ECS506U Software Engineering

Group Project 2017

**Group 2**

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**Test and Contribution Report Template**

**Version 2.0**

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# Introduction

1. This document is a template – it is up to you to replace the contents with material relevant to your contribution to the group project.
2. The test and contribution report is a confidential report that must be submitted as a coursework item. It should be no more than 10 pages and have no appendices.
3. It must have a front cover clearly identifying yourself and the group letter of the group you belong to. The report is expected to reflect three things:

* Your design: A summary description of the design of your module and how it integrates into the system as a whole.
* Your testing: A test plan along with achieved test results against each requirement for that module.
* Their contribution: A statement of the contribution made by each member of the group to project success

1. This document must be no more than 10 pages and should not contain any appendices.
2. Your submitted document does not need an introduction section so please delete this section and all other extraneous text from your submission.

# Module Design

1. A description of the module you designed and built, including a description
2. Describe this formally and provide design descriptions in UML. You must include key UML diagrams that help explain your contribution (for example a class diagram that highlights the parts that you were responsible for). Marks will be deducted for not using UML and for not highlighting what methods and classes you produced.
3. Describe any requirements ambiguities and state how you chose to interpret them.

# Team Performance

1. Brief description of how you felt the team worked together.
2. A table listing each group member and assessment grades must be included in the individual report. The rows will be all the group members’ names, as listed in the group membership spreadsheet (no alternative spellings and nicknames please!) except your own, and the column will list YOUR confidential assessment of the quality of contribution made by each member on a grade (E, M B and F).
3. If all group members contributed satisfactorily and equally the grading should be a default M for each member. If you feel that the performance of a specific member of the group was below expectations, then grade them as a B and if above then an E. If they failed to make a significant contribution, then grade them F.
4. In all cases where you grade a group member with any other grade than M a detailed justification must be given.
5. In terms of grading we mandate the following interpretation, where expectations are as defined in this document (not your own!):

* E should be taken to mean contribution exceeded expectations
* M meets expectations
* B is below expectations
* F significant lack of contribution.

1. Do not list nor grade yourself in your table.
2. Do not share your grading or collude in your grading with any other members of your group. To do so will incur a penalty.

# Test Plan and Results

1. Test plan organized by module requirements describing the test case that should be exercised to demonstrate the requirement has been met. This should be detailed enough to allow someone else to successfully access the system and test your module.
2. Test results documented against each requirement proving that you ran that test case and confirming the result (pass or fail).
3. The first test case must be of the authentication functionality for the system regardless of which module you were responsible for.
4. Your test plan and results must describe the tests and results for one of the following seven modules:

* Customer account
* Vehicle records
* Diagnostic and Repair bookings
* Parts record
* Specialist Repairs
* Scheduled maintenance bookings

1. In addition to authentication use only one of the test templates below to base your test cases on, for your module.
2. Indicate whether the test is passed or failed when you tested it.
3. Any test data that you require must either be in the system database actually delivered or required to be entered by the tester. Note that existing test data is required and you will be penalised if excessive data entry is required.
4. Show screen shots and specify icons/buttons where appropriate, but do not overdo it – remember the space limitations.
5. Note that records may be timestamped as in the past or future so be mindful to create test data records that fall before March 31st and after May 1st 2017.
6. Note that the assessment will involve running additional test cases so please do not assume that because you have passed the test cases that we will not run additional cases and that your system is error free. Further and more extensive testing is therefore encouraged.

## Test Cases - Authentication (A)

|  |  |  |
| --- | --- | --- |
| **Test** **Case** | **Steps and expected Result** | **Pass/Fail** |
| 1. Logon as existing system administrator – provide id and password. | 1. Run the GMSIS.jar 2. Input:   Username:10001  Password: password   1. Enter 2. Navigate to the admin tab   **Result** : View Admin section | PASS |
| 1. View list of existing users (all users of both types) | 1. Login as admin 2. Navigate to the admin Tab     **Result**: table of users of both types | PASS |
| 1. Change password of existing day-to-day user. | 1. Login as admin 2. Navigate to admin tab 3. Select user from table 4. Click edit button 5. Change password 6. save   **Result**: The password should have changed | PASS |
| 1. Create a new day-to-day user. | 1. Login as admin 2. Navigate to admin tab 3. Fill in text fields(first name, last name, password) 4. Select standard radio 5. Click add user button   **Result** : record added in list | PASS |
| 1. Logout existing administrator. | 1. Click logout button on the upper right corner.   **Result**: App shows login screen only, main app has closed. | PASS |
| 1. Login as the new day-to-day user. | 1. Fill in username, password field with the ID and password of a standard day to day user. 2. Press enter   **Result**: The admin tab should be disabled | PASS |
| 1. Logout as new day-today user. | 1. Click Logout button in the upper right corner   **Result**: App shows login screen only, main app has closed. | PASS |
| 1. Attempt login as new day-to-day user with incorrect authentication. | Fill in username, password fields with random characters.  **Result**: GUI will not allow alphabet characters to be inputted in username field. Also will prompt invalid username/password. | PASS |
| 1. Logon as existing system administrator. | Refer to test Case 1 from step B onwards. | PASS |
| 1. Delete newly created day-to-day user. | 1. Refer to test Case 1 from step B onwards. 2. Select the newly created user from the table. 3. Click the delete button. 4. Confirm by selecting “yes”   **Result**: selected row is removed | PASS |
| 1. Login as existing day-to-day user | 1. Input day to day user details : Username:10005   Password: password   1. Enter 2. Navigate to the admin tab   **Result** : View Admin section | PASS |

