

## Introduction

Thank you for your interest in participating in this study. We are a team of researchers at the [ORGANIZATION], aiming to understand the client-AI expert collaboration when planning for AI applications.

In these collaborations, a client typically sets out their goals, expectations, etc. about the AI application as a client-side plan prior to collaboration with the AI experts. The client would share the client-side plan with the AI experts afterward so that the AI experts can have discussions with the client as they come up with potential technical approaches. However, prior work points to the various challenges that the client faces while attempting to come up with a coherent, complete, and feasible client-side plan on their own.

In this study, we aim to evaluate our prototype system to help clients come up with a client-side plan for an AI application development idea that they would share with AI experts to get a client-AI expert collaboration started.

As an expert in your domain, we ask you to play the role of a client in a client-AI expert collaboration. We specifically ask you to outline the client-side plan, using the prototype system over 3 hours. Try to elaborate your domain knowledge in the plan considering AI experts.

The study will proceed in the following order:

- 1 First, after the introduction, you will fill out a pre-study survey for 10 minutes, which includes questions about your background and some basic information about the AI application idea that you will be developing into a client-side plan.
- 2 Next, as a tutorial, we will walk you through the prototype system with the features and interactions it provides for 10 minutes.
- 3 Afterward, you will freely explore the system and the interface and ask any questions about it for another 10 minutes.
- 4 Then, you will be completing the client-side plan within 3 hours as a main study:
  - You will be provided with the system URL.
  - You will be provided a document link, where you can freely write your thoughts.
  - You will procedurally fill in the client-side plan using the system.
- 5 Followingly, for 5 minutes, you'll be shared a short post-study survey including 6 questions about the task load that you've experienced.

6 Finally, for a 1-hour focus-group interview, you'll be asked questions related to the experience you had using the system. The researchers will lead the discussion in the group. The interview is oriented towards the challenges and benefits of using the system.

Throughout the survey, to keep your identity anonymous, you will be using a unique ID. Please refer to the ID we've sent you through the email.

Please be aware that the client-side form(s) you fill out will be shared with at most three AI experts for their feedback. The client-side forms will be only identified by the ID assigned to you and will not be associated with any of your personal information unless you input your personal input into the answers. To secure your personal information, please avoid inputting your personal information into the system and if you believe you have done so in error, please inform the experimenter as soon as possible.

## **Pre-Study Survey**

Before we proceed to the main part of the study, we would like to ask about your background and the current state of your AI application idea. I'll share the survey link via message. Please fill in the pre-study survey for 10 minutes.

[Survey Submission]

## **Tutorial**

Now, we will walk through the prototype system. In the tutorial, we'll introduce our system in a step-by-step manner with an example AI model design scenario. Let me remind you that we're playing the role of a client when using the system.

[Walkthrough]

Any questions at this point?

## **Exploration**

Now, you can freely explore the system for 10 minutes. Navigate to the system URL and type in your unique ID.

[Exploration]

## **Main Study**

Now, you will be asked to complete AI application planning by using the system for three hours. The system consists of a total of seven sections and fifty-eight questions. You are encouraged to modify

and refine your plan more concretely. As you modify your answers, the system will automatically track the changes. Before we proceed, please open your comment document link provided in the email.

During the main study, there are a few rules to follow.

- Please leave your front-facing camera on while using the system.
- Please take the time to use the system. This is not a race and we encourage you to take notes, refer to different information sources, and even reply to some irrelevant messages. Your actions are not restricted unless you leave the desk too long.
- Please leave your thoughts and experiences in the provided document. Your reflections on the experience are a valuable asset to the study.
- You can turn off your camera if you finish early, yet we highly encourage you to use a sufficient amount of time.
- Additionally, if you want to save your answers privately, you can click on the download button provided at the bottom left of the interface. The 'answers.txt' file contains all your previous answers and questions in a readable format.

[System Iteration]

## **Post-Study Survey**

Thank you for completing the study. Now, please complete a short 5-minute survey about the task load you experienced during the study. Here is the link to the survey.

[Survey Submission]

## **Group Interview**

Thank you again for participating in our user study as your insights are incredibly valuable for us. In this session, we will discuss your experiences using the [SYSTEM NAME] for AI application planning. We want to hear about the challenges you faced while using the system, especially dealing with unfamiliar questions, and how the system helped you to navigate those challenges.

Please remember there are no right or wrong answers. We want to hear your honest opinions. Note that this discussion will be recorded.

[Discussion]

Thank you for your participation in the discussion. Is there anything else anyone would like to add before we finish here?

## **Conclusion**

This concludes the study and thank you for taking the time to participate in this study. The compensation for the study is [COMPENSATION AMOUNT] and we'll try to deliver it within [PAYOUT DURATION]. Is there any further question or clarification that needs to be added?

Thank you for participating in the study.