**CAB201 Programming Principles - Semester 1, 2018**

**Statement of Completeness for Assignment: Major Project - Mates\_Rates\_Rent\_a\_Car (MRRC)**

This statement of completeness will need to *accurately* state the functionality which has been implemented. There will be a penalty of 5 marks (loss of 5 marks) for a non-submitted statement of completeness, and a penalty of 1 mark for each inaccurate statement to a maximum of 4 marks.

**Student Name(s)/Student ID(s):**

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**In the following section, you are required to mark which functionality you have implemented. In the column on the right please mark ‘Y’ where you have completed this functionality, and ‘N’ where you have not. Please fill in any additional text boxes requested, and please note any limitations or bugs in the box at the end of each section. You may expand the table if you need more room for comments.**

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| **File I/O** | | |
| **File location** | *If your solution does not load files from the specified location in the specification, please note here where the files are stored.*  **Customers:** Data/customer.csv  **Fleet:** Data/fleet.csv  **Rentals:** Data/rentals.csv | |
| **Read** | CRM + Vehicles/Fleet | Y |
| Rentals (must meet above criteria first) | Y |
| **Write** | CRM + Vehicles/Fleet (must be able to read CRM/Vehicles) | Y |
| Rentals (must meet above criteria first, and be able to read Rentals) | Y |
| **Comments** | *Please note any limitations, bugs, logical errors, and/or run-time errors here* | |

*Please note that your assignment must be able to load the files in the same format as provided in the example files.*

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| **CRM And Fleet Functionality** | | |
| **CRM** | View customers | Y |
| Add customer   * With validation - no repeated customer ID | Y  Y |
| Remove customer   * With validation – only if not renting vehicle | Y  Y |
| Edit customer   * With validation – same as add | Y  Y |
| **Fleet** | View vehicles | Y |
| Add vehicle   * With validation - all fields are valid options, and there is no repeated registrations | Y  Y |
| Remove vehicle   * With validation – only if not already being rented | Y  Y |
| Edit vehicle   * With validation – same as add | Y  Y |
| *Extra marks – implemented vehicle classes with inheritance*  Please include a brief explanation of the inheritance here if implemented: | N |
| **Renting** | View rented vehicles report. This should show the vehicle, customer, and the daily cost of the rental. | Y |
| Rent vehicle. This should show the total cost of the rental.   * With validation – only if vehicle and customer exist, vehicle is not already being rented, and customer is not already renting | Y  Y |
| Return vehicle.   * With validation – only if vehicle was being rented by the customer | Y  Y |
| **Comments** | *Please note any limitations, bugs, logical errors, and/or run-time errors here* | |
| **Changes from spec.** | *Please* ***briefly*** *note any changes from the specification of the classes and methods, and your reason for these.* | |

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| **Search Functionality** | | |
| **Possible to Query - Simple** | Any   * Be able to see any unrented vehicle in the fleet | Y |
| Any vehicle at given cost range   * Be able to see any available car in the fleet within the specified cost range | Y |
| Single attribute query   * E.g.:   + Red | Y |
| A choice between two attributes (disjunction)   * E.g.:   + Family OR Luxury | Y |
| A combination of two attributes (conjunction)   * E.g.:   + Family AND Luxury | Y |
| **Inter-mediate** | A choice of any number of attributes (disjunction)   * E.g.:   Family OR Luxury OR Red | N |
|  | A combination of any number of attributes (conjunction)   * E.g.:   Luxury AND Red | N |
| **Advanced** | A combination of any number of attributes, using both AND and OR, where the operators AND and OR should have the same priority (precedence)   * E.g.:   Economy OR Family AND 4-Cylinders | N |
| ***Ninja (extra marks)*** | A combination of any number of attributes, using AND and OR, with AND having a higher priority than OR, supporting parenthesis to resolve priority   * E.g.:   ((GPS AND Sunroof) OR (Red OR Green)) AND Commercial OR Luxury | N |
| **Comments** | *Please note any limitations, bugs, logical errors, and/or run-time errors here* | |

**In the following section, you are required to provide screenshots of that provide evidence of the implemented functionality, and which indicate how the marker would find the functionality in your GUI.**

***The Fleet section has been filled in as an example. Please remove the images and text here and replace them with your own.***

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| --- | --- |
| **CRM And Fleet Functionality** | |
| **CRM** | **View customers** |
| **Add customer**  *Will popup the customer details by clicking the add button* |
| **Remove customer**  *By selecting the customer details to remove and then remove button will validate and remove the customer from the customer list* |
| **Edit customer**  *Modify button will popup the details of selected customer and allows to edit the details. By clicking on the submit button, the details will be updated.* |
| **Fleet** | **View vehicles**  Vehicles are viewed under the ‘Vehicles’ tab. |
| **Add vehicle**  Clicking the ‘Add’ button brings up the Vehicle entry view.    Fields are validated on text change.  A message box is shown if the vehicle rego is not unique:    Example of adding a vehicle (with only the mandatory fields input): Default values will popup automatically according to the selection of vehicle class.    Result after clicking submit: |
| **Remove vehicle**  A row is selected by clicking it in the data grid view. You can then click the ‘Remove’ button to remove a vehicle. A confirmation box is displayed.    If the vehicle is currently being rented, a message is displayed:    Otherwise it is removed from the data grid view. |
| **Edit vehicle**  A row is selected by clicking it in the data grid view. You can then click the ‘Modify’ to bring up the modify view, which is the same as the add view except that the properties are loaded in.    Clicking submit updates the vehicle in the view:    After clicking submit button data grid view will be updated |
| **Renting** | **View rented vehicles report**  *Rental report tab shows the following screen contains the report* |
| **Rent vehicle**  *After selecting a free vehicle from the gridview and selecting the customer and number of dates, when clicking on Rent button will validate the customer and vehicle and allows to give rental*  *If the customer has already taken a vehicle, the following message box will appear* |
| **Return vehicle**  *By selecting the rental details from the gridview and clicking on return vehicle will allows the users to return the vehicle* |

**Insert some screenshots briefly explaining how search functions in your GUI.You should provide an example of the first two options (any and any vehicle at given cost range), and an example of a more complex search.**

***Examples of each have been provided. Please remove these and replace with your own images.***

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| **Search Functionality** |
| **Any**  Press ‘Show all’ button to see all unrented vehicles.  Takes string “any” as input.. and by clicking on the search button, it will display all the vehicles which are not given for rental |
| **Any vehicle at given cost range**  Use the numeric up down controls to adjust the cost range. This effects the results of the ‘Show all’ button. |
| **Example of query**  A query can be typed into the text box, and searched for by clicking the ‘Search’ button. |