AI Chatbot: New and Improved

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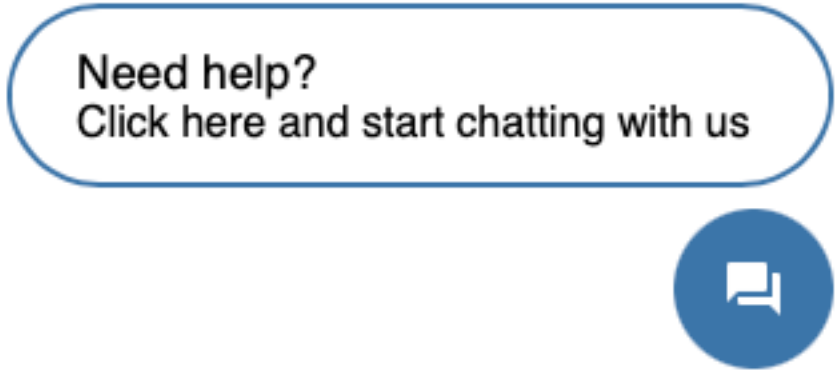
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Typical AI chatbot experience:

- Click the icon in the bottom corner
- Type your questions into the textbox
- AI agent (hopefully) provides accurate answers in a timely fashion



Why an AI chatbot?

- To look cutting-edge to your users?
- To show off your AI savviness on your website?
  - No (at least, it shouldn't be).
- It's to improve your site's ***usability***.
  - It gives users a simpler way to find the information they need.

Consider the following:

- A user tries to navigate through an NC Gov website.
- This website contains information that can be hard to search manually.
- An AI chatbot serves as the guide for the user through the site.
- Routine questions may be resolved more efficiently, while visitors can still be directed to human support when needed.



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Before You Build: Begin With the Users' Needs

- Begin with the problem. Determine what users are struggling to find or understand.
- Document the questions visitors ask most often, along with the correct answers and the sources containing the answers.
  - Collecting these questions in an Excel spreadsheet is ideal.
- Define how success will be measured.
  - "If the chatbot could help users accomplish only three things, what should those three things be?"
- Implementing the technology comes *after* this analysis.

Several years in the making:

- Earliest planning goes back to 2024.
- Collaborations include:
  - DIT's Office of AI and Policy
  - The Governor's Digital Experience Office
  - Anthropic AI
- The new chatbot is now live on:
  - DIT's HIEA
  - DIT's CJLEADS
  - DOA's Division of Purchase and Contracts



Affordability:

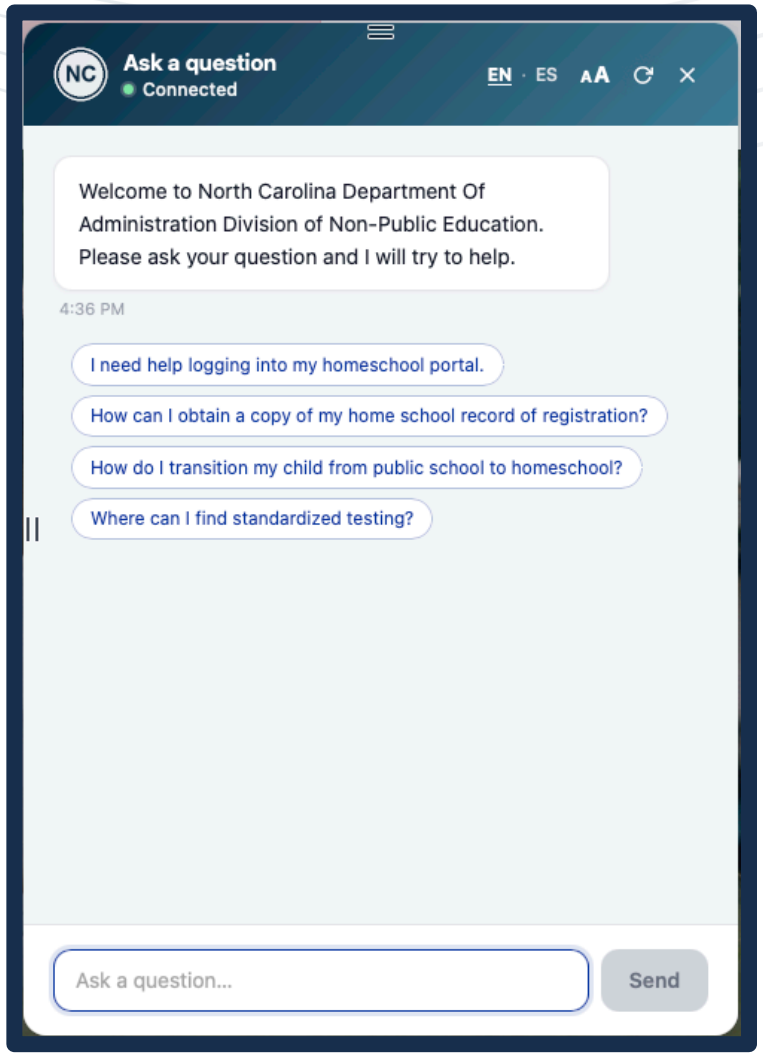
- Previous chatbots were outsourced:
  - Zammo
  - Salesforce
  - etc.
- This meant paying pricey subscription fees.
- The new chatbot was designed completely in-house.
- No subscription fees means lower costs.
  - Outsourced = tens of thousands of dollars for a subscription
  - In-house = less than $50 a month in token fees



