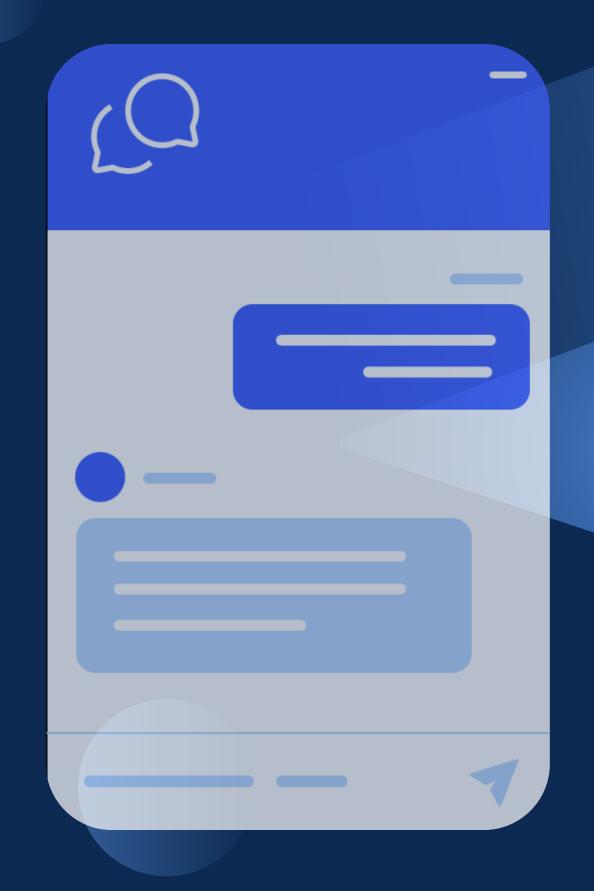


# Lost Package Chatbot – CLI Prototype

Al Analyst take-home assignment: Lost Package Chatbot

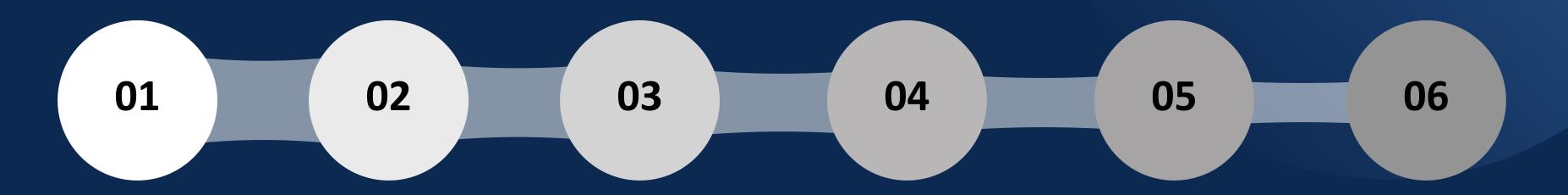
**Dina Trac** 

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#### **Conversation Flow & Error Handling**

Detailed process for handling user inputs, status branches, and error cases in chatbot



# User Inputs Sequence

Order ID, Email, ZIP

Code collected

sequentially to

confirm identity and
lookup order status

#### **Status Branches**

Delivered status
triggers
confirmation or
missing package
report; In Transit or
Out for Delivery
offers SMS updates
and delivery tips

## Invalid Order ID Handling

Reprompt user up to 3 times for correct ID format (Ex: AB-123456); escalate to human agent if still invalid

## Ambiguous Yes/No Responses

Reprompt up to 3 times for clarity; then provide safe fallback instructions to avoid confusion if response remains ambiguous

# Mismatched Identity Handling

Detects email/ZIP
code mismatch with
order; explains issue
and offers
escalation to human
assistance

#### Flowchart Summary

Overall flow: Start →
Order ID → Email →
ZIP → Confirm →
Lookup → Status
Branch → End,
illustrating the
conversation
structure

### Technical Approach

Implementation details, sample orders, key functions, and interaction style for the CLI prototype

Order ID	Email	Zip	Status	Carrier
AB-123456	dora@gmail.com	94107	In Transit	USPS
AB-654321	dino@yahoo.com	93402	Out for Delivery	UPS
AB-112233	devin@gmail.com	94704	Delivered	FedEx

#### **Challenges & Future Improvements**

Lessons learned and opportunities to expand

Challenges	Future Improvements	
Edge-case inputs: Users enter invalid IDs, emails, or ZIPs → requires graceful reprompts	Carrier API Integration: Connect to UPS, FedEx, USPS for live tracking and proof-of-delivery.	
Clarity vs. conversation: Keep prompts friendly but precise to avoid yes/no confusion.	Session memory and authentication: Persist user context, verify identity, personalize responses.	
Human escalation: Knowing when to hand off (mismatched identity, repeated errors).	Multi-lingual support: Localize prompts and validations for global customers.	
Mock backend limits: Sample orders don't reflect real-time exceptions like weather or address errors.	Web UI with Chatbot widget: Expand beyond CLI to an accessible, user-friendly interface.	
	Notifications: Allow SMS/email status updates and delivery tips.	