## Test Cases - Vehicle record (A)

|  |  |  |
| --- | --- | --- |
| **Test Case** | **Steps & Expected Result** | **PASS/FAIL** |
| 1. Search for vehicles by type (car, truck, van). | 1. Navigate to Vehicles Tab 2. Above table select radio: 3. Car 4. Truck 5. Van   **Result**: Only Vehicles of the selected type will be displayed dynamically. | PASS |
| 1. Select vehicle and show past and future, parts used, booking dates, and the total cost per booking (warranty and non-warranty). | 1. Select from the table a vehicle e.g. “UIO8976 Audi a3” of customer “Adi Dassler” 2. Click the Booking & Parts button   **Result**: A GUI pop-up will display table of Past & Future Bookings with total cost, date and type if any.   1. On the right side in the View Bookings section select: 2. Past Bookings. 3. Future Bookings 4. Past & Future   **Result**: In the table only selected type of bookings will be displayed dynamically if any.   1. Select a booking from the table. Hence on the right side in the Parts section click parts Installed button.   **Result**: A GUI popup will display parts installed for the booking selected if any. | PASS |
| 1. Search for vehicles by manufacturer. | 1. Navigate to the Vehicles Tab 2. Right to the search field select from the dropdown menu the “Vehicle Manufacturer” option 3. Fill in the search field with a vehicle manufacturer e.g. “Fiat” and click the search button   **Result**: If the manufacturer exists the table below will display the “Fiat” Vehicles. Otherwise an error message will popup. | PASS |
| 1. Select vehicle and show details. | 1. Navigate to Vehicles tab. 2. Select a vehicle from the table e.g. “AKI9087 Fiat Fiorino” of customer Warren Buffet which has no warranty. 3. OR select a vehicle with warranty e.g. “AKI8976 Scania Infinity” of customer Warren Buffet. 4. Click Vehicle Details button.   **Result**: A popup GUI will display Full vehicle details along with customer and warranty details. If the vehicle has no warranty the warranty fields will display “Not Applicable”. Otherwise will show warranty details. | PASS |
| 1. Edit an existing vehicle record. | 1. Navigate to Vehicles Tab 2. Select a vehicle from the table e.g. “JIK9864 Fiat Abart” of customer Warren Buffet. 3. Click Edit button 4. A GUI will popup displaying all of the selected vehicle’s details in an editable status. If the vehicle has no warranty the warranty text fields will be disabled by default. Otherwise it will display the warranty details. 5. Edit the mileage and select No warranty radio. Hence click update. 6. Click exit and to validate that the changes have been made select “JIK9864 Fiat Abart” from the table. 7. Click Vehicle Details   **Result**: Observe that in the warranty information appears “Not Applicable” and the mileage has changed. | PASS |
| 1. Edit the warranty details of a vehicle under warranty. | 1. Navigate to Vehicles Tab 2. Select a vehicle under warranty e.g. “JUI78987 Mercedes SLR” of customer “Russel Westbrook” and click Edit button 3. A GUI will popup displaying all of the selected vehicle’s details in an editable status. 4. On the right side are the warranty details. 5. Edit the company, address, expiry date and click update. 6. Click exit and to validate that the changes have been made by selecting the “JUI78987 Mercedes SLR” from the table. 7. Click Vehicle Details   **Result**: Observe that in the warranty information the changes you made to the vehicle have been updated. | PASS |
| 1. Delete a vehicle record. | 1. Navigate to the Vehicles Tab 2. Select a vehicle from the table e.g. “AJI8907 Ferrari Maranelo” of customer James Brown and click the delete button 3. A popup will ask for confirmation.   **Result**: If “yes” is clicked the record will be deleted and hence removed from the table. Otherwise the vehicle will not be deleted.  **NOTE**: Data integrity testing see test case 10. The vehicle in this test case has no bookings hence this record does not affect diagrep, parts, spc module. | PASS |