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Usability:

- New, intuitive interface inspired by DMV
- Digital Accessibility in mind:
  - Custom, high-contrast colors
  - Resizable window and text
  - Keyboard navigation compatibility
  - Screen reader compatibility
- Improved usability and information access:
  - Clickable chips for suggested questions
  - Built-in bilingual capacity (English & Spanish)
  - Answer caching
  - Clarification questions



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Customizability:

- Each agency receives their own chatbots (or ***minibots***)
- Every aspect of a minibot is customizable by the agency.
- Access is provided by the ***NC AI Service Agent Portal***:
  - Digital Solutions provides administrators with an Azure AD for access.
  - Click *Minibots* on the left, then your minibot from the list.



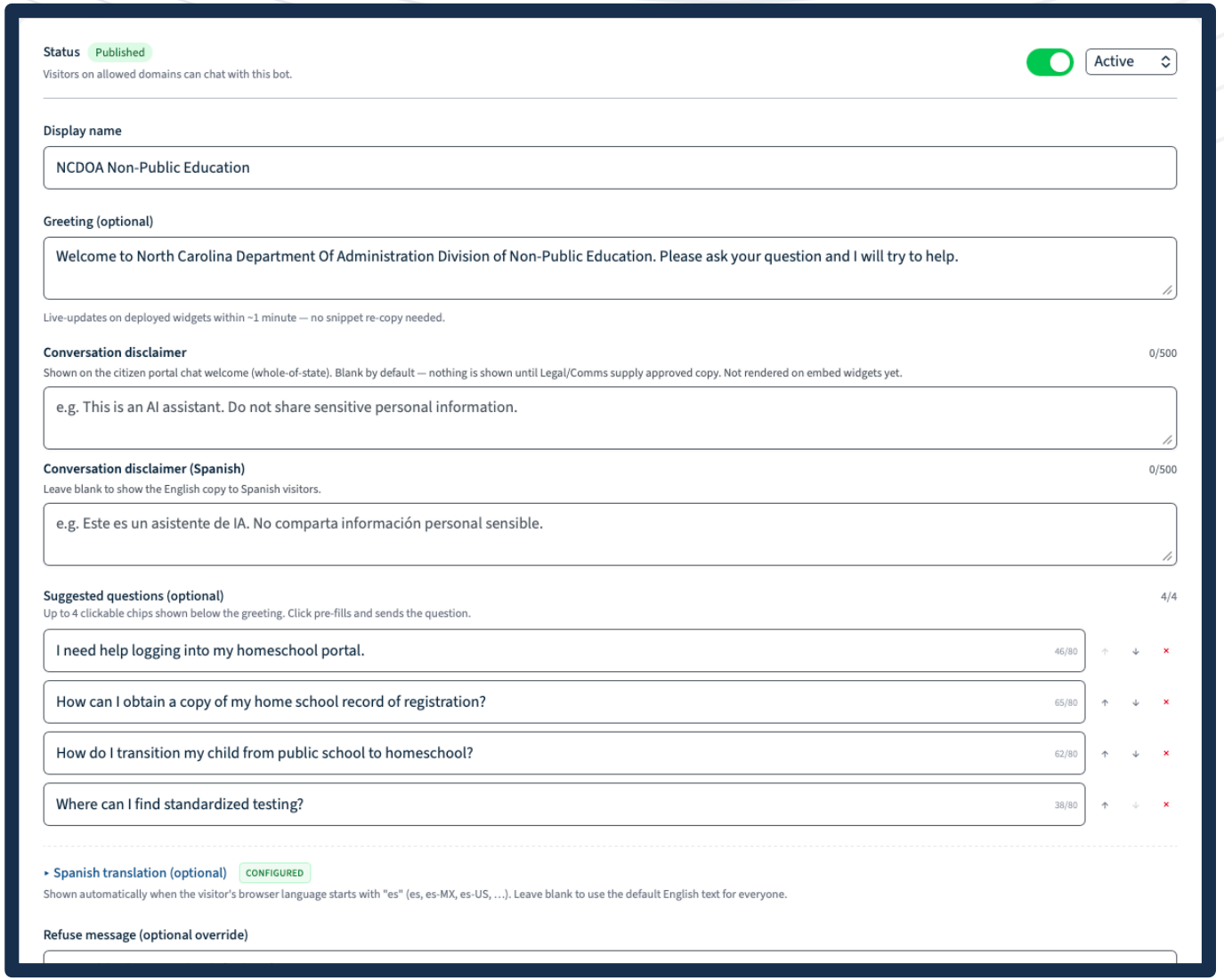
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Question: Is Your Content Chatbot-Ready?

