**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 15 October 2022 |
| Team ID | PNT2022TMID53078 |
| Project Name | Project – Car Resale Value Prediction |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration and Login | Registration through Form  Registration through Email  Login through Email |
| FR-2 | User should be able to input car details | Car information like date of purchase, price, damages incurred, etc are entered by the user |
| FR-3 | User should be able to view past predictions | User can view the previous predictions the model has made on different cars and categorise according to the brand, type of car, date of purchase, etc. |
| FR-4 | System predicts car resale vale | Taking input features given by user, system should be able to predict car price by forwarding the prediction request to the ML model. |
| FR-5 | Admin should be notified of any errors in the system | Any error that occurs like the model taking a long time to evaluate resale price should be notified to the admin so that the problem might be fixed. |

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Effective User Interface with descriptions for each feature and proper layout that ensures each user finds it easy to access and interact with the system. |
| NFR-2 | **Security** | Account creation for each user with a mandatory password strength check while creating the account. |
| NFR-3 | **Reliability** | Chance of critical failure should be less than or equal to 2%. |
| NFR-4 | **Performance** | The system must provide a webpage rendering images and texts upon receiving a request within a time of 8 seconds over a standard internet connection. |
| NFR-5 | **Availability** | The website should be available to users 24x7. Any issues or errors will be addressed within the next 24 hours. |
| NFR-6 | **Scalability** | The system must be scalable enough to support 1,00,000 requests at the same time without crashing. |