Project Design Phase-I

Solution Architecture

Date	19 September 2022
TeamID	PNT2022TMID39861
Project Name	Project - Retail Store Stock Inventory Analytics
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, behaviour, 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.

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Example - Solution Architecture Diagram: Retail Chain Enterprise Inter-store interactions Retail Store Boundary Suppliers Warehousing Fast, responsive Seamless supplier Back-office Systems Systems sourcing internal ops Supplier Sourcing Internal Systems Systems (B2B) Financial/ HR & Employees Manufacturers Inventory Systems Other Systems Efficient, self-service consumer touchpoints Fast & efficient interactions In-Store Device Touchpoints Intermediaries Senior Citizens' Fixed POS/ Point-of-Sale Ecosystem Price Checker Self-Checkout Benefit Kiosk System Services Providers Online presence, secure Lottery access & payments Provider Digital Store Hybrid Store Shoppers Order online (Physical+Digital) Consumer E-Commerce Fulfill Eg: AmazonGO Mobile Website Anywhere Integrated customer Omnichannel experiences experiences **Delivery Partners** Shoppers Desired business objectives - Retail systems - Digital Store components - External systems Shared-economy Logistics companies delivery delivery service

Figure 1: Application Architecture of a Retail Chain

Reference: https://dzone.com/articles/future-retail-a-business-and-technical-architectur

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