**SENG301 ASSIGNMENT1 REPORT**

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**2.1 User story 1: Owner subscription**

**Original estimate:**

4.7 hrs

**Tasks:**

Verify firstname(s)/lastname/password/email submitted at once functionality (including tests)

* Create a function which can verify submission is valid. If there is any null input or invalid input (such as incorrect email format), submission will be considered as invalid.
* 1.5 hr (estimation)

Verify email which has been occupied or not functionality (including tests)

* Create a function for verifying if the email has been occupied, which will fetch all owner ids from database and compare them with email input.
* 1.5 hr (estimation)

Display an error message if an owner tries to register with an existing email functionality

* If email address is existing, an error message will be printed on the console
* 0.1 hr (estimation)

Store firstname(s)/lastname/password/email into database functionality (create a new user account) functionality (including tests)

* Create a function to store all the submission inputs into database.
* 1.5 hrs (estimation)

Display a confirmation if a new user account has been created functionality.

* If a new user account is created, a confirmation will be printed on the console.
* 0.1 hr (estimation)

**completion time:**

approximately 8 hours

**2.2 User story 2: Vehicle subscription**

**Original estimate:**

7.9 hrs

**Assumption:**

Because from the conceptual diagram, the relationship between owner and vehicle is 1..\* to 1..\*. However, after discussing with tutor, it is considered that if this multi-to-multi relation is used, the assignment will become more complicated. Because one more relationship table will be used for mapping relationship between owner and vehicle. Thus, an assumption is made as below. In this case, one owner can have multiple vehicles, but one vehicle only can belong to one owner. Vehicle (1..\*) -------(1) Owner

**Tasks:**

Verify vehicle’s type/plate number/make/model/fuel all submission at once functionality (including tests)

* Create a function which can verify submission is valid. If there is any null input or invalid input (such as vehicle and fuel types), submission will be considered as invalid.
* 1.5 hrs (estimation)

Verify plate number which has been occupied or not functionality (including tests)

* Create a function for verifying if the plate number has been occupied as owner id, which will fetch all owner plate numbers from database and compare them with plate number input.
* 1.5 hrs (estimation)

Display an error message if an owner tries to register with an existing plate number functionality

* If email address is existing, an error message will be printed on the console
* 0.1 hr (estimation)

Store owner id, vehicle’s type, plate number, make, model, fuel type into database (register a vehicle) functionality (including tests)

* Create a function to store all the valid submission inputs into database.
* 1.5 hrs (estimation)

Display a confirmation if a new vehicle has been registered functionality.

* If a new user account is created, a confirmation will be printed on the console.
* 0.1 hr (estimation)

Update vehicle’s information in database functionality. (including tests)

* Create a function to update registration into database by selected owner id and plate number.
* 1.5 hrs (estimation)

Display a confirmation if a registration has been updated.

* If a vehicle registration is updated, a confirmation will be printed on the console.
* 0.1 hr (estimation)

Remove vehicle’s registration, withdrawing from database functionality. (including tests)

* Create a function remove the registration by selected owner id and plate number in the database.
* 1.5 hrs (estimation)

Display a confirmation if registration has been removed.

* If a vehicle registration is removed, a confirmation will be printed on the console.
* 0.1 hr (estimation)

**Acceptance Criteria:**

An owner must submit vehicle’s type/plate number/make/model/fuel all at once when submitting or updating.

An owner can update any vehicle info.

When the update is done, a confirmation message is displayed on the screen.

An owner can remove any vehicle registration.

When a vehicle registration is deleted, a confirmation message is displayed on the screen.

The submitted details must be stored into database.

The plate number is used as the vehicle id on the system.

When the registration of the owner is done, a confirmation message is displayed on the screen.

After the registration of a plate number, no other registration is allowed with the same email address.

If an owner tries to register with an existing plate number, an error message saying that plate number is already in use must be displayed on the screen.

**completion time:**

approximately 13 hours