a

Project Design Phase-II Technology Stack

IBM CLOUD





DATABASE

TRAIN AND TEST SET



EVALUATION

USER



USER





CAR DETAILS



WEB APP

ADMIN



Table-1: Components & Technologies:

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Component** | **Description** | **Technology** |
| 1. | User Interface | A website where the user interacts | HTML, Python ,Flask |
| 2. | Data Pre-process | Pre-processing of the dataset | Pandas, Numpy |
| 3. | Prediction | Resale value Prediction | Python models |
| 4. | Cloud Database | Database Service on Cloud | IBM Cloud |
| 5. | Machine Learning Model | ML model for predicting prices | Regression Model |

Table-2: Application Characteristics:

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Characteristics** | **Description** | **Technology** |
| 1. | Open-Source Frameworks | open-source frameworks used for development | Python, Flask, Python Libraries |
| 2. | Security Implementations | User Authentication | SHA-256 Encryption |
| 3. | Scalable Architecture | The 3-tier architecture (Web, Application,  Database) is scalable. | IBM Cloud |
| 4. | Availability | Application made available even under heavy load | IBM Cloud - cloud hosting |
| 5. | Performance | Able to handle multiple requests | IBM Cloud - load balancers |