**Project Design Phase-II**

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

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| Date | 03October 2022 |
| Team ID | PNT2022TMID21861 |
| 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 | Registration through Form  Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | User ID Proof confirmation | Online verification of ID Proof submitted by the user |
| FR-4 | RC Verification | Verification of Registration Certificate (RC) |
| FR-5 | Insurance documents verification | Verification of Insurance documents |
| FR-6 | Other documents to be verified | * Service records book * No Objection Certificate(NOC) * Road Tax Receipt * Emission Certificate   shall be verified |

**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** | The platform will be a user friendly one as the only form of input received form the user is the vehicle data in the form of documents and ID Proofs and the verification is done. |
| NFR-2 | **Security** | The platform shall be made secure such a way that no data shall be leaked or accesed by unauthorised users. |
| NFR-3 | **Reliability** | The platform shall be made a more reliable one through proper prediction of car resale price and satisfying the customer needs. |
| NFR-4 | **Performance** | The price of the cars shall be predicted with appreciable amount of efficieny by using these machine learning techniques.   * Multiple Linear Regression Analysis * K-Nearest Neighbours Algorithm * Decision Trees * Naïve Bayes classification |
| NFR-5 | **Availability** | The platform shall be made avaiable for all the users who wish to resale their cars in the form of a website or a dedicated application. |
| NFR-6 | **Scalability** | By using the 4 different machine learning techniques, the resale price shall be perdicted with nearly 60-70% of accuracy. |