the register page. 5) Select the “Go back to login page” link. 	1	errMsg = Please correct the following errors. usernameError = utalIDError = roleError = You already have an account with this role. passwordError = phoneError = emailError = licence_plateError =
6	TC01	Test sixth set of Register system user.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from homepage. 2) Enter the following data into the registration form fields: <i>username = seleniumtest, utalID = 9999999999, role = user, password= seleniumpassword, phone = 1234567890, email = test@uta.edu, licence_plate = DDT6789.</i> 3) Press the register button. 4) Check that no erros messages were displayed in the register page. 5) Select the “Go back to login page” link. 	1	errMsg = usernameError = utalIDError = roleError = passwordError = phoneError = emailError = licence_plateError =
7	TC02	Test first set of Login of a system admin.	<ol style="list-style-type: none"> 1) Enter the following data into the login form fields in the homepage: <i>username = , password= userpassword</i> 2) Press the login button. 3) Check excepted error messages against actual error messages displayed on the login Page. 	2	loginError = Both username and password must be provided.

8	TC02	Test Second set of Login of a system admin.	<ol style="list-style-type: none"> 1) Enter the Following Data into login form fields in the homepage: username= admin_account, password = 1122 2) Press the login button. 3) Check the expected error messages against the actual error messages displayed on the login page 	2	loginError = Invalid username or password
9	TC02	Test successful Login of a system user.	<ol style="list-style-type: none"> 1) Enter the Following Data into login form fields in the homepage: username= admin_account, password = 123456789 2) Press the login button 3) Check that there are no error messages displayed on the login/home page. 	2	loginError=
10	TC03	Test successful registration as a user.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from homepage. 2) Enter the following data into the registration form fields: username = user_selenium, utalD = 1009999999, role = user, password= userpassword, phone = 123456789, email = seleniumuser@uta.edu, licence_plate = DFR6578. 3) Press the register button. 4) Select the “Go back to login page” link. 	3a	
11	TC03	Test successful login as newly registered user.	<ol style="list-style-type: none"> 1) Enter the following data into the login form fields in the homepage: username = user_selenium, password= userpassword 2) Press the login button. 	3b	

12	TC03	Test successful search of available parking spots.	<ol style="list-style-type: none"> 1) Select the “Request reservation” link on the user home page. 2) Enter the following data into the request reservation form fields: <i>parking_type = premium, start_time = 21:30, duration = 15</i> <u>AND</u> check the checkboxes: <i>cart, camera and history</i>. 3) Press the Request reservation button. 	3c	
13	TC03	Test successful confirmation of a reservation.	<ol style="list-style-type: none"> 1) Select the first radio button from the available parking spots list. 2) Press the <i>Confirm and make a payment</i> button. 	3d	
14	TC03	Test successful payment of reservation.	<ol style="list-style-type: none"> 1) Enter the following data into the payment form: <i>credit_card_type = visa credit_card_number = 1001511875000000</i> 	3e	
15	TC03	Test successful logout from user homepage.	<ol style="list-style-type: none"> 1) Select the logout button on the user homepage. 	3f	
16	TC04	Test successful registration as a manager.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from homepage. 2) Enter the following data into the registration form fields: <i>username = roger_federer, utalID = 1111111111, role = manager, password = 123456789, phone = 9999999999, email = rogerfederer@uta.edu, licence_plate = RFF1990</i> 3) Press the register button. 4) Select the “Go back to login page” link. 	4a	

