ECS506U Software Engineering

Group Project 2017

**Team 9**

**Assumptions**

**Authentication**

* The system will allow the administrators to add new administrators
* The day-to-day users of the system will be the ‘Mechanic’
* A logged in user (administrator) cannot delete themselves (system would be inaccessible if all admins could be deleted.

**Customer Account**

* There are no differences in the system requirements between an individual and a business customer. The module was not designed to have two subclasses of the ‘Customer’ class (‘Individual’ and ‘Business’), but it is using instead a variable in the ‘Customer’ class, identifying the type of customer. This improves the efficiency of the whole system by reducing the required memory allocation while it preserves maintainability as it is possible to create the two subclasses if they are required in the future.
* The auto-increment artificial primary key used in the customer database does not have a natural uniqueness. Neither the first name and last name of a customer. Therefore, it was assumed that a customer with the same combination of phone and email cannot be inserted in the system twice. This was implemented by making the columns of ‘PHONE’ and ‘EMAIL’ unique to constraint them.
* When deleting a customer from the system all the records referencing the customer are also deleted. However, this is with one exception that the customer does not have any bills unsettled at the time the user attempted to delete. The system will refuse to delete the customer if after searching all the bookings it finds any with ‘unsettled’ status.

**Specialist Repair**

* There are 10 repair centres CURRENTLY in use by the system, however this is not the limit.
* Specialist repairs can be done in 1 day (sent and returned on same day).
* When sending a part in for repair, the vehicle the part is for must be recorded.