

## **Metro & Bus Ticket Booking Chatbot**

**Completed & presented by** Praneet

**Platform:** IBM Watson Assistant on IBM Cloud

**Project Link:**

<https://webchat.global.assistant.watson.appdomain.cloud/preview.html?backgroundImageURL=https%3A%2F%2Fus-south.assistant.watson.cloud.ibm.com%2Fpublic%2Fimages%2Fupx-6b7effeb-e09f-4c6a-b55c-cfa25d1aaa70%3A%3Ab586f4b5-c338-4da7-9a3e-b36a8d574db2&integrationID=f3fb7afe-61d4-469c-afe1-5a9393fc9239&region=us-south&serviceInstanceID=6b7effeb-e09f-4c6a-b55c-cfa25d1aaa70>

### **Use Case**

#### **Target Users:**

Public transport users & daily commuters

#### **Functionalities:**

- Ticket Booking (Metro/Bus)
- Fare Inquiry
- Schedule Info
- Ticket Cancellation
- Booking Confirmation

#### **Design Focus:**

Minimal intents + entity-driven flow for simplified user experience

### **Technologies Used**

- IBM Watson Assistant
- IBM Cloud
- Natural Language Processing (NLP)
- Slot-Filling
- Conditional Logic

### **Intents**

- #book\_ticket – For booking a metro/bus ticket
- #fare\_info – For asking about fare between stations
- #route\_info – For checking route details
- #cancel\_ticket – To cancel a booked ticket
- #greetings, #goodbye – For polite conversation flow

### **Entities**

- @mode – metro, bus
- @station – source & destination station names
- @fare – 40, 50, 60, 100
- @date – for selecting travel date
- @time – for selecting travel time
- @confirmation – yes, no

### Dialog Flow

1. **Detect Intent** – The bot identifies what the user wants (e.g., booking, fare info).
2. **Slot Collection** – Gathers details such as:
  - From Station
  - To Station
  - Travel Date & Time
  - Mode (Metro/Bus)
3. **Show Fare** – Displays the appropriate fare based on route.
4. **Confirm Booking** – Asks user to confirm; proceeds to book or cancel.

### Fare Logic (Example)

- From CST to Panvel → ₹100
- From Andheri to Bandra → ₹50
- From Dadar to Ghatkopar → ₹40
- From Borivali to Churchgate → ₹60

*(Add these as conditions in the Fare node using conditional logic)*

### Sample Conversation

**User:** Book a metro ticket from Andheri to Bandra tomorrow at 6 PM

**Bot:** Fare is ₹50. Would you like to confirm your booking?

**User:** Yes

**Bot:**  Ticket confirmed!

### Benefits & Scope

- Faster, automated ticket bookings
- Easily scalable for new routes, cities, or services
- Can be extended to include payment integration
- Future scope for language support, chatbot analytics, and smart recommendations