- Good AI starts with good content.
- Remember: the chatbot is just a tool to help people find information.
- The chatbot *cannot* compensate for information that is missing, outdated, or difficult to understand.
- Before you start working on chatbot enablement, walk through the following questions:
  - Is our information accurate and current?
  - Are important instructions buried in PDFs, long pages, or complex tables?
  - Are common visitor questions missing clear answers?
  - What do website search terms, analytics, and download patterns reveal?

General:

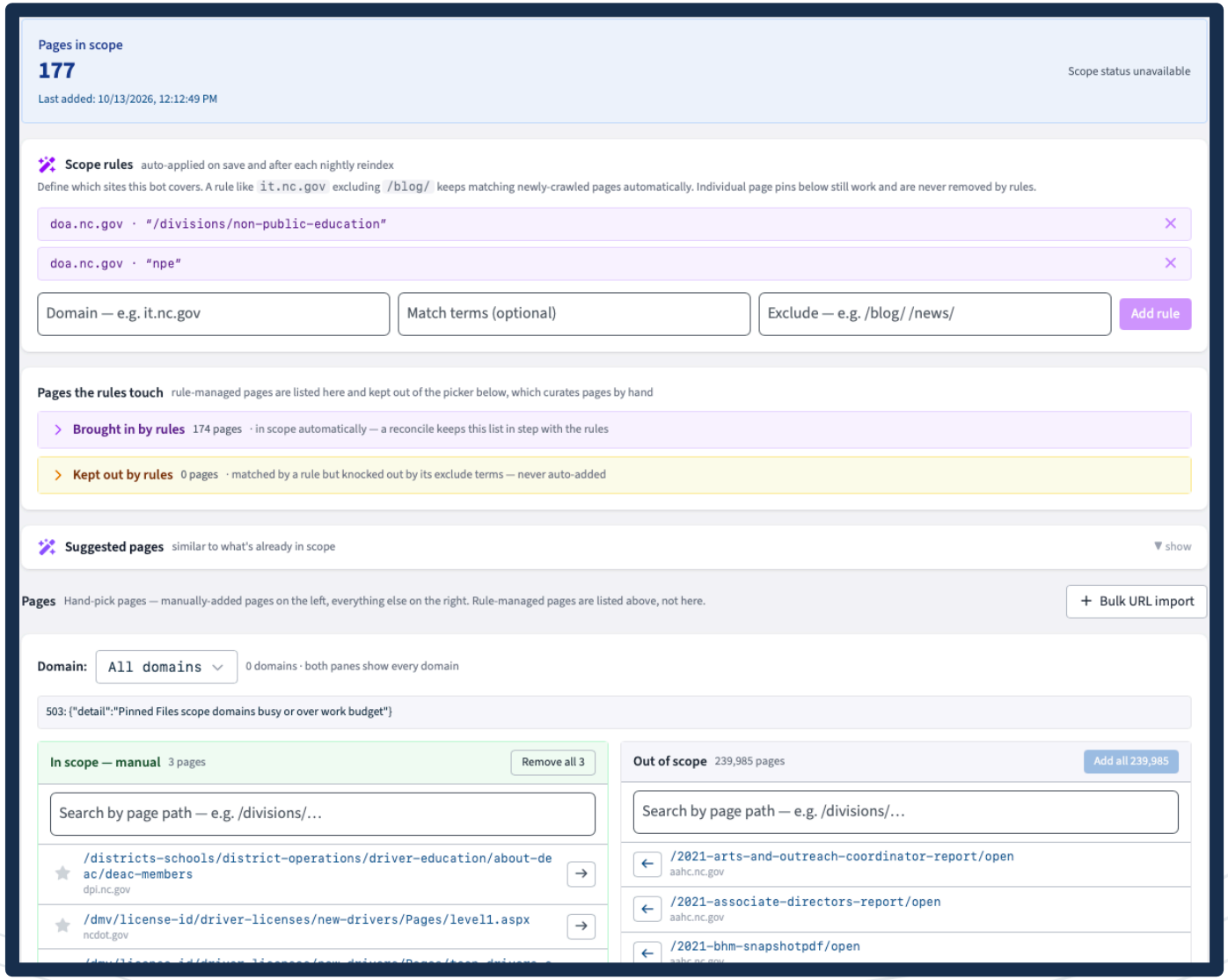
- Name
- Status
- Greeting
- Conversation disclaimer
- Suggested questions
- Refuse message (with escalation link)
- Custom branding
- Answer caching
- Ask before answering



