**Project Design Phase-II**

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

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| Date | 27 October 2022 |
| Team ID | PNT2022TMID12047 |
| Project Name | 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.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | The system provides a help and support menu in all interfaces for the user to interact withthe system. The user can use the system by reading help and support. |
| NFR-2 | **Security** | All communications will be encrypted. This protects the application, data, and the personal information of the user from interception. The application will not store personal data of the user on the device. The application requires a valid SSL certificate be maintained at all times to allow trusted and secure communication. |
| NFR-3 | **Reliability** | We don’t share the user’s information to the 3rd party for any marketing and we won’t share the cookies in backend. |

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | Collect Dataset | We can collect datasets from different open sources like **kaggle.com, data.gov, UCI machine learning** repository, etc. |
| FR-2 | Pre-Process The Data | Import Required Libraries  Read The Datasets  Cleaning The Dataset  Splitting Data Into Independent And Dependent Variables |
| FR-3 | Model Building | Choose The Appropriate Model  Check The Metrics Of The Model  Save The Model |
| FR-4 | Application Building | Build The Python Flask App  Build An HTML Page  Execute And Test Your Model |

**Non-functional Requirements:**

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

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| NFR-4 | **Performance** | The system response time for every instruction conducted by the user must not exceed more than a minimum of 10 seconds. The system should have high performance rate when executing user’s input and should be able to provide response within a short time span usually 50 second for highly complicated task and 20 to 25 seconds for less complicated task. |
| NFR-5 | **Availability** | The system should always be available for access at 24 hours, 7 days a week. Also in theoccurrence of any major system malfunctioning, the system should be available in 1 to 2working days, so that business process is not severely affected. |
| NFR-6 | **Scalability** | Our solution provides approximately 0.7 accuracy for training dataset and 0.6 accuracy for test dataset in the case of higher workloads also. |