

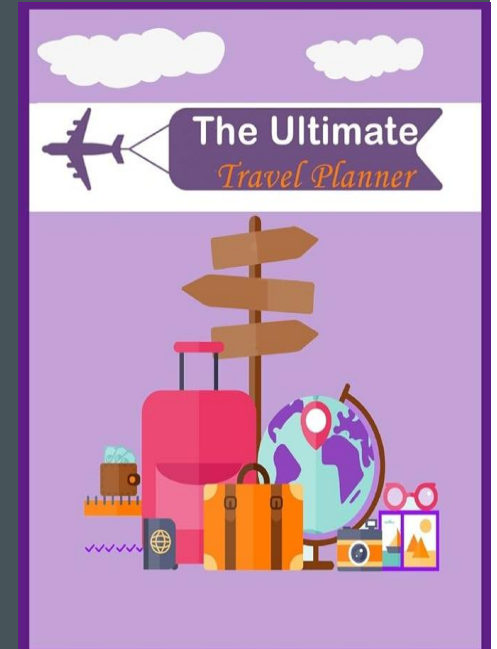
# ***IBM GOVERNMENT INTERNSHIP 2025 PROJECT-1***

## **TRAVEL PLANNER AGENT**

*AI-based Trip Planning Chatbot on IBM Cloud*

**Presented By:**

- **SAKSHAM SAXENA**
- **VIT BHOPAL UNIVERSITY - B.TECH CSE**
- **Technology Used: - IBM Cloud, Watson Assistant**



# OUTLINE

**A conversational chatbot built using IBM Watson Assistant that interacts with users to plan a trip by asking key questions like destination, budget, dates, and preferences, and provides a custom travel itinerary.**

- **Problem Statement**
- **Proposed System/Solution**
- **System Development Approach**
- **Algorithm & Deployment**
- **Result (Output Images)**
- **Conclusion**
- **Future Scope**
- **References**

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# **PROBLEM STATEMENT**

**Example:** Travelers often find it difficult and time-consuming to plan trips — from choosing destinations to managing budgets.

The need for a quick and intelligent virtual assistant that can suggest a trip plan is growing.

This project aims to solve that by building an AI agent that can interactively plan travel itineraries through simple conversations.

# **PROPOSED SOLUTION**

**We have developed a chatbot called Travel Planner Agent using IBM**

**Watson Assistant that: -**

- **Takes user input for destination, budget, travel date, and preferences.**
- **Generates a customized travel itinerary.**
- **Allows users to restart the planning process.**
- **Uses conditional logic and context variables.**
- **Provides an intuitive, user-friendly experience.**

# SYSTEM APPROACH (TECHNOLOGY USED)

| <u>Components</u>         | <u>Tools / Tech. Used</u>              |
|---------------------------|--|
| <b>Chatbot Framework</b>  | <b>IBM Watson Assistant</b>            |
| <b>NLP + Logic Flow</b>   | <b>Watson Dialog Skills</b>            |
| <b>Deployment</b>         | <b>IBM Cloud (Lite Plan)</b>           |
| <b>Language Model</b>     | <b>IBM Granite / Prebuilt Intents</b>  |
| <b>Variables Handling</b> | <b>Context variables + logic jumps</b> |
| <b>Platform</b>           | <b>Web interface (Watson Preview)</b>  |

# ALGORITHM & DEPLOYMENT

## Algorithm:

- Capture user input using free text or buttons
- Store input into context variables (e.g., \$destination, \$travel\_date)
- Use conditional jumps to guide the conversation
- Generate a static or templated travel itinerary
- Ask user if they want to restart
- If Yes → clear variables & restart

## Deployment:

- Hosted on IBM Watson Assistant
- Chat preview available via IBM Cloud
- Optional: Exported as .json for backup

