

[Wed Mar 13] First Meeting with Client

Date [↗](#)

Wed Mar 13, 2024 7:45am – 8:30am (GMT+11)

Participants [↗](#)

- Wafa Johal Benkaouar Johal - Client
- @Jinhao He @PENG TANG @shaohuiw1 @Zhuowen Zheng @Chengjia Zhou @Xi Luo @Jiyuan CHEN

Goals [↗](#)

- Understanding Client Needs: Delve into and understand the client's specific needs and expectations.
- Discussing Communication Plans.
- Defining Project Scope and Milestones.
- Discussing Risk Management and Contingency Plans.

Discussion topics [↗](#)

Time	Item	Presenter	Notes
0:00	Introduction and Overview	Client	Introduction and Overview
0:33	Project Introduction	Client	Discussion on using a robot head (Furhat) as an embodiment for a chatbot like ChatGPT for domain-specific tasks
1:04	Application Examples	Client	Example: Building a receptionist for a hotel, integrating website information with the robot
3:08	Project Details	Client	Steps include data scraping, using LLMs for understanding website content, and developing Q&A skills for the robot
5:37	Model Requirements	Shaohui WANG, Client	Discussion on model requirements, mentioning the use of GPT-4 and potential for other models
7:51	Resources and Lab Access	Client	Mention of the SDK
10:39	Data Preparation Inquiry	Shaohui WANG, Client	Questions about target data sources, with a focus on multimodal data like text, images, and maps

Action items [↗](#)



Decisions [↗](#)

Communication Plan with Client:

At most every two weeks (Fortnight)

Objectives :

This project focuses on developing a tailored Q&A platform using a Furhat robot, powered by data scraped from a chosen website as a demonstration (e.g., Melbourne Connect or CIS). The project involves leveraging scraped data to train a domain-specific Language Model (LLM)-based agent, allowing the Furhat robot to serve as an interactive Q&A resource and receptionist. The objective is to create an intelligent system capable of providing information, answering queries, and assisting users based on domain-specific content.

Scope:

- 1. Data Collection and Preparation:** Implementing web scraping techniques to gather relevant information from a selected website. Cleaning and structuring the scraped data to create a comprehensive knowledge base for the Q&A agent.
- 2. Domain-Specific Language Model Development:** Utilising Language Model capabilities (LLMs) to train a domain-specific agent capable of understanding and generating responses related to the content from the chosen website. This may involve fine-tuning existing models or creating new ones tailored to the selected domain.
- 3. Q&A Agent Implementation on Furhat:** Integrating the domain-specific agent with the Furhat robot to establish an interactive Q&A platform. Designing an intuitive user interface and natural language interaction flow for users engaging with the Furhat robot.
- 4. Receptionist Functionality:** Enhancing the Q&A platform to perform receptionist tasks, such as providing directions, event information, or general inquiries related to the selected website's content, facilitating a user-friendly and informative experience.

Milestones:

- **Data Scraping and Preprocessing:** Developing scripts to scrape relevant information from the chosen website, extracting and structuring it for the Q&A platform.
- **Language Model Development:** Training or fine-tuning language models using the scraped data to create a domain-specific agent capable of understanding and generating contextually relevant responses.
- **Furhat Integration:** Implementing the Q&A agent on the Furhat robot, designing a conversational interface for users to interact naturally and receive accurate and informative responses.
- **Testing and Iteration:** Conducting comprehensive testing to ensure the system's accuracy, responsiveness, and user-friendliness. Iteratively refining the Q&A agent based on user feedback and system performance.

This project aims to create an intelligent, domain-specific Q&A platform using advanced language models and robotics technology. The resulting Furhat Q&A system will demonstrate an efficient and interactive information resource, providing assistance and information tailored to the chosen website's content as a demonstrative example. This endeavour offers a unique opportunity to explore the integration of AI-driven agents with robotics for practical and user-centric applications.

Lab Access

As a research project student, you have access to the open desk in the lab to work on your project.

The HCI lab is located in the Melbourne connect building at Level 5. It is a great opportunity to immerse yourself in a research environment and interact with other researchers.

Contact the lab manager: Allen Mari Pilaes allenmari.pilaes@unimelb.edu.au