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Scope:

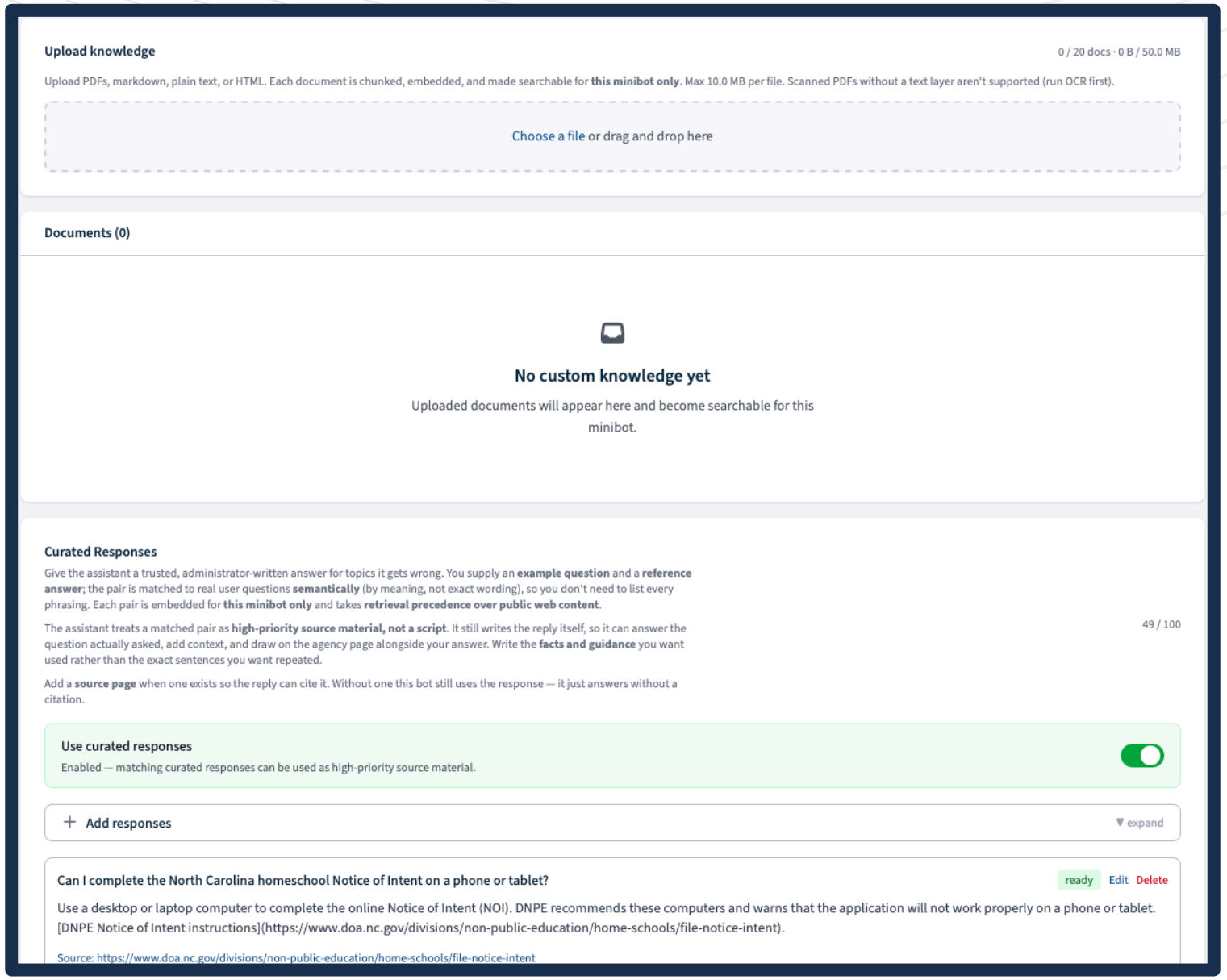
- Chatbot ***crawler*** collects data from public-facing websites
- Sites are indexed in the general knowledge base
- Sites can then be added to a Minibot's ***scope***:
  - Manually (hand-picked)
  - Automatically (scope rules)
    - Pages brought in by rules update automatically