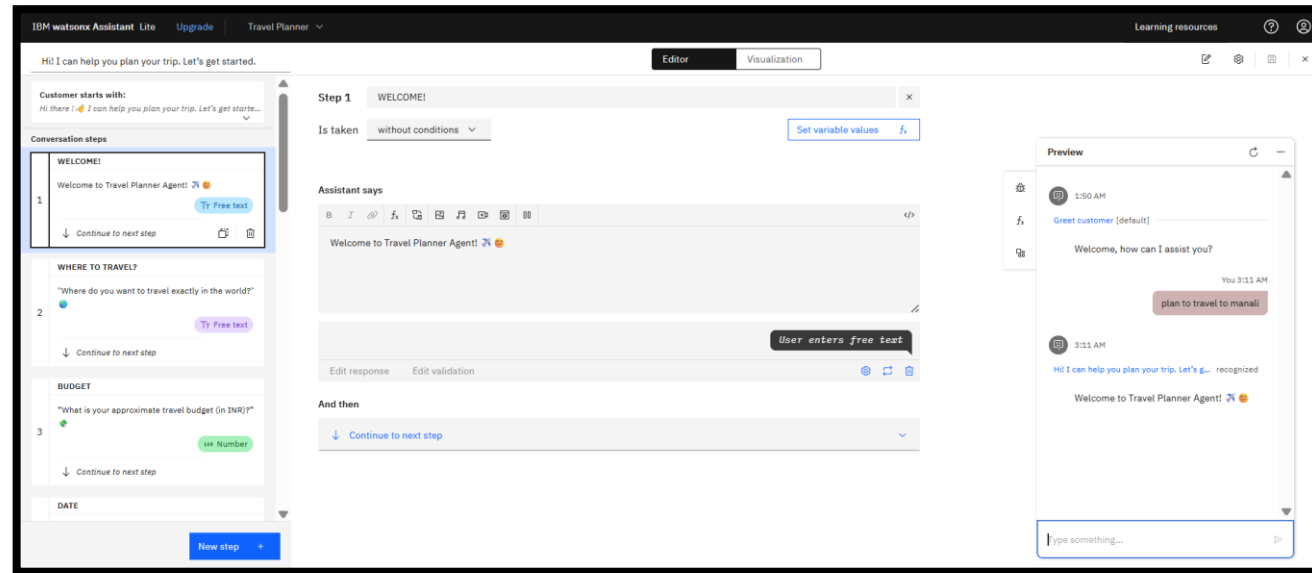
# RESULTS

***“Bot asking user for preferences and returning a personalized itinerary along with their previews.”***

**STEP-1** “Hi there !👋 I can help you plan your trip. Let’s get started.” 😊

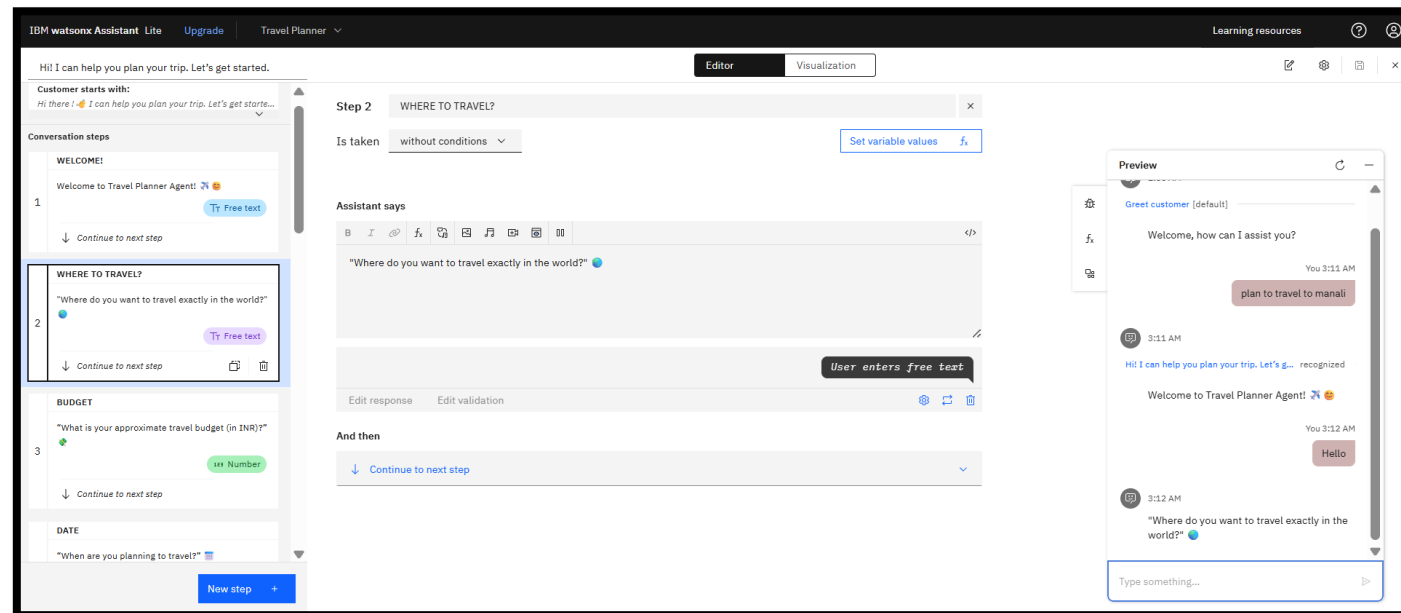
The screenshot displays the IBM watsonx Assistant Lite interface for configuring a bot named "Travel Planner". The interface is divided into several sections:

- Header:** Includes "IBM watsonx Assistant Lite", "Upgrade", "Travel Planner", and "Learning resources".
- Editor/Visualization Tabs:** The "Editor" tab is active.
- Customer starts with:** A text box containing the initial greeting: "Hi there !👋 I can help you plan your trip. Let's get started...".
- Conversation steps:** A list of four steps for the bot's conversation flow:
  - Step 1: "Welcome to Travel Planner Agent! 🎉👋" with a "Try Free text" button and a "Continue to next step" link.
  - Step 2: "Where do you want to travel exactly in the world?" with a "Try Free text" button and a "Continue to next step" link.
  - Step 3: "What is your approximate travel budget (in INR)?" with a "Try Number" button and a "Continue to next step" link.
  - Step 4: "When are you planning to travel?" with a "Try Date" button and a "Continue to next step" link.
- Display name:** A section for setting a display name to overwrite the action title. The current value is "Get help on ACME bill".
- Add example phrases:** A section for adding phrases that trigger the bot's actions. It includes a "Total: 1" counter and a text box containing the phrase: "Hi there !👋 I can help you plan your trip. Let's get started.👋".
- Preview:** A floating window showing a simulated conversation. It displays the bot's greeting: "Welcome, how can I assist you?" and a "Greet customer [default]" action.