| 1. Create a new vehicle record. | 1. Navigate to Vehicle tab 2. Click the add button from the right side 3. A popup will display the fields required to be filled in. 4. Vehicles belong to customers. There is a dropdown containing all customers in the system. 5. Select a customer, e.g. “Warren Buffet” 6. For quick selection select from the vehicle template a vehicle e.g. “Ferrari Maranelo”   **Result**: Dynamically the make, model, engine size and fuel type will be filled in.   1. Fill in the remaining vehicle fields i.e. registration number (e.g. TAA2596) , colour, MoT, mileage 2. Hence if the vehicle has no warranty select the “no warranty” radio. Otherwise fill in warranty fields.   **Result**: Dynamically the warranty fields will become un editable if “no warranty” is selected.   1. Click the add button and then exit.   **Result**: Observe that the vehicle record appears in the table with customer details. For further details including warranty details click “Vehicle Details “ button. | PASS |
| 1. Logout, close application and log back in. Show created record is persistently stored. | 1. Click the logout button 2. Login with user: 10001 and password: password 3. Navigate to Vehicles tab 4. Search the vehicle record added previously (i.e. TAA2596) by vehicle registration number.   **Result**: The previously added record should appear on the table | PASS |
| 1. Data Integrity testing: “Death Relationship” test on Vehicle deletion. Show that when a vehicle is deleted that all of the bookings of that vehicle, parts installed of that bookings as well as specialist repaired parts are deleted dynamically. | 1. Navigate to Vehicle tab. 2. Select a vehicle e.g. “AKI9087 Fiat Fiorino” of customer “Warren Buffet” and click Bookings & Parts. Hence click parts installed to view parts installed if any.   **Result:** Observe that the vehicle has 3 Repair Bookings of which the first one has 3 parts installed   1. Click exit. Hence select it again and delete it. 2. Navigate to the Bookings tab. 3. Attempt to search for the “AKI9087 Fiat Fiorino”   **Result**: Observe that the bookings of “AKI9087 Fiat Fiorino” have been deleted dynamically.   1. Navigate to the Parts tab 2. Search by Vehicle Registration number the “AKI9087 Fiat Fiorino”   **Result**: Observe that the parts installed of “AKI9087 Fiat Fiorino” have been deleted dynamically.   1. Navigate to the SPC tab. 2. Search by Vehicle Registration number the “AKI9087 Fiat Fiorino”   **Result**: Observe that the parts subcontracted by SPC of “AKI9087 Fiat Fiorino” have been deleted dynamically. | PASS |
| 1. Testing next Booking in Vehicles. Next booking is supposed to show the most recent future booking.   Add a booking to a vehicle more recent than the current next booking and show that it gets updated to show the most recent added. | 1. Navigate to the Vehicles tab 2. E.g. Vehicle “AIO8977 VolgsWagen Polo” has next booking on 2017-06-16 15:00 of customer “Warren Buffett” 3. Navigate to Booking tab 4. Click add Booking 5. From the Customer Details section select from the Customer drop down menu customer “Warren Buffet” 6. From the Vehicle Details section select his “AIO8977 VolgsWagen Polo” vehicle. 7. From the Booking Details section select a date earlier than “2017-06-16 15:00”(i.e. the current next booking date) e.g. “2017-05-02 09:00” 8. Click confirm. 9. Navigate to Vehicles tab   **Result**: Observe that vehicle “AIO8977 VolgsWagen Polo” has updated next booking on “2017-05-02 09:00” | PASS |
| 1. Search vehicles by vehicle template. | 1. Navigate to Vehicles tab 2. Above the table there is dropdown menu with vehicle templates. 3. Click it. 4. Select from the list the Vehicle template you want to search for e.g. “Ferrari Maranelo”   **Result**: Observe that dynamically on vehicle template click the matching vehicle are displayed if they exist.  E. To return to the initial state with all vehicle s select from the vehicle template menu the “ALL” option. | PASS |
| 1. Testing of LastService functionality. LastService is supposed to show the most recent past booking. | 1. Navigate to Vehices tab 2. Select a vehicle e.g. “KHH9087 Fiat GTI” that has bookings. 3. To validate if the last service displayed is correctly. Click Bookings & Parts button to view all the bookings of that vehicle. 4. To view only the past bookings filter by selecting Past bookings from the drop down on the right in the View bookings section.   **Result**: Observe the booking dates and validate that the last service date is correct. In our example “2017-03-01 12:00” is the correct last service. Which is displayed correctly. | PASS |