Reese Cady

Christian Barreto
Gabe Williams

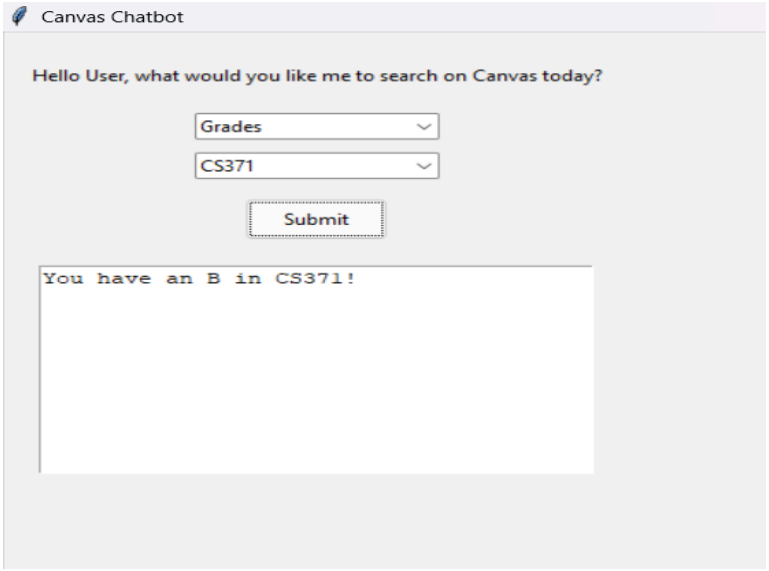
User Study 1 Report

1. Tasks performed by our system

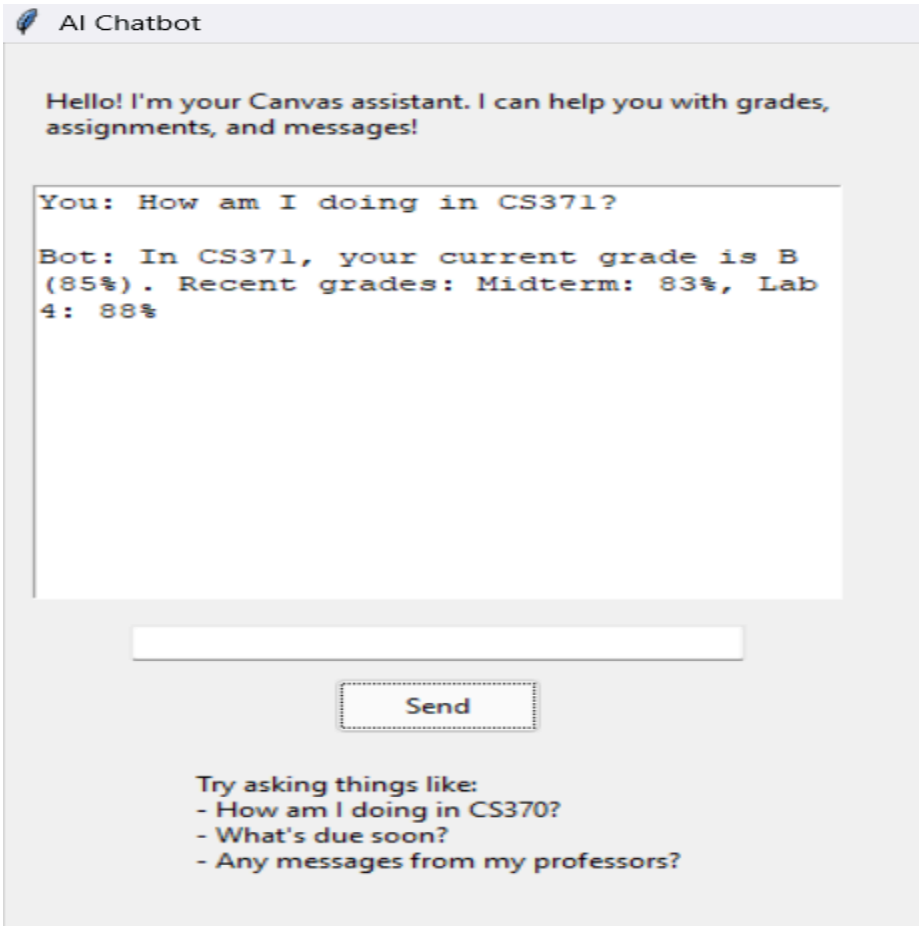
The functional tasks performed by our chatbot system mainly have to do with 3 components. Checking for upcoming/missed assignments, checking for current grades, and checking for missed messages. We determined these 3 tasks to be the most important parts of Canvas as Canvas is primarily used as a way to track assignments and turn them in while knowing your current grades at the same time.

2. The low-fidelity prototypes

The two different low fidelity prototypes we used were a keyword based chatbot and then a more artificial intelligence based chatbot. The main difference between these chatbots is the complexity of the type of input it can work with users. For the keyword based chatbot, input can only be the keyword that the chatbot will prompt you to answer. Anything else will cause a default error message saying nothing was found. Meanwhile, the artificial intelligence chatbot can take more complex input and provide just as efficient responses.



Keyword Chatbot



AI Chatbot

3. Preparations before meeting participants

Some of the questions we asked before evaluation were the person's name, how familiar they are with Canvas, and how confident they are with finding assignments on Canvas. The last two questions were based on a scale to 5 starting from 1. Some preparations we made included having an audio recording ready to record participant's initial reactions and thoughts. Another main preparation we had was having a Google form with the survey and having them fill out their names and pre-evaluation screenings. Once the participants interacted with the chatbots and their initial reactions were recorded, then the rest of the survey was shown to them.

4. Evaluation Insights

Reese's evaluation introduced some challenges in the comparison of results:

- Reese presented the **AI-based chatbot** as a prototype, that would have some improvements made to it in terms of accuracy, which may have influenced participants' perceptions.
- Participants evaluated the AI chatbot assuming it was not a finished product, leading to a higher preference rating despite its incomplete functionality.

Adjusted Interpretation of Results:

When reevaluating the results with a realistic perspective of the prototypes:

- The **keyword-based chatbot** received positive feedback for its clarity and straightforward interaction style.
- The **AI-based chatbot**, while conceptually preferred, had usability concerns in its prototype state, highlighting gaps in development.

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5. Chosen Design and Rationale

Chosen Design: Keyword-Based Chatbot

We decided to move forward with the keyword-based chatbot for the following reasons:

1. **Simplicity and Reliability:** The design aligns with user expectations for a straightforward, functional tool.
2. **Ease of Development:** A simpler structure ensures quicker implementation and testing.
3. **User Feedback:** When presented as a prototype, users found the keyword-based chatbot easy to navigate and understand.

Addressing AI Chatbot Feedback:

While users appreciated the flexibility of the AI chatbot, these features can be revisited in future iterations once the core functionalities are fully realized.

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6. Modifications for the Final Design

The keyword-based chatbot will be refined to improve usability:

- **Enhanced Keyword Prompts:** Provide clearer instructions and examples for users to input the correct keywords.
- **Error Handling:** Customize error messages to guide users toward acceptable inputs instead of generic errors.
- **Scalability:** Structure the chatbot in a way that allows future upgrades, potentially integrating AI features.

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7. Conclusion and Next Steps

This study revealed key insights into user preferences and interaction patterns. Moving forward, we will:

1. Finalize the keyword-based chatbot design with the modifications outlined.
2. Develop a high-fidelity prototype for further testing.
3. Consider integrating features inspired by the AI chatbot concept in future iterations.

By focusing on simplicity and user-friendliness, the chosen design aligns with the immediate needs of our target audience.