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Knowledge:

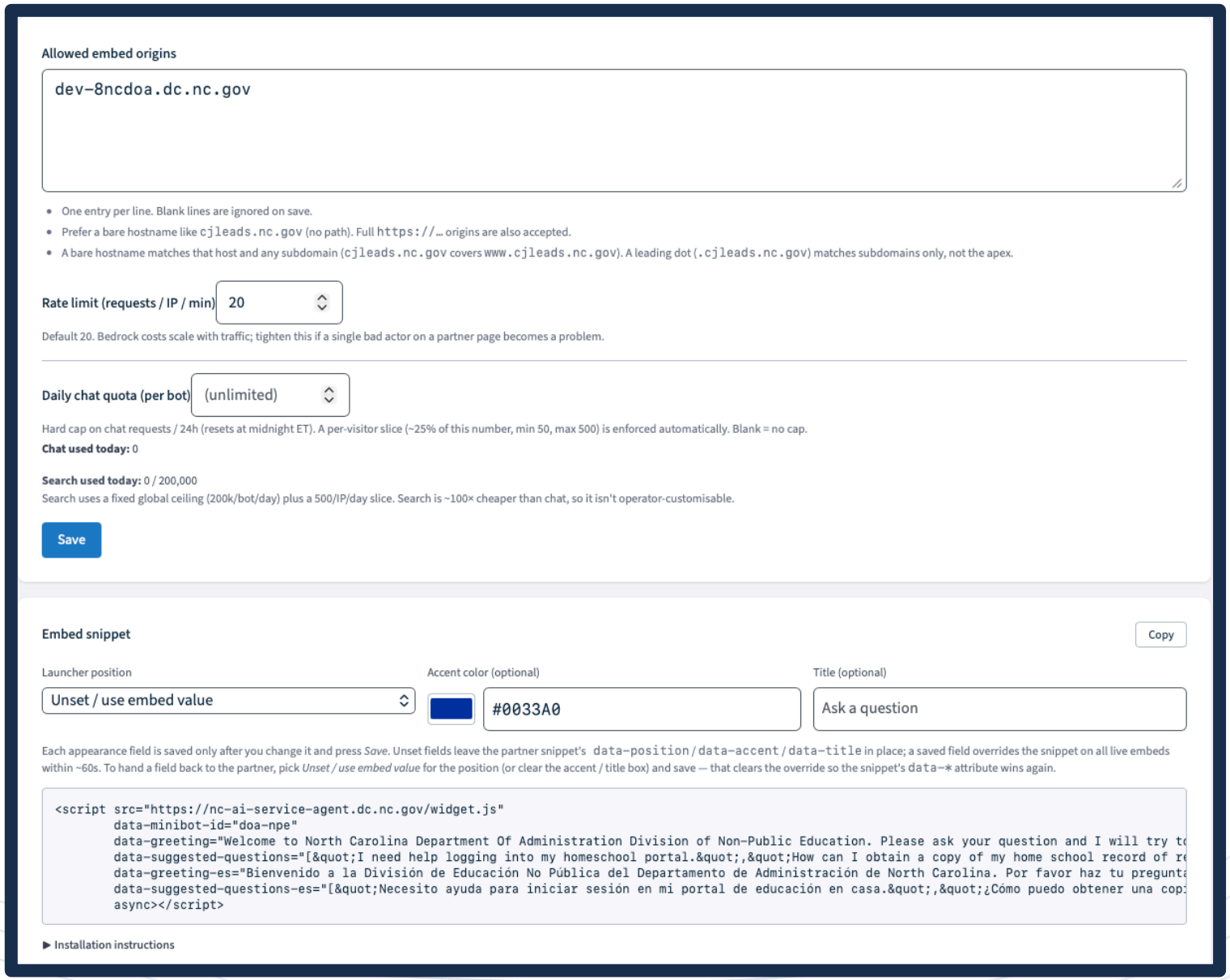
- Upload text files directly
  - PDF
  - HTML
  - Markdown
  - Plain text
- Add curated responses
  - Example question
  - Reference answer
  - Source page



