Project Design Phase-I
Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID50313
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:

- Technical Users ,Accounting has authority on Inventory Management, Deposit Management, Debit Management ,Service Management and also reporting features.

- Basic users are only able to report their debit inventories and request service for them.

- To make desktop based application of IMS for small organization.

- To make the system easily managed and can be secured

- To cover all the areas of IMS like purchase details, sales details and stock management.

- The 3-tier includes the three hierarchy of the flow of programming logic from user interface to database and again database to user interface with the desired information requested by the clients.

- The visual part is implemented using all kinds of swing components, which does not make database calls. The main function of this tier is to display information to the user upon user's request generated by user's inputs such as firing button events.

- The middle tier, business logic, is called by the client to make database queries. It provides core function of the system as well as connectivity to the data tier, which simplify tasks that were done by the clients tier.

- Data layer is also the class which gets the data from the business tier and sends it to the database or gets the data from the database and sends it to business tier.

- As application starts the login page appears. Admin login is determined by the username and password that has all the authority to add, update and delete the stock of the organization as per the requirement.

- We can create godwon if we need to extend or we have more than one godwom. We can create the godwom along with the date.

- It show the details about the sales and the remaining stock of sales. It also show the details about the sales in return.

- It shows the details about the purchase made by the organization along with the price and dates.

- Inventory Management System (IMS) is targeted to the small or medium organization which doesn't have many godwom or warehouses i.e. only to those organization that has single power of authority.

- Inventory Management System is a simple desktop based application basically suitable for small organization. It has every basic items which are used for the small organization.

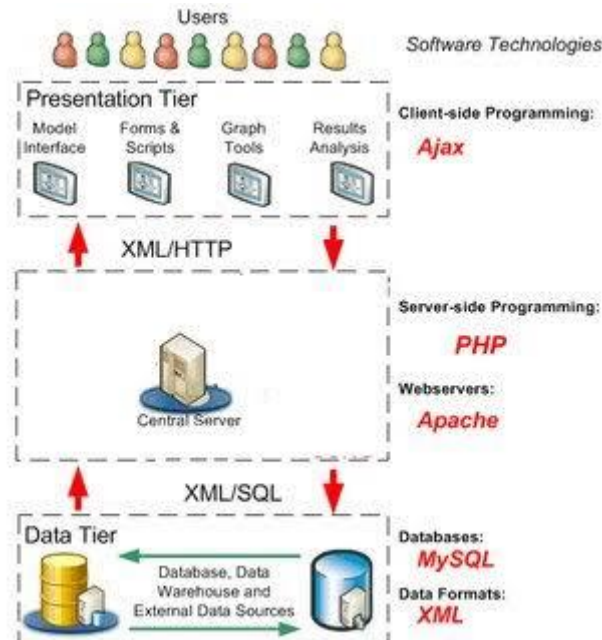**Example - Solution Architecture Diagram:**

Figure 1: Architecture and data flow of the voice patient diary sample application

Reference: https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/