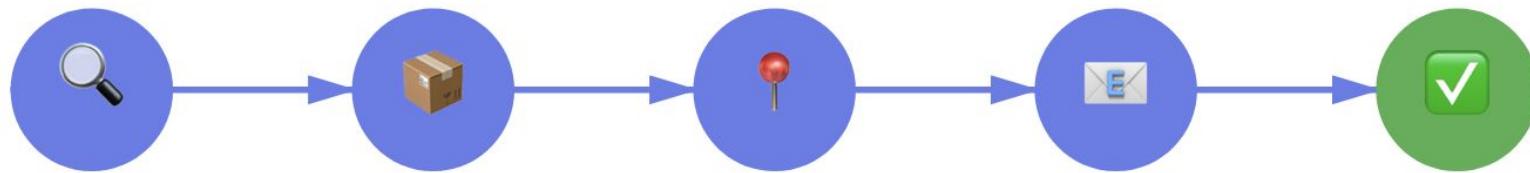


Package Tracking Chatbot

User Journey Map: Lost Package Claim Process



Initial Contact

User starts chat
Selects "Report Lost"

Enter Tracking

Provides tracking #
Bot validates format

Package Status

Bot checks status
Shows "Lost"

Verify Email

Enters email
Receives code

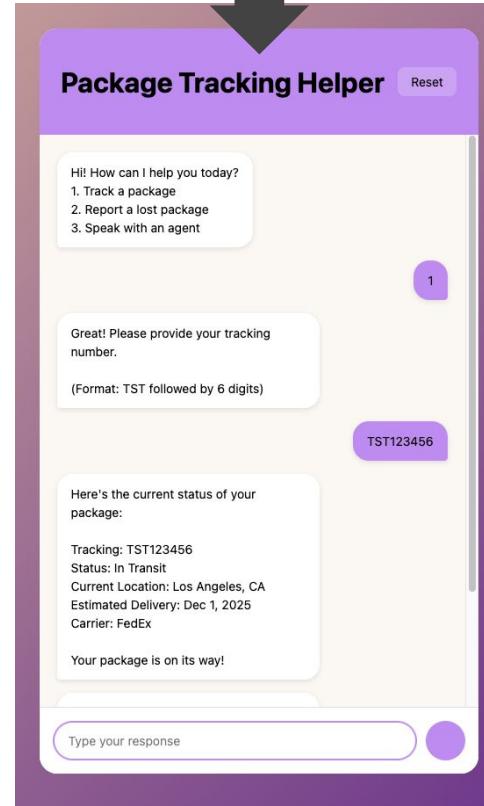
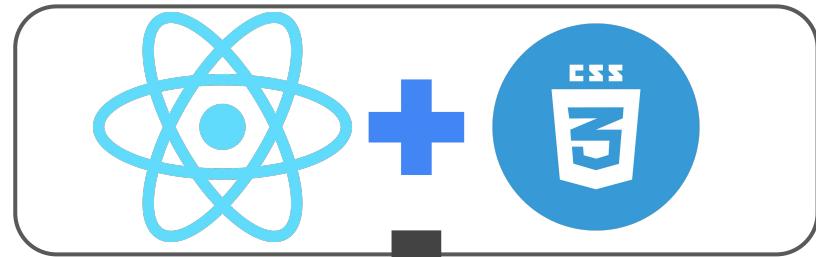
Claim Filed

Case number issued
Email confirmation

- Finite state machine pattern (only a set of conversation states)
- Simplified to prevent confusion and maintain context
- Option to speak with a live agent for more complicated cases
- Option to restart at any point

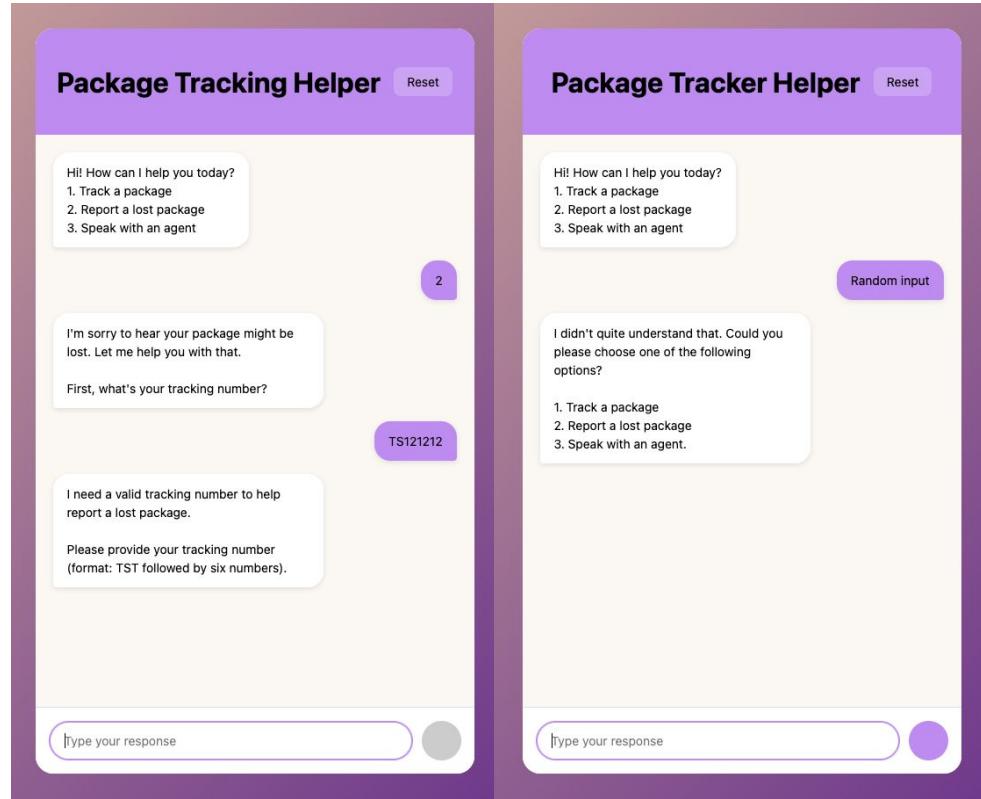
Technical implementation

- Tech Stack
 - Written in:
 - [React.js](#)
 - HTML/CSS
 - Requirements:
 - [Node.js](#) (npm)
 - Vite (for local development)
- Features:
 - Track package and report lost package flows
 - Input validation (regex)
 - Empty input prevention
 - Reset chat to restart the flow



Challenges and Solutions

- How to manage conversation state and context
 - Only allow certain inputs and responses for clarity
 - Fallbacks for unrecognized inputs
 - Ex. 1) Invalid tracking number
 - Ex. 2) Unexpected response
- Double rendering in dev mode
 - useRef to track initialization



Future improvements

- Basic features
 - Parse multi-word responses
 - Email verification (2-Fac)
 - Accessibility
- Advanced/Complex features
 - Actually hand off to a human agent
 - Integrate ML and NLP for better understanding and text recognition
 - Multilingual support

