

### Mechanical Car Workshop Manager (MCWM) Traceability Matrix

Entry #	Paragraph #	System Specification Text	Type	Build
1	2.0	The MCWM shall have a form for the user to enter a customer's personal information.	SW	1.0
2	2.0	The MCWM shall have a section for the user to enter in the customer's car information.	SW	1.0
3	2.0	The MCWM shall allow the user to switch between a customer page, a car service page, and an inventory page, and a report page.	SW	1.0
4	2.0	There shall be a user interface implemented to allow the user to edit the entries on each page.	SW	1.0
5	2.0	The user shall be able to sort and search information in the tables using the GUI.	SW	1.0
6	3.0	For each customer, the system shall save the customer's first and last name, address, phone number, email (optional), car information, and car services rendered.	SW	2.0
7	3.0	This information shall be entered by the user into the specified fields and saved in the system's database.	SW	2.0
8	3.0	To edit customer information, the MCWM shall allow the user to select a customer and edit the different fields within the table.	SW	2.0
9	3.1	For each car, the system shall save the customer ID, car model/make, and car service rendered and requested.	SW	2.0

10	3.2	Each car service order shall contain information regarding the car and the service required for the car.	SW	3.0
11	3.2	Each car service shall be assigned a specific price.	SW	3.0
12	3.2	For each service requested, the user shall select the car service(s).	SW	3.0
13	3.2	The MCWM shall check which service(s) have been selected and calculate the total cost of the service.	SW	3.0
14	3.2	The MCWM will allow the user to add in a specific service that is not covered by the list of services available if needed.	NTH	3.0
15	4.0	The MCWM shall allow the user to add/edit/remove car parts and the respective car part information into the inventory. Part information shall include the part's name, price, and current stock of the parts.	SW	4.0
16	3.2	The system shall update the inventory of individual car parts in the database as services are created or cancelled.	SW	4.0
17	3.2	The MCWM shall also check the inventory to see if the parts required for the car service is available and will alert the user if the parts are not available.	SW	4.0
18	5.0	The MCWM shall be able to generate reports that contain customer information, their car(s), the services requested, the inventory that was used for the service, and the profit the shop made.	SW	4.0
19	5.0	The user will be able to save the report.	NTH	4.0

20	6.0	The MCWM database shall use SQLite.	SW	4.0
21	6.0	The database of the system shall contain customer information, car information, car part inventory and car service information.	SW	4.0