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Embed:

- Add your *primary* domain to ***Allowed embed origins***
  - Do *not* add subdomains
- Copy ***Embed snippet*** into a Drupal content block and configure it
- Your chatbot is deployed and ready to go!



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Prompt:

- Customize your Minibot's tone, scope, or behavior in the ***Prompt addendum***
- Tailor its performance to your desired results
- Test the responses in ***Try it***



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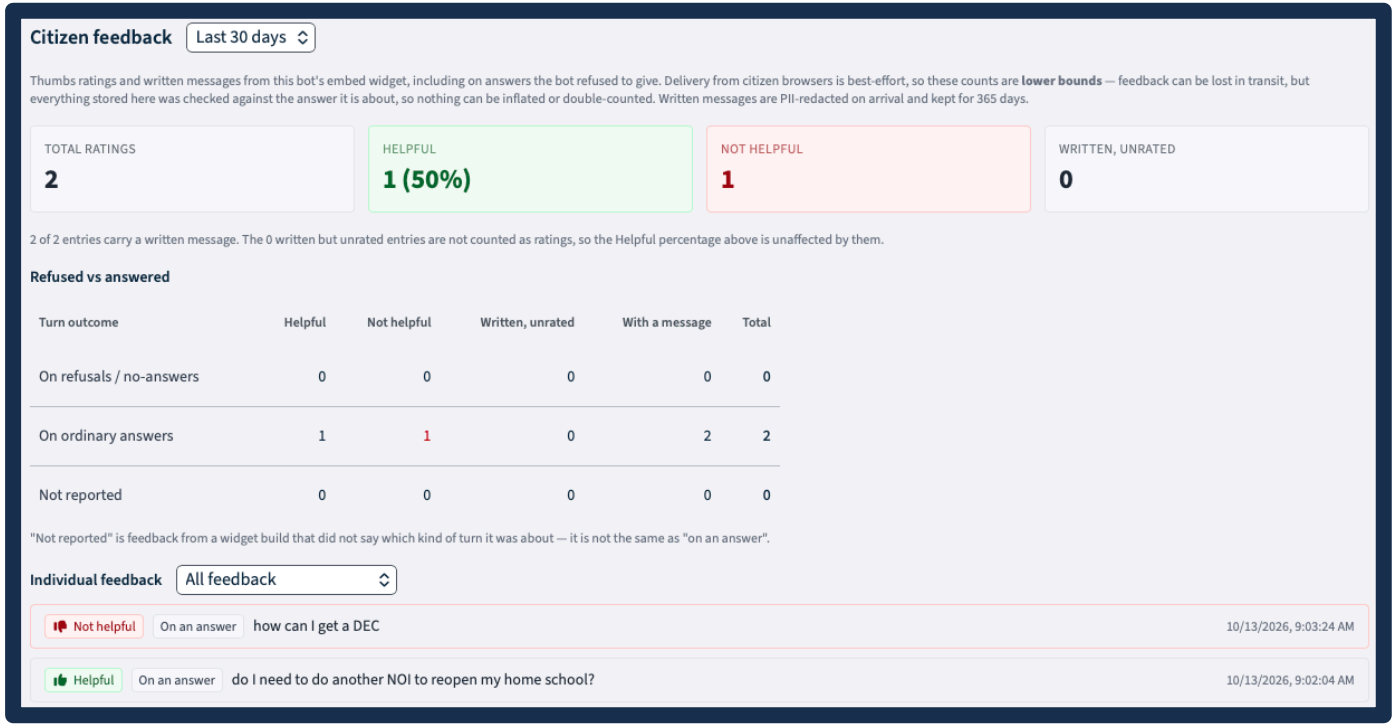
Define What your Minibot Will and Will Not Do

- **In scope:**
  - Answer approved general questions
  - Guide users to relevant pages
  - Help users understand or complete certain tasks
  - Provide relevant links and resources.
- **Out of scope:**
  - Questions without a reliable answer or are irrelevant
  - Situations requiring human assistance
  - Requests involving sensitive or restricted information
  - Say when a reliable answer is unavailable.

