

Task #10 – Stakeholder Mapping

Topic: Inference report for “Railway ticketing management system”.

Reference article: [Online Railway Ticketing System: A Case Study of Kaduna to Abuja Branch of Nigerian Railway Corporation.](#)

Report:

1. Empathize: Passengers traveling between Kaduna and Abuja have historically faced challenges with manual ticketing processes, including long queues, limited accessibility, and potential errors in booking. These issues often lead to frustration and inefficiencies, affecting both travelers and railway staff.

2. Define: The primary problem identified is the reliance on a manual ticketing system within the Nigerian Railway Corporation (NRC), which results in:

- Extended waiting times for passengers.
- Inaccuracies in ticket issuance.
- Limited accessibility for remote bookings.

These factors contribute to a suboptimal travel experience and operational inefficiencies.

3. Ideate: To address these challenges, the study proposes the development of a web-based online railway ticketing system with the following features:

- **User-Friendly Interface:** Utilizing frameworks like Bootfaces, Primefaces, and Facelet to create an intuitive frontend.
- **Robust Backend:** Implementing a MySQL server (Xampp) to manage data efficiently.
- **Secure Transactions:** Employing Java programming for secure communication between frontend and backend.
- **Real-Time Updates:** Providing passengers with current information on train schedules and seat availability.

4. Prototype: The prototype developed encompasses:

- **Frontend Development:** Crafting web pages that allow users to register, log in, search for trains, and book tickets seamlessly.
- **Backend Configuration:** Setting up a MySQL database to handle user information, booking records, and train schedules.
- **Integration Layer:** Writing Java code to facilitate smooth interactions between the user interface and the database.

5. Test: The system underwent rigorous testing, including:

- **Functionality Tests:** Ensuring all features operate as intended.
- **Usability Assessments:** Gathering feedback from potential users to refine the interface.
- **Performance Evaluations:** Verifying the system's responsiveness under various conditions.