## STEP-2 WELCOME

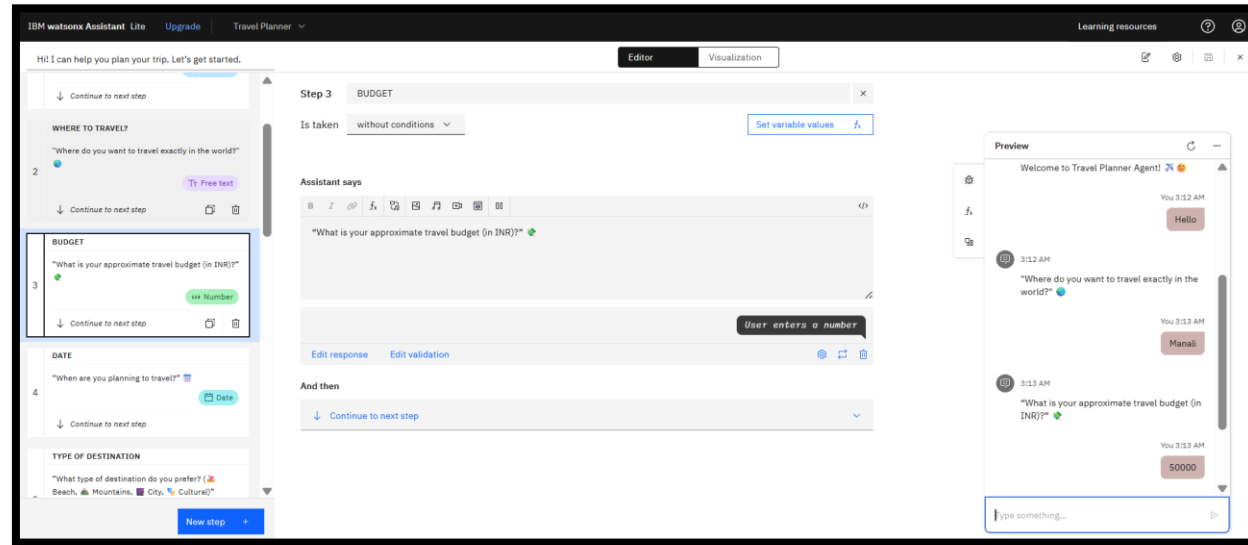
"Welcome to Travel Planner Agent!" ✈️ 😊




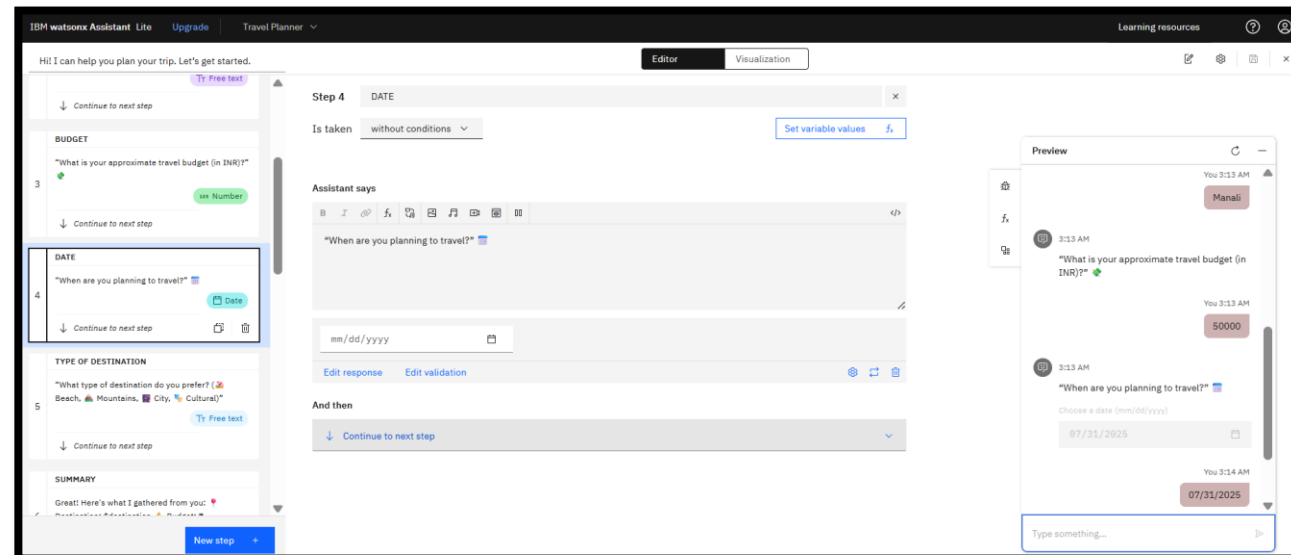
## STEP-3

"Where do you want to travel exactly in the world?" 🌍





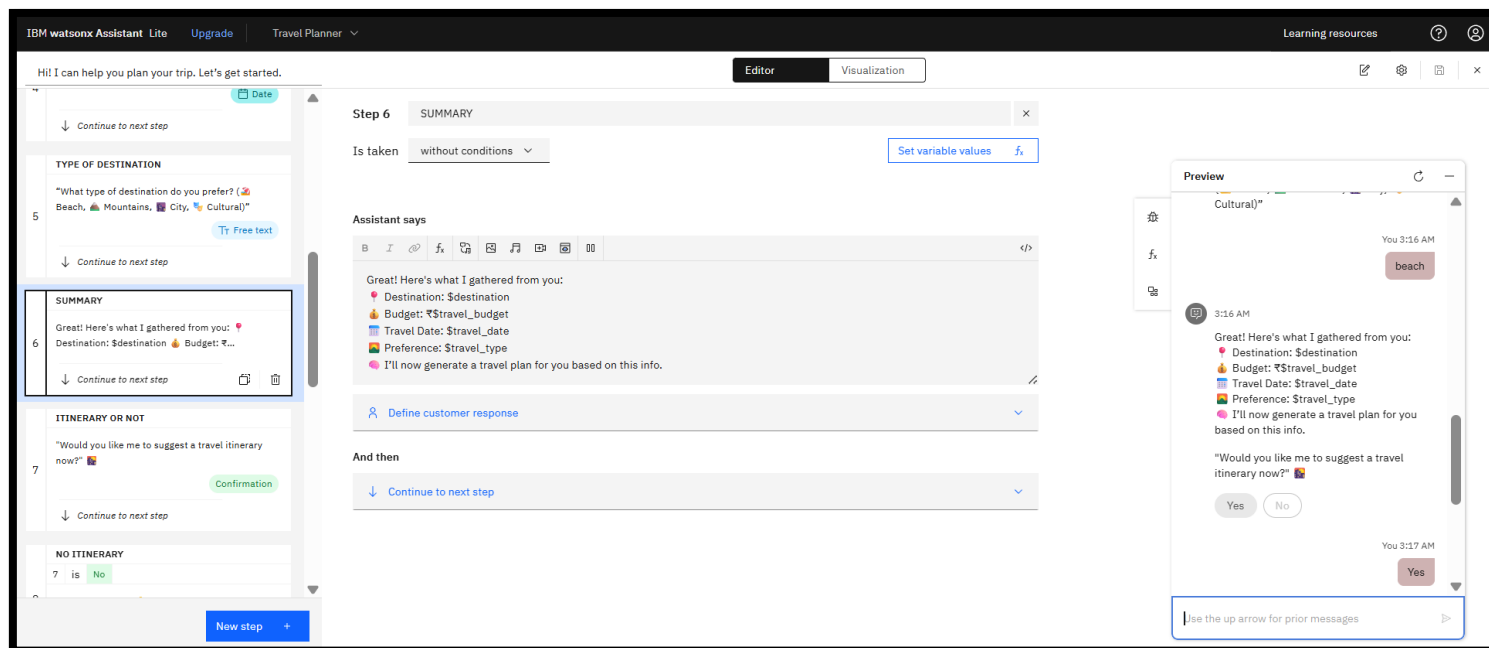
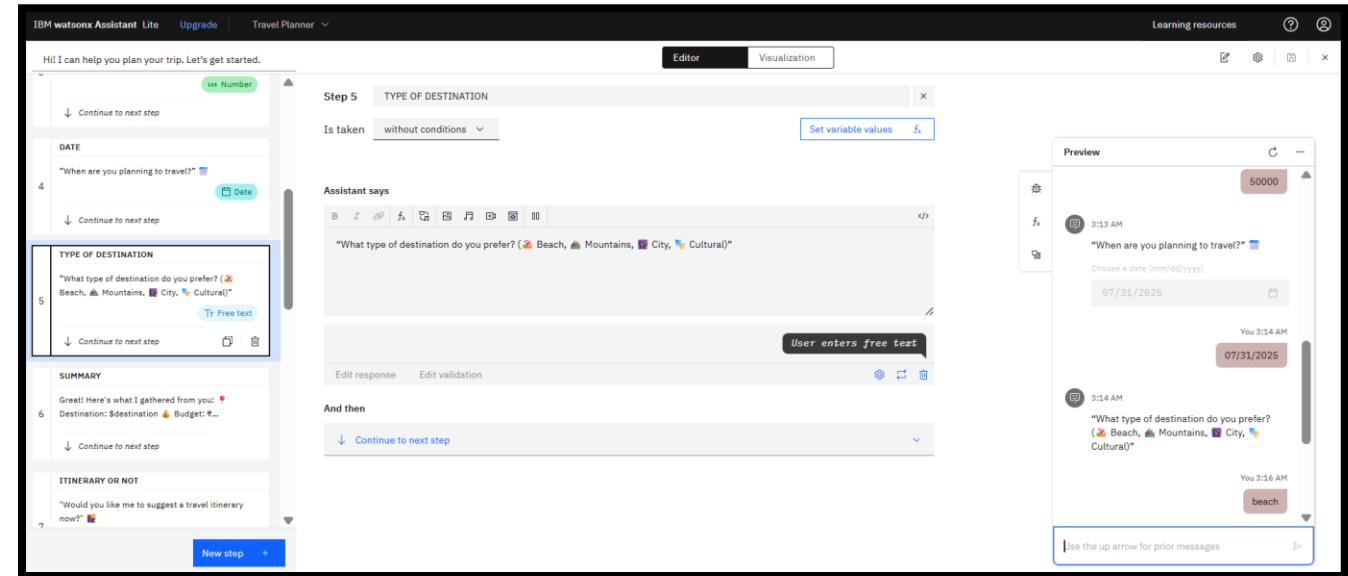
**STEP-4 BUDGET**  
**“What is your  
 approx. travel  
 budget (in INR)?”** 



