

PROJECT DESIGN PHASE-I
SOLUTION ARCHITECTURE

Date	30 September 2022
Team ID	PNT2022TMID15996
Project Name	Car Resale Price Prediction
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- The best technological solution to predict the resale value of the car. We employ machinelearning methods because the project is still in development.
- To address the non-uniform distribution, we first apply class balancing. Next, feature ranking and analysis are carried out. Finally, numerous ML models are trained and assessed based on different performance metrics to select a solution with a greater accuracy.
- Development phases:
 - Step 1: Data pre-processing.
 - Step 2: Features Analysis.
 - Step 3: Comparative Evaluation of various models.
 - Step 4: Performance Evaluation.
- Requirements: A dataset of the car resale, with the attributes like Condition of the car, color, mileage etc.
- Based on the past specifications the price of the car is predicted.

Example - Solution Architecture Diagram:

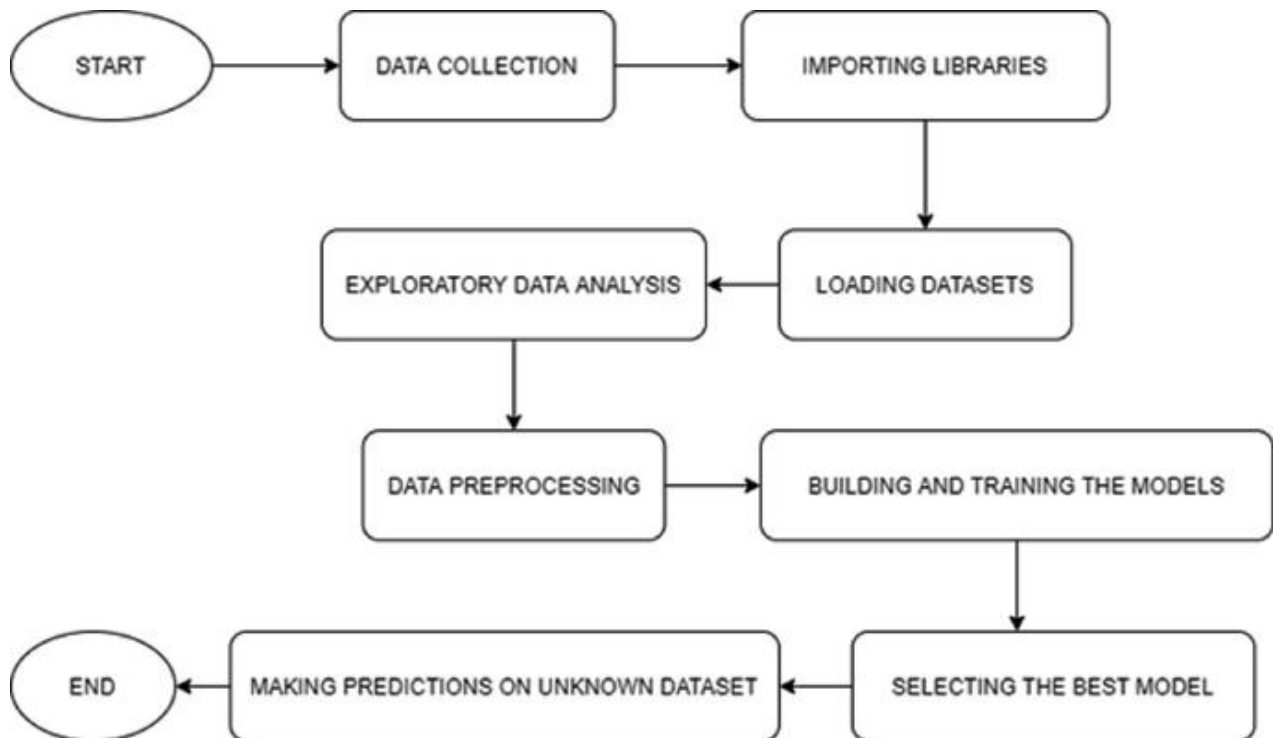


Figure 1: Architecture and data flow of the Car Resale Price Prediction.

Reference:

https://media.springernature.com/lw685/springerstatic/image/chp%3A10.1007%2F978-981-16-8739-6_11/MediaObjects/511941_1_En_11_Fig1_HTML.png