

**Project Design Phase-I**  
**Solution Architecture**

Team ID	PNT2022TMID26463
Project Name	Retail Store Stock Inventory Analytics

**Solution Architecture:**

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

- Find the best tech solution to solve existing business problems.

With the use of Data Analysis, Data Science, and Image Processing a tech solution is developed to solve the existing business problem and to improve the efficiency of the existing solution models.

- Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.

Characteristics & Behaviour:

- User-friendly
  - Real-time dashboard
  - Detailed & Periodic Generation of Inventory Report
  - Automatic Credit Point based Discount System
  - Enhanced Billing Process with Barcodes
- Define features, development phases, and solution requirements.
  - Features:
    - Instant Invoice Generation
    - Automatic Determination of GST & other taxes
    - Easy Categorisation and Product Search
    - Effective Notification System
    - Real-time dashboard updation
    - Efficient Report generation & visualisation
  - Solution Requirements:
    - Data set
    - Data model
    - Data processing tools.
- Provide specifications according to which the solution is defined, managed, and delivered.

The proposed solution is defined, managed, and delivered by

- Analysing the technology environment
- Analysing and documenting requirements
- Participating in technology selection
- Creating a solution prototype
- Supporting project management.

### Example - Solution Architecture Diagram:

