

Project Design Phase-I Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID51924
Project Name	Intelligent Vehicle Damage Assessment and Cost Estimator for Insurance Companies
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:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

In the project we use IBM cloud db2 , we also use Mask R-CNN to train the model, we give images as input to the CNN model , we also did VGG image annotation to train data as input ,

- Initially, the machine marks the damage using X,Y polygons
- Then save the data points as JSON file
- Then the name, size and the extra data will be stored in the file
- The polygons create ID's to the data points such as class 1 , class 2 etc.
- Then it predicts the damage and estimates the cost according to it

Solution Architecture Diagram:



