Project Design Phase

Proposed Solution Template

Table: Proposed Solution Description

S.No.	Parameter	Description
1	**Problem Statement**	Manual metro ticket booking systems involve long queues, paper-based tickets, human errors, and delayed ticket issuance, especially during peak hours. This results in passenger inconvenience, overcrowding, and inefficient metro operations.
2	**Idea / Solution Description**	Implement a **Metro Ticket Generating System using ServiceNow** that allows passengers to book tickets digitally through a Service Portal by selecting source and destination stations. The system automatically calculates fares, generates QR-code-based digital tickets, and delivers them instantly via email or SMS using Flow Designer and Notifications.
3	**Novelty / Uniqueness**	The solution leverages **ServiceNow's low-code platform**, integrating Service Catalog, Flow Designer, QR code generation, and notifications into a **single unified system**, eliminating the need for separate ticketing applications or manual counters.
4	**Social Impact / Satisfaction**	Reduces waiting time at metro stations, promotes contactless and paperless travel, improves commuter satisfaction, and supports smart city initiatives by digitizing public transport services.
5	**Business Model**	Reduces operational costs by minimizing manual ticket counters, lowers staffing requirements, decreases printing expenses, and improves revenue accuracy through automated fare calculation and transaction logging.
6	**Scalability of the Solution**	The system can easily scale to support multiple metro lines, stations, and high passenger volumes. Additional features such as monthly passes, dynamic pricing, and integration with payment gateways can be added without changing the core architecture.