Search Assistant: Effect of Chatbot on User's Collaborative Search Behavior

SearchX

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1.Background

Collaborative Search

- Multiple parties work towards a common goal
- Involve information lookup, sharing, synthesizing, and decision making

Collaborative search system

- Extra features to facilitate collaboration
- Shared query, bookmarks, notepad and chat

ChatBot

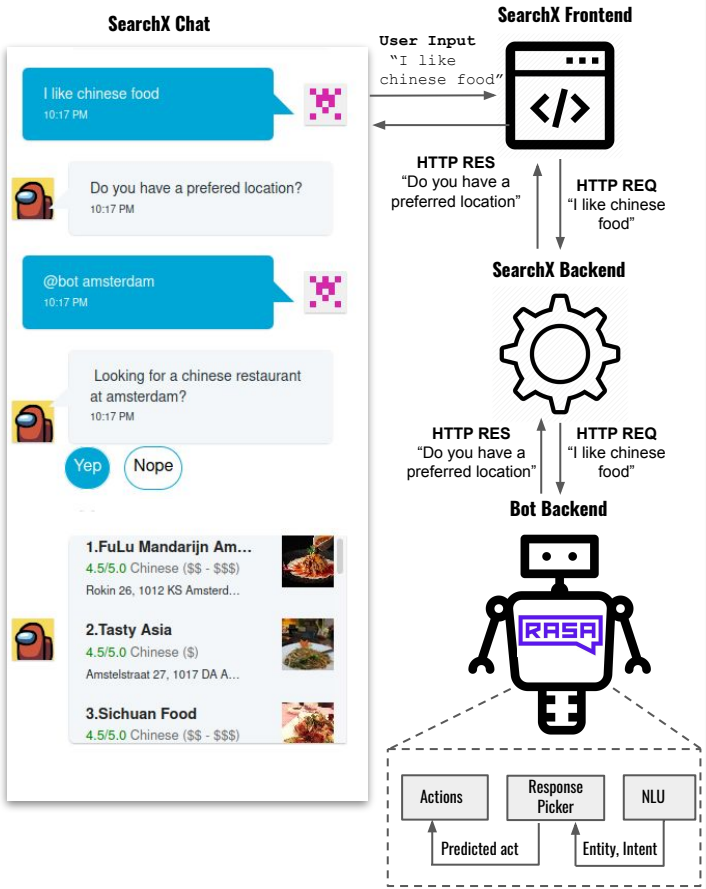
- A program designed to counterfeit a smart communication
- Improves collaborative search experience when used with single-user search engine and messaging platform

2.Question

What is the effects of a chatbot on users' collaborative search experience on a dedicated collaborative search system?

- How does it affect uses' collaborative experience
- Will it reduce the need to search independently

3.Chatbot High Level Structure



4.User Study

Setup

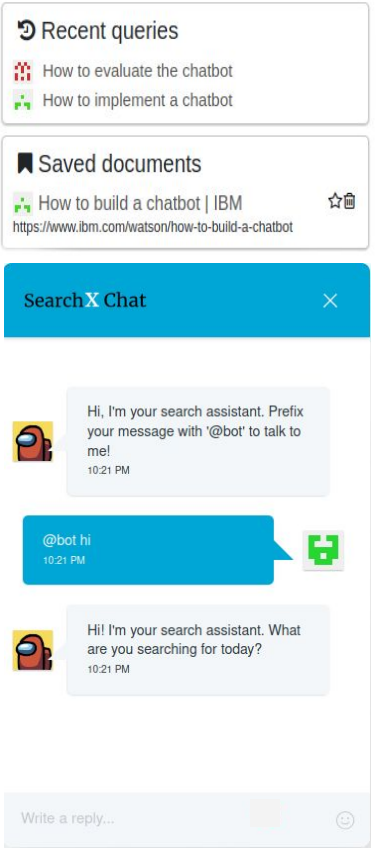
- Participants divide into groups
- Only allow using SearchX
- Each group conducts search tasks in random order with/without a chatbot
- Measure task completion time, query count, message count, average message length
- Post-task questionnaire

Results

- **Objective measurements**
  - Chatbot reduces mean effort
  - Not significant enough
- **Users' impression**
  - Chatbot significantly improved sharing, coordinating, communicating, and reaching consensus
  - Non-significant effect on rising awareness, and enjoyment
  - Most users found chatbot helpful

5.Conclusion

- Chatbot improves the collaborative experience
- It does not significantly reduce the need to search independently
- Future work could investigate the effect of chatbot with collaborative search features turned off



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