## Project Design Phase Technology Stack (Architecture & Stack)

Date	25June2025
Team ID	LTVIP2025TMID31104
Project Name	Field Service WorkOrder Optimization
Maximum Marks	4 Marks

## **Technical Architecture:**

The solution is developed on the Salesforce cloud platform, which includes a Lightning user interface, Apex-based backend logic, and standard Salesforce cloud infrastructure. It enables automatic assignment of field technicians for service requests based on criteria like skill set, availability, and location. External email APIs and Apex triggers handle

**Table-1: Components & Technologies:** 

S.No	Component	Description	Technology
1	User Interface	Users interact with system through Salesforce Lightning, HTML Salesforce Lightning Experience	
2	Application Logic-1	Custom logic for assignment and notifications  Apex Classes & Triggers	
3	Application Logic-2	Auto-scheduling & Apex Batch & Scheduler batch job for data clean-up	
4	Database	Stores WorkOrders, Technicians, Assignments  Salesforce Custom Objects	
5	Cloud Database	Hosted on Salesforce infrastructure	Salesforce Cloud

6	File Storage	Stores metadata and	Salesforce File Storage
		attachments	
7	External API-1	Send email alerts for	Salesforce Messaging API
		assignment	
8	Infrastructure (Server	Application hosted in	Salesforce Platform (Cloud)
	/ Cloud)	the cloud	

## **Table-2: Application Characteristics:**

S.No	Characteristics	Technology
1	Open-Source Frameworks	Salesforce Lightning Framework, Apex (proprietary but extensible)
2	Security Implementations	Field-level security, role-based access control, and encrypted
		communication
3	Scalable Architecture	Cloud-based architecture with multi-tenant scalability on Salesforce
4	Availability	Hosted on Salesforce Cloud with 99.9% SLA
5	Performance	Uses optimized triggers and batch jobs for bulk processing and high- speed execution