17	TC04	Test successful login as a newly registered manager.	<ol style="list-style-type: none"> 1) Enter the following data into the login form fields in the homepage: username = roger_federer, password= 123456789. 2) Press the login button. 	4b	
18	TC04	Test successful view user details by manager.	<ol style="list-style-type: none"> 1) Select “View parking user details” link on the manager home page. 2) Enter the following data into the search user form field: username = user_account. 3) Press the Search button. 4) Navigate back to Manager Home page. 	4c	
19	TC04	Test successful set violations by manager.	<ol style="list-style-type: none"> 1) Select “Set Violations” link on the manager home page. 2) Enter the following data into the search user form fields: username = user_account. 3) Enter the following data into the username field: No.of No-Shows = 3 <u>AND</u> select the Overstay radio button. 	4d	
20	TC04	Test successful logout from manager homepage.	<ol style="list-style-type: none"> 1) Select the logout button on the manager homepage. 	4e	
21	TC05	Test successful registration as an admin.	<ol style="list-style-type: none"> 1) Select “No account? Register here” from home page. 2) Enter the following data into the registration form fields: username = seleniumadmin, utalID = 1335556678, role = admin, password= adminpassword, phone = 1231231234, email = seleniumadmin@uta.edu, licence_plate = RFF1000 	5a	

			3) Press the register button. 4) Select the “Go back to login page” link.		
22	TC05	Test successful login as a newly registered admin.	1) Enter the following data into the login form fields in the homepage: username = <i>seleniumadmin</i> , password = <i>adminpassword</i> . 2) Press the login button.	5b	
24	TC05	Test successful edit user profile by admin.	1) Select the “Edit User Profile” link on the admin home page. 2) Enter the following data into the search user form field: username = <i>user_account</i> . 3) Press the Edit button. 4) Enter the following data into the edit user profile form fields: role = <i>manager</i> , phone = <i>1001001000</i> , email = <i>changed@uta.edu</i> , license number = <i>ARF9999</i> , user status = <i>0</i> , reason = <i>overstay</i> . 5) Press Submit buttonSelect the “Go back to Manager Home page” link.	5c	
25	TC05	Test successful logout from admin homepage.	1) Select the logout button on the manager homepage.	5d	

Table 1: Selenium test case table (A05-Team3)

NB: Please note that test cases 10-25 above are ‘sunny days’ scenarios and do not have expected outputs because their corresponding SeleniumTC##.java only test the flow : The scripts do not check for ANY error messages(not even if they are empty for example: `loginError = ""`).

OP number	Description
1	Register with all unique possible error messages then no error messages.
2	Login with all unique possible error messages then no error messages.
3a	Register as a user without any error messages.
3b	Login as user without any error messages.
3c	Search for available parking as a user without error messages.
3d	Confirm a selected parking reservation without any error messages.
3e	Pay for selected options in 3c without any error messages.
3f	Logout after successful reservation made for user.
4a	Register as a manager without any error messages.
4b	Login as a manager without any error messages.
4c	View parking user details as a manager without any error messages.
4d	Set violations for user by manager without any error messages.
4e	Logout after successful set violations for manager.
5a	Register as an admin without any error messages.
5b	Login as an admin without any error messages.
5c	Edit user profile as an admin without any error messages.
5d	Logout after edit user profile for admin.

Table 2: OP numbers and respective descriptions for Selenium test cases.

Section 1.2 Test Summary:

Selenium TC#	Test Case #	Objective	Test execution status.
TC01	1	Test first set of Register system user.	PASSED.
	2	Test second set of Register system user.	PASSED.
	3	Test third set of Register system user.	PASSED.
	4	Test fourth set of Register system user.	PASSED.
	5	Test fifth set of Register system user.	PASSED.
	6	Test sixth set of Register system user.	PASSED.
TC02	7	Test first set of Login of a system admin.	PASSED.
	8	Test second set of Login of a system admin.	PASSED.
	9	Test third set of Login of a system admin.	PASSED.
TC03	10	Test successful register as a user.	PASSED.
	11	Test successful login as newly registered user.	PASSED.
	12	Test successful request reservation.	PASSED.
	13	Test successful confirm reservation.	PASSED.
	14	Test successful make a payment for a reservation.	PASSED.
	15	Test successful logout from user home page.	PASSED.
TC04	16	Test successful register as manager.	PASSED.
	17	Test successful login as newly registered manager.	PASSED.
	18	Test successful view user details as manager.	PASSED.
	19	Test successful set violations.	PASSED.
	20	Test successful logout from user manager home page.	PASSED.
TC05	21	Test successful register as a admin.	PASSED.
	22	Test successful login as newly registered admin.	PASSED.
	23	Test successful edit user profile as admin	PASSED.
	24	Test successful logout from user manager home page.	PASSED.

