## Project Design Phase-II Solution Requirements (Functional & Non-functional)

| Team ID      | PNT2022TMID42107                      |
|--------------|---------------------------------------|
| Project Name | Project – Car Resale Value Prediction |
| College Name | AVS College of Technology             |

## **Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task)   |
|--------|-------------------------------|--|
| FR-1   | User Registration             | <ul> <li>Registration through Form</li> <li>Registration through Gmail</li> <li>Registration through Instagram</li> <li>Registration through Facebook</li> </ul> |
| FR-2   | User Confirmation             | <ul><li>Confirmation via Email</li><li>Confirmation via Message</li></ul>  |
| FR-3   | User Profile                  | <ul><li>View account details</li><li>Change password</li></ul>   |
| FR-4   | Car details                   | <ul> <li>Adding the new car</li> <li>Getting car details</li> <li>View and update details</li> </ul>   |
| FR-5   | Maintain database             | <ul> <li>Store car details in car database</li> <li>Store user details in user database</li> </ul>   |
| FR-6   | Value prediction              | <ul> <li>Predict the value of the resale car using the model and details entered</li> <li>Display the predicted value</li> </ul>                                 |
| FR-7   | Feedback                      | Feedback through form  |

## Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description  |
|--------|----------------------------|--|
| NFR-1  | Usability                  | <ul> <li>User friendly UI</li> <li>Clear instructions and sample examples will be provided</li> <li>Easy process flow to predict value</li> </ul>                                |
| NFR-2  | Security                   | <ul> <li>User authentication while entering website</li> <li>No information is shared with third party</li> <li>User can see only his details</li> </ul>                         |
| NFR-3  | Reliability                | <ul> <li>Data will be stored and replicated so that data loss can be avoided</li> <li>Rate of occurrence of failure is very less</li> </ul>                                      |
| NFR-4  | Performance                | <ul> <li>Quick prediction results</li> <li>Fast website loading</li> <li>Efficient ML algorithm to provide accurate result with less time complexity</li> </ul>                  |
| NFR-5  | Availability               | <ul> <li>Application can be accessed from both mobile and desktop</li> <li>Single page failure does not affect the whole website</li> <li>Uninterrupted user services</li> </ul> |
| NFR-6  | Scalability                | <ul> <li>Able to handle large amount of data and traffic globally without failure</li> <li>Database can be scaled according to the usage in a cost effective manner</li> </ul>   |