

Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	05 Jan 2026
Team ID	
Project Name	Metro Ticket Generating System in ServiceNow
Maximum Marks	4 Marks

Technical Architecture:

The solution architecture of the **Metro Ticket Generating System using ServiceNow** illustrates how different ServiceNow components interact to provide a seamless digital metro ticket booking experience. The architecture enables passengers to book metro tickets through the ServiceNow Service Portal, automatically calculates fares, processes requests using workflows, and stores ticket details securely.

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	Platform	Core platform for building and managing the metro ticketing solution	ServiceNow
2	Workflow Automation	Automated processing of metro ticket requests	ServiceNow Flow Designer
3	Service Catalog	User interface for submitting metro ticket booking requests	ServiceNow Service Catalog
4	Request Management	Creation and tracking of ticket booking requests (RITM)	ServiceNow Request Management
5	Database / Data Storage	Storage of metro ticket booking details	ServiceNow Tables
6	Notifications	Real-time notifications for ticket booking status	ServiceNow Notification Engine
7	Integration (Optional)	Integration with payment or QR systems (future scope)	ServiceNow IntegrationHub

S.No	Component	Description	Technology
8	Scripting	Custom business logic for fare calculation and validation	JavaScript (Server-side / Client-side)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Low-Code Platform	Configuration-based development with scripting support	ServiceNow Platform
2	Security Implementations	Role-based access control and secure data handling	ServiceNow Security, ACLs
3	Scalable Architecture	Cloud-based architecture supporting high request volume	ServiceNow Cloud Infrastructure
4	Availability	High availability with audit trails and logs	ServiceNow SLA, Redundancy
5	Performance	Real-time ticket processing and optimized workflows	Flow Designer
6	Maintainability	Easy configuration updates and enhancements	ServiceNow Admin Tools

References

- ServiceNow Documentation: <https://docs.servicenow.com>
- ServiceNow Flow Designer: <https://www.servicenow.com/products/platform-flow-designer.html>
- ServiceNow Service Catalog: <https://www.servicenow.com/products/service-catalog.html>