Table 3: Test summary tables for Selenium tests TC01-TC05.

Section 1.3 Test Coverage – (Please refer to “A05 Metrics.xlsx”)

Section 1.4 Selenium Test Organization:

- functions folder: *UTAParking/src/functions*

Contains *UtaParking_functions.java* file that has all the common functions the selenium tests called. All the SeleniumTC##.java tests extend *UtaParking_functions.java* and call its functions depending on the needed functionalities to test.

```

1 package functions;
2
3 import java.io.FileInputStream;
11
12 public class UtaParking_functions {
13
14     public static WebDriver driver;
15     public static Properties prop;
16     private String test_delay;
17
18     public UtaParking_functions() throws FileNotFoundException, IOException{
19         Properties propDelay = new Properties ();
20         propDelay.load(new FileInputStream("./Configuration/UPA_Configuration.properties"));
21         test_delay = propDelay.getProperty("test_delay");
22     }
23
24
25     public void UPA_BF_Register(WebDriver driver, String sUserName, String sUtaID, String sRole, String sPassword,
56
57     public void UPA_BF_Login(WebDriver driver, String sUserName, String sPassword) throws InterruptedException {
77
78     public void UPA_BF_RequestReservation(WebDriver driver, String sParkingType,String sStart_time,String sDuration) throws InterruptedException
99
100    public void UPA_BF_ConfirmReservation(WebDriver driver) throws InterruptedException
112
113    public void UPA_BF_MakePayment(WebDriver driver, String sCCType, String sCCNumber) throws InterruptedException
130
131    /***** MANAGER */
133
134    public void UPA_BF_SearchUserManager(WebDriver driver, String sUsername) throws InterruptedException {
147
148    public void UPA_BF_SetViolationsManager(WebDriver driver, String sUsername, String sNoShows) throws InterruptedException {
164
165    public void UPA_BF_SearchEditUser_Admin(WebDriver driver, String sUsername,
203
204    public void UPA_BF_Logout(WebDriver driver) throws InterruptedException
215
216 }
217

```

Figure 1: Screenshot of Uta Parking functions.java content (unexpanded).

- **configurations file:** *UTAParking/Configuration/UPA_Configuration.properties*

The file contains the URL that tomcat server uses to run the application, the path to the shared UI map and a delay variable to force selenium tests execution to slowdown for human eyes (it can be set to empty in case no inspection is needed).

All the SeleniumTC##.java tests used this file by loading it into the “prop” variable.

```
1 // Application URL //
2
3 sAppURL = http://localhost:8080/UTAParking/
4
5
6 // UI Map //
7 SharedUIMap = ./SharedUIMap/SharedUIMap.properties
8
9 #delays
10 test_delay = delay
11 |
```

Figure 2: Screenshot of UPA_Configuration.properties content.

- **SharedUIMap:** *UTAParking/SharedUIMap/SharedUIMap.properties*

This file contains a **mapping** of the identification elements found in the .jsp files to centralized identifiers. The functions and Selenium tests use this mapping to identify the elements they need to test on the webpages.

All selenium test loaded the content of the Shared UI map.

(Please refer to either the project.zip or the youtube video for SharedUIMap.properties content)

- **tests package:** *UTAParking/src/tests*

This package contains **ALL** selenium tests that execute the test cases. As of now, there are 5 Selenium test cases in this package. Each specified in *Table1* above.

(Please refer to either the project.zip or the youtube video for each TC##.java content)

Section 1.5 - YouTube video reference

<https://youtu.be/HjGnBd0CocI>