Project Planning – Design, Resource Planning

Metro Ticket Generating System in ServiceNow

---

1. System Design Overview

The **Metro Ticket Generating System in ServiceNow** is designed to follow a structured and automated ticket lifecycle, starting from ticket request creation and ending with ticket generation and confirmation. The system leverages **ServiceNow Service Catalog** to provide a self-service interface for passengers and **Flow Designer** to automate validations, approvals, fare calculation, and ticket generation.

The design ensures that passengers can easily book tickets by selecting source and destination stations, ticket type, and travel details. Once submitted, the request is validated automatically, fares are calculated using predefined rules, and digital tickets with QR codes are generated instantly. Notifications are sent to users at every critical stage, ensuring transparency and a seamless travel experience.

The system design emphasizes scalability, accuracy, and ease of use, while also providing administrative control and reporting capabilities for metro authorities.

---

2. Work Breakdown Structure (WBS)

Phase 1: Planning & Analysis

- Requirement gathering for metro ticketing workflows
- Identification of ticket types (single, return, daily, monthly, corporate)
- Understanding fare rules and approval requirements
- Documentation of functional and technical requirements

Phase 2: Design

- Workflow design using Flow Designer
- UI design for Service Catalog ticket request forms
- Definition of validation rules and fare calculation logic
- Design of notification templates and reports

Phase 3: Development

- Creation of Service Catalog items for metro ticket booking
- Configuration of Flow Designer workflows

- Implementation of fare calculation logic
- QR code / ticket number generation
- Notification configuration

Phase 4: Testing & Security

- Functional testing of ticket booking workflows
- Validation of fare calculation accuracy
- Performance testing during peak request scenarios
- Security and access control validation

Phase 5: Deployment

- Final deployment of the solution in the ServiceNow instance
- User documentation and knowledge transfer
- Project presentation and submission

---

3. Project Timeline & Schedule

Phase	Duration	Output
Planning	Week 1	Approved project plan
Design	Week 2	Design documentation
Development	Week 3 – Week 4	Working ticket system
Testing	Week 5	Test reports & sign-off
Deployment	Week 6	Final release

---

4. Milestones

- Approval of project planning and requirements
- Completion of Service Catalog and workflow automation
- Successful testing and validation sign-off
- Final project deployment and submission

---

5. Resource Planning

Human Resources

- **ServiceNow Developer** – Design and development of workflows and catalog items
- **Tester** – Functional, performance, and validation testing
- **Administrator** – Configuration management, access control, and deployment

Tools & Technologies

- ServiceNow Platform
- ServiceNow Service Catalog
- Flow Designer
- Notifications (Email / In-app)
- Reporting and Dashboards

---

6. Communication Plan

Communication Type	Frequency	Method
Status Updates	Weekly	Dashboard / Review
Issue Reporting	As required	Tickets / Calls
Project Review	Milestone-based	Online Meetings