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Feedback:

- Expanded feedback options for end users
- Thumbs up/down + written comments (up to 500 characters)
- All feedback on Minibot will be shown here
- Questions the Minibot failed to answer will also be logged here



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Admins:

- Add or remove people who have access to the Minibot
  - Creator of Minibot is made first admin
  - Access requires Azure AD permissions (provided by Digital Solutions)
  - Admins are added via their NC Gov email
  - Admins can then add their own admins



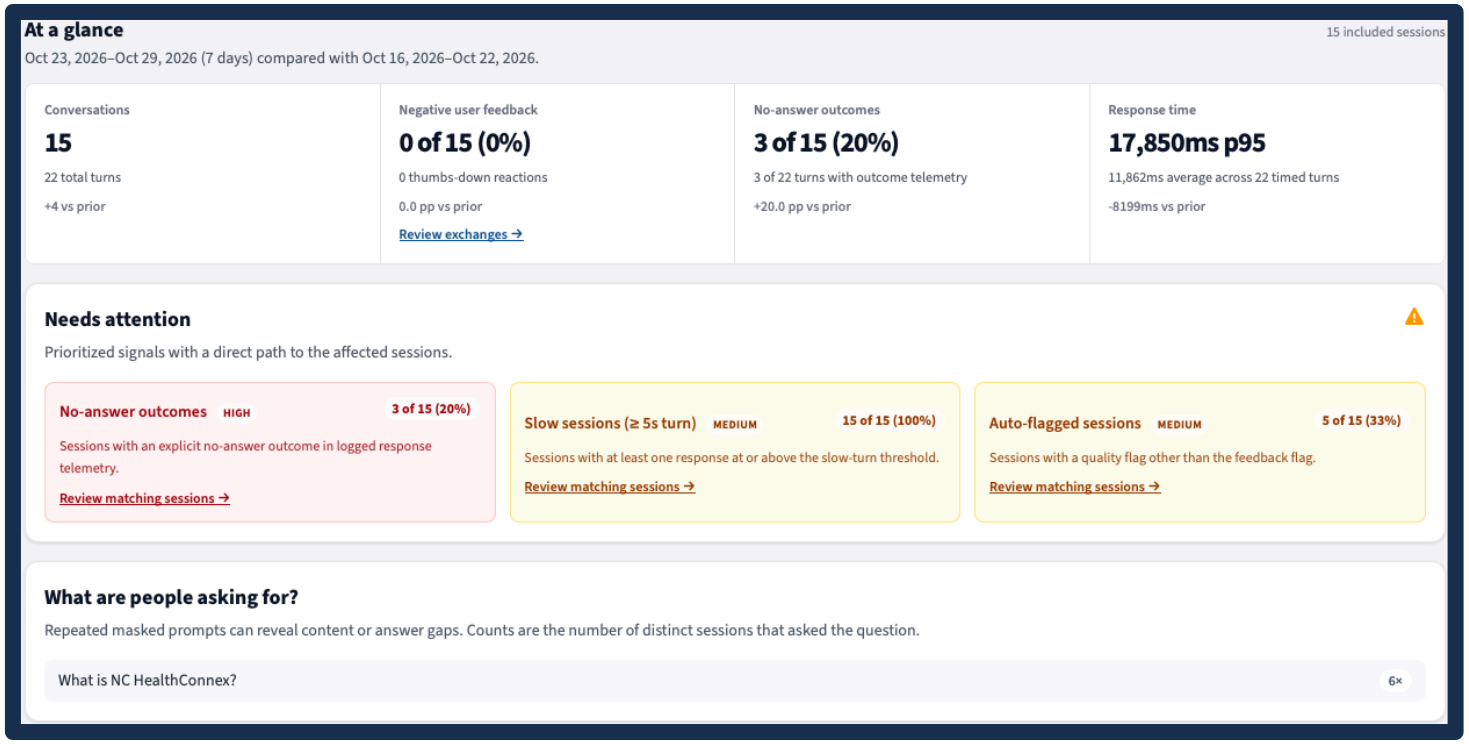
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Operating model (cycle):

1. Monitor – Gather data from your website to thoroughly understand your users' needs.
2. Review – Look over your data and determine the appropriate requirements and actions.
3. Update – Update your minibot to match your findings.
4. Test – Confirm your minibot behaves as desired.
5. Publish – Deploy your changes into your production website!
6. Repeat

