

Chatty: An All-in-One Language Learning System

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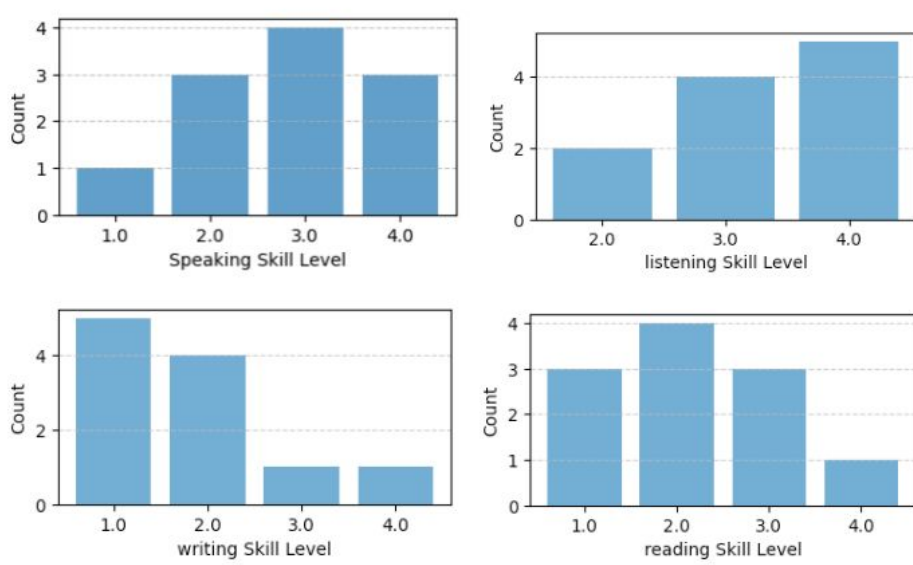
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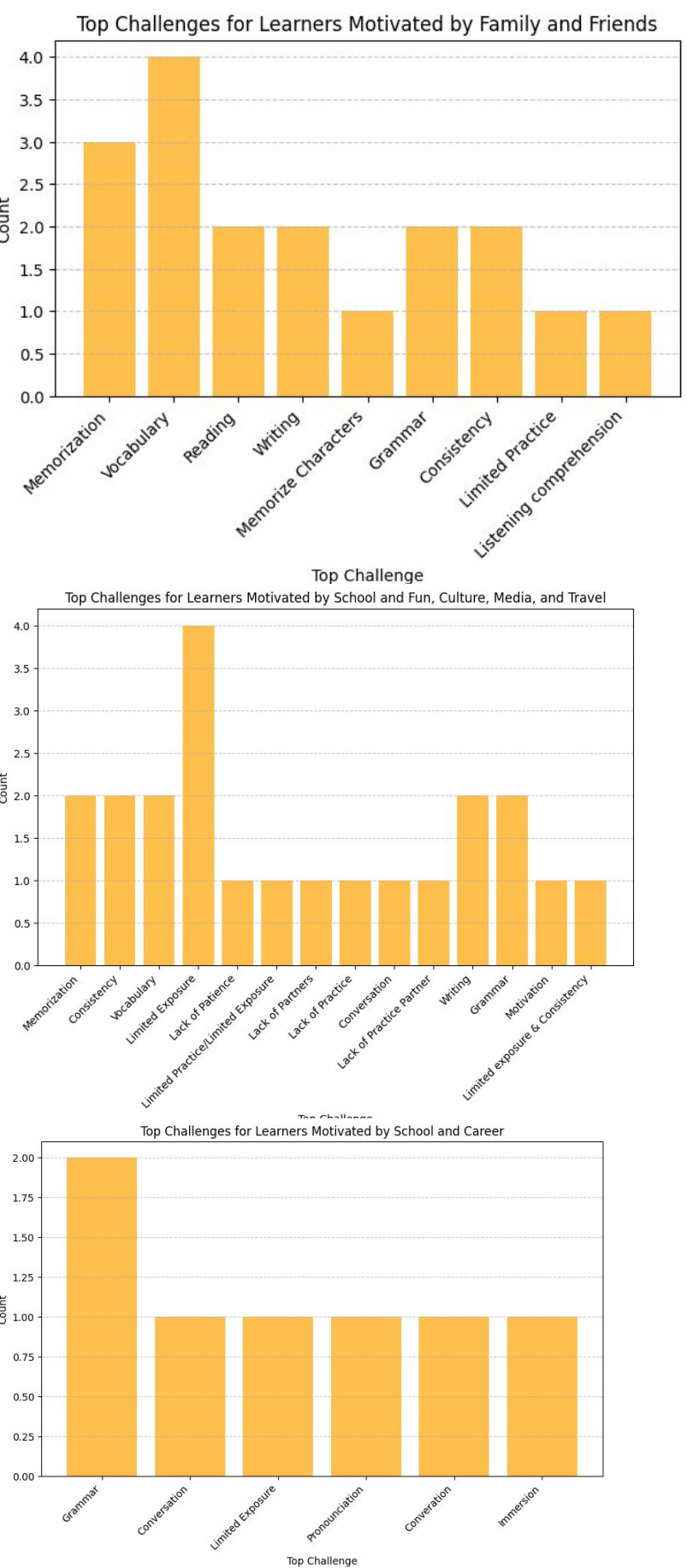
User Research