**STEP-5 DATE**  
**“When are you  
 planning to  
 travel?”** 

## STEP-6 TYPE OF DESTINATION

“What type of destination do you prefer? (🏖️ Beach, 🏔️ Mountains, 🏙️ City, 🎭 Cultural)”



## STEP-7 SUMMARY

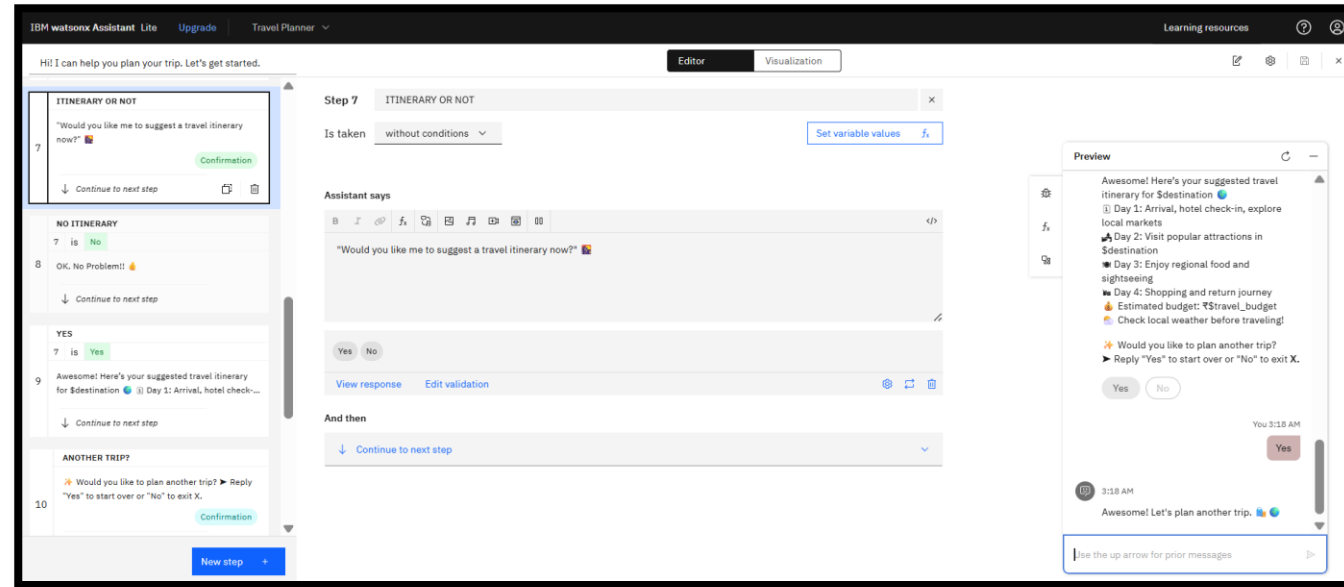
Great! Here's what I gathered from you: 📌

- Destination: \$destination 💰
  - Budget: ₹\$travel\_budget 📅
  - Travel Date: \$travel\_date 🌅
  - Preference: \$travel\_type 🗣️
- I'll now generate a travel plan for you based on this info.

## STEP-8 ITINERARY?

"Would you like me to suggest a travel itinerary now?" 🏠  
NO- OK. No Problem!!

👍  
YES- Awesome! Here's your suggested travel itinerary for \$destination 🌍

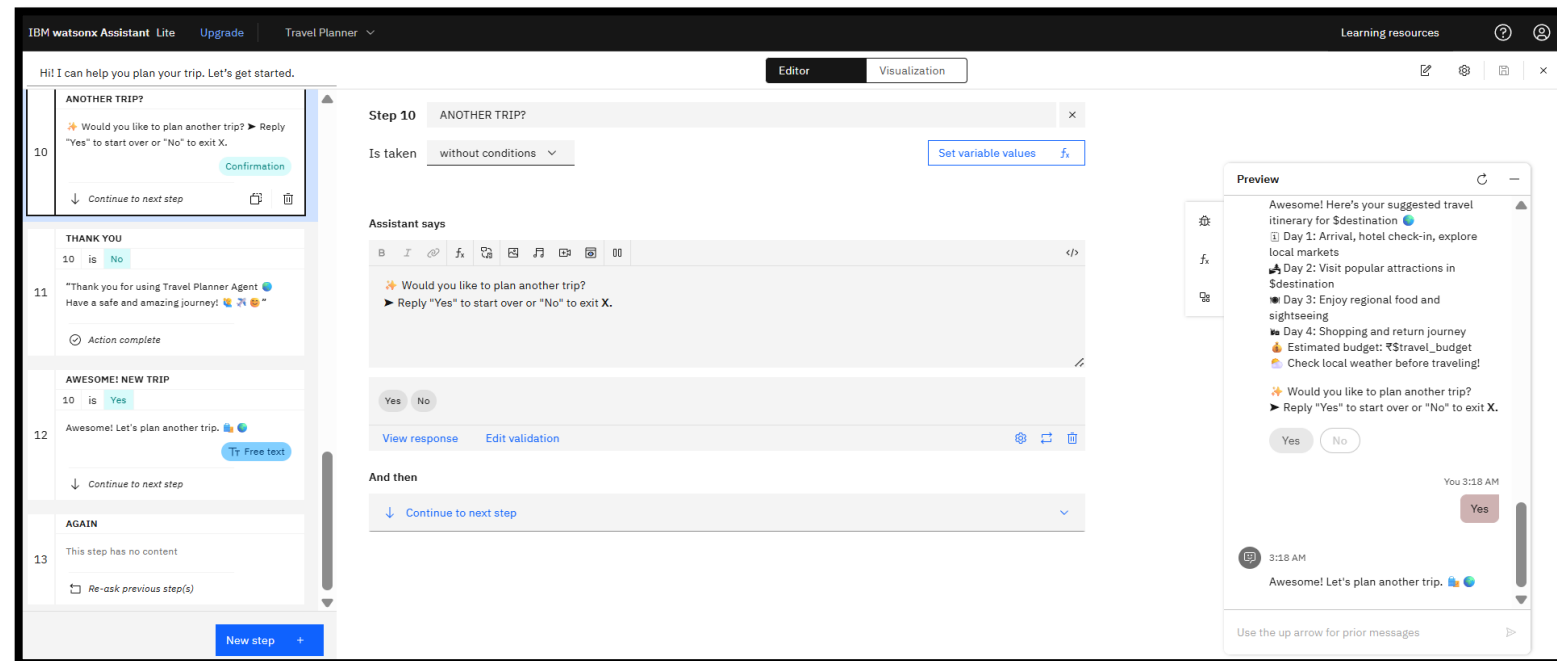


## STEP-9 ANOTHER TRIP?

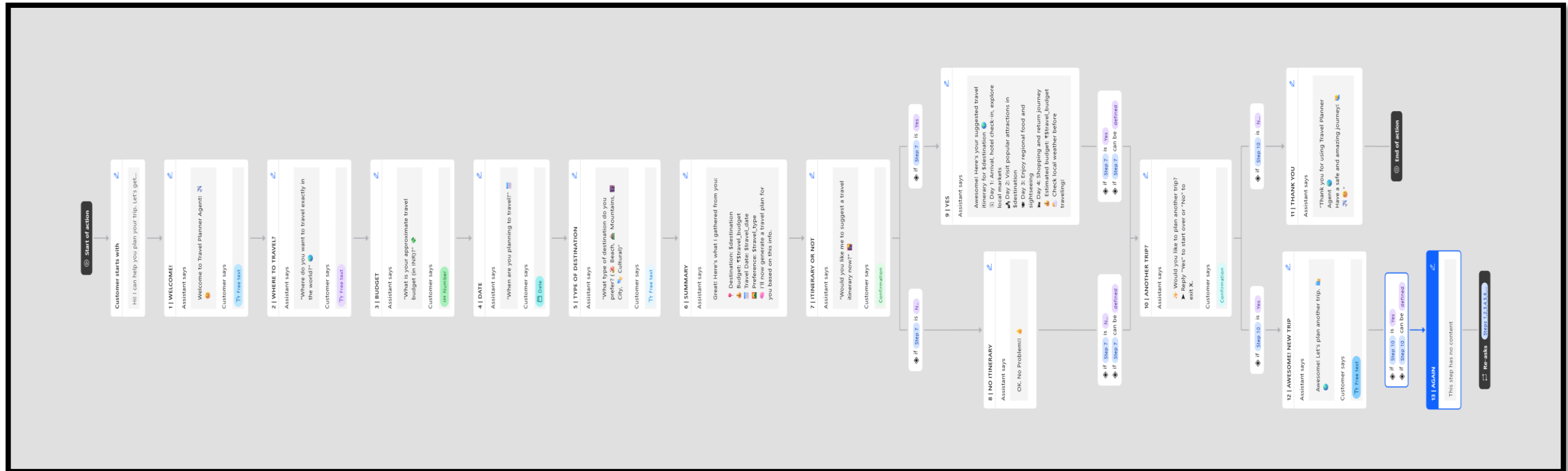
🌟 Would you like to plan another trip? ➤ Reply "Yes" to start over or "No" to exit X.

NO- "Thank you for using Travel Planner Agent 🌍  
Have a safe and amazing journey! 🧑🏽♂️🛫😊"

YES- Awesome! Let's plan another trip. 🛍️🌍



# PROJECT FLOWCHART



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# **CONCLUSION**

**The Travel Planner Agent successfully demonstrates the capability of IBM Watson to build intelligent and user-friendly conversational interfaces. It simplifies trip planning by making it interactive, personalized, and fun. The project effectively combines AI and user experience design.**

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## GITHUB LINK

- <https://github.com/Sakshamsaxena007/Travel-Planner-Agent.git>

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# **FUTURE SCOPE**

**In the future, the system can be enhanced by:**

- **Connecting live APIs (Weather, Hotels, Flights)**
- **Providing destination recommendations**
- **Including multi-destination planning**
- **Integrating payment gateways for bookings**
- **Expanding language support for global users**

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# REFERENCES

- IBM Watson Assistant Documentation
- IBM Cloud Portal – <https://cloud.ibm.com>
- Internship Guidelines Document (**SB4Academia 2025**)
- Icons from Emojipedia
- Your own code + dialog setup



# IBM CERTIFICATIONS

In recognition of the commitment to achieve  
professional excellence



Saksham Saxena

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



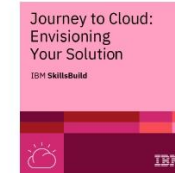
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# IBM CERTIFICATIONS

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Completion Certificate



This certificate is presented to

Saksham Saxena

for the completion of

**Lab: Retrieval Augmented Generation with  
LangChain**

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

**Completion date:** 23 Jul 2025 (GMT)

**Learning hours:** 20 mins



*Thank You*