Insights:

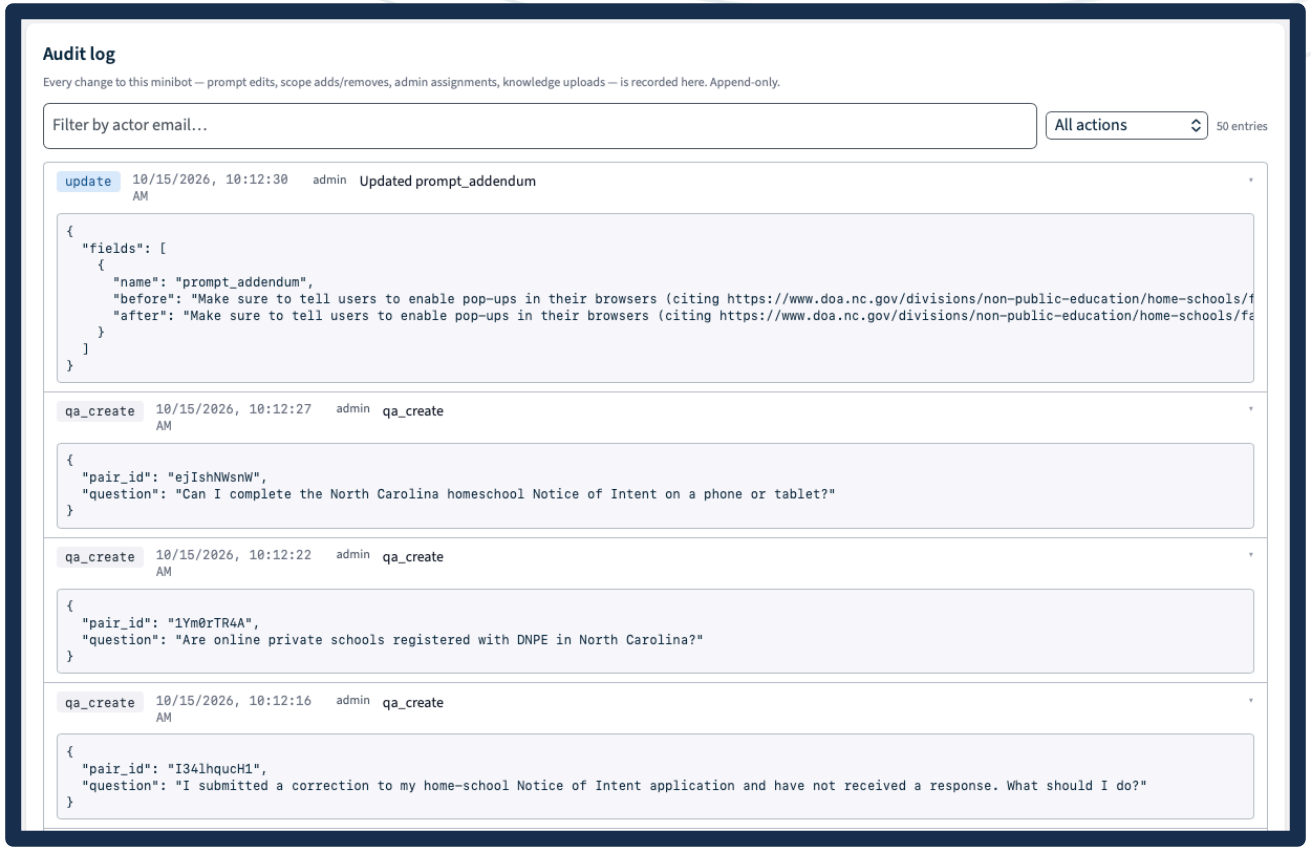
- Google Analytics-type data for your Minibot
  - Total question volume
  - Most common questions asked
  - Refusal rate per question
  - User Feedback
  - Etc.
- Digital Services specialists available to help with strategic review, operating model, etc.



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Audit:

- Keeps track of ***every*** change made to the Minibot:
  - Change type
  - Date & time
  - Admin ID
  - Complete JSON text of change
- Very helpful for tracking down when something went wrong.



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Thank You

To learn more, or to request an AI Chatbot for your agency, please visit https://itservices.nc.gov/services/digital-services/ai-chatbot

For additional questions, please reach out to dit-chatbot@nc.gov