We created a language learning survey and received 35 insightful responses. We also conducted 10 semi structured interviews to better understand the user space beyond qualitative data collection..



Personas

Heritage, non heritage speakers, each with their own set of challenges!



System Overview and Approach

We introduce Chatty, a language learning system leveraging LLMs to provide convenient and friendly practice. It provides both casual conversational practice and roleplay scenarios while supporting input through both audio and text. Additional features are added for easier facilitation of conversation and a lesson page can provide information on what users can further focus on to improve in their language learning.



Account Login and Language Selection

Screenshots of the account login and language selection interface. The login screen shows a welcome message and a login button. The language selection screen shows a dropdown menu for language selection.

Conversation and Scenario Options

Screenshots of the conversation and scenario options interface. The top screen shows a welcome message and a dropdown menu for conversation practice. The bottom screen shows a 'Create Custom Scenario' form with fields for scenario title, AI role, and description.

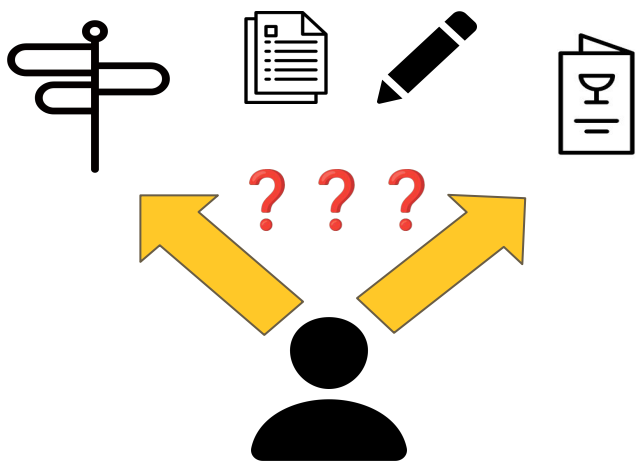
Conversation UI

Screenshots of the conversation UI interface. The top screen shows a chat window with a user message and a system response. The bottom screen shows a dictionary lookup for the word '中文'.

Language Lessons based on Chat History

Screenshot of the language lessons interface based on chat history. It shows a 'Chat History' section with a list of messages and a 'Your Language Lessons' section with a list of lessons.

Example Scenario: Travel abroad



Heritage speakers can converse, but may struggle with reading/writing or topics outside of everyday life

Non heritage speakers find it hard to apply their textbook knowledge to a faster conversational pace

Problem

- Lack of access to conversational practice - in speaking, reading, writing, listening
- Writing and reading illiteracy in certain languages
- Self consciousness of proficiency leads to less practice (negative feedback loop)
- Current resources (textbook, Duolingo, etc.) are not immediately applicable to conversation

Evaluation Results

Evaluator Comments

- Users enjoyed our system's inclusion of suggested lines and dictionary to assist in language learning
- Impressed by the AI's handling of user input mistakes, including misspellings, incorrect grammar, or incorrect language being used
- System has potential for use as a practice tool for language learners
- Can provide opportunities to practice language skills in a welcoming and convenient setting

Future Directions

- More natural AI conversