eGainTrack - Package Tracking Chatbot

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Design Choices

- eGainTrack greets you by name and feels like a real conversation
- Numbered options make choices clear instead of typing a lot
- Shares details only when they’re relevant so no overwhelming dumps
- customer can file a claim even if the system shows delivered
- Path is adapted based on your tracking number’s last digit (delivered, delayed, or lost)
- Bot catches typos and prompts you gently to try again
- Wanted to keep the chat friendly and straightforward throughout

Technical Implementation

- Just run one Python file in your terminal so no installs or setup headaches
- I broke the code into small, focused functions (name, validation, status, claim) so tweaking is a breeze
- Typos get caught on the spot with regex checks for names, emails, phone numbers, and prices
- I use a simple “last-digit” trick (0–3 delivered, 4–6 delayed, 7–9 lost) to demo every scenario reliably
- A handful of variables track where we are in the chat which means no lost context
- Enter something wrong? The bot gently asks you to try again instead of crashing
- All API calls are stubbed in-process, so it’s clear where to drop in a real tracking service later

That’s an invalid option.
Please enter 1-2.

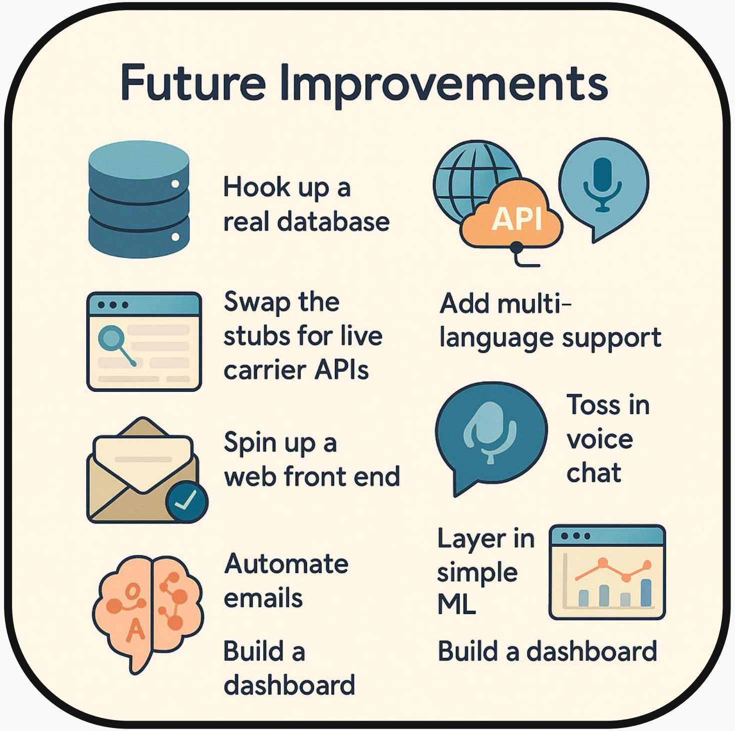
```
CLI:
Would you like to
track a package?
1. Yes
2. No
3. File claim
```

Challenges faced

- Keeping the chat smooth even with so many if this, then that branches
- Striking the right balance in error messages
- Making package status last-digit logic work for demo predictability
- Covering weird real-world cases like package says delivered but it never showed up, then what do you
- Turning a plain chatbot into something that actually feels like a friendly conversation without making code too complicated

Future Improvements

- Hook up a real database so claims and user info stick around
- Swap the stubs for live carrier APIs (USPS, FedEx, etc.)
- Spin up a web front end so you can chat in your browser
- Automate emails to send claim confirmations and updates
- Add multi-language support so it speaks your preferred language
- Toss in voice chat–talk to eGainTrack and hear it reply
- Layer in simple ML to predict helpful next steps based on past chats, and improve overall user experience



Thank you