# Tenant.AI

# **Empowering Renters with Personalized Guidance**

Authors: Rushali Mohbe & Nathan Cunningham

CS5170

## Feedback Plan

To gather user feedback for the high-fidelity prototype of the Retrieval Augmented Generation (RAG) chatbot aimed at assisting tenants in Massachusetts, we plan to collect feedback from users as it is crucial to involve users in the development process to ensure this project effectively meets their needs and addresses their concerns. Below is a detailed plan outlining the methods to gather feedback and the type of information we plan to collect.

#### User Interviews

#### **Process:**

Participant Recruitment: Participants representing a range of demographic characteristics (e.g., age, gender, income level, language proficiency) and tenancy experiences (e.g., new renters, long-term tenants)

Preparation: Develop an interview guide with key themes and questions centered on user experiences, satisfaction, and areas for improvement.

Conducting Interviews: Use a semi-structured format, allowing for flexibility in responses while covering key topics [1].

#### Sample Questions:

- Describe your experience using the chatbot. What did you find helpful?
- Was there anything that confused you during your interaction with the chatbot?
- How would you rate the clarity and usefulness of the legal information provided?
- Can you suggest any features that you would find valuable for your needs?

#### Surveys

#### **Process:**

Designing the Survey: Use online tools like Google Forms to collect infomation about the perceived usability of the project using the System Usability Scale [2].

The System Usability Scale The SUS is a questionnaire with 5 response options, a number from 1 to 5. 1 = Strongly disagree and 5 = Strongly Agree. Below are the 12 questions that are part of the SUS.

- I think that I would like to use this system frequently.
- I found the system unnecessarily complex.
- I thought the system was easy to use.
- I think that I would need the support of a technical person to be able to use this system.
- I found the various functions in this system were well integrated.
- I thought there was too much inconsistency in this system.
- I would imagine that most people would learn to use this system very quickly.
- I found the system very cumbersome to use.
- I felt very confident using the system.
- I needed to learn a lot of things before I could get going with this system.

## Usability Testing Sessions

**Process:** Selecting Tasks: Identify common tasks users are likely to perform, such as asking about tenant rights, recovering security deposit, or understanding lease agreements.

Facilitating the Session: Have users complete the tasks while providing verbal feedback about their experiences. Record their interactions, noting where they struggle or express confusion [3].

Post-Session Debrief: After task completion, conduct a debriefing session to discuss their experiences and capture additional feedback.

### Sample Metrics to Collect:

- Task Success Rate: Did the user successfully complete the task?
- Time on Task: How long did it take to complete each task?
- Error Rate: How many errors did the user make while interacting with the chatbot?
- Subjective User Satisfaction: Ask the user to rate their satisfaction on a 1-5 scale after each task.

# Type of Information to Collect

- 1. User Experience Data
  - Understand user emotions and motivations related to chatbot use.
  - Gather qualitative insights on usability issues and desired features.
- 2. Usability Metrics
  - Collect metrics such as task success rates, error rates, and user satisfaction scores.
- 3. Feature Requests and Improvements
  - Collect suggestions for additional features or enhancements.
  - Document user feedback on the effectiveness of existing functionalities.
- 4. Educational Effectiveness
  - Assess perceived accuracy and helpfulness of the legal information provided by the chatbot.
  - Evaluate pre and post-interaction knowledge about tenant rights.
- 5. Demographic Information
  - Gather data regarding the demographic backgrounds of users to ensure varied perspectives are represented.

By integrating these methodologies and aligning them with the respective scientific citations, we will effectively collect useful feedback for iterating and improving the RAG chatbot for tenants in Massachusetts.

# References

- [1] Maria Rosala and Kara Pernice. *User Interviews 101*. en. Sept. 2023. URL: https://www.nngroup.com/articles/user-interviews/.
- [2] Jeff Sauro. A practical guide to the system usability scale: background, benchmarks & best practices. eng. Denver, CO: Measuring Usability LLC, 2011. ISBN: 9781461062707.
- [3] Kate Moran. Usability (User) Testing 101. en. Dec. 2019. URL: https://www.nngroup.com/articles/usability-testing-101/ (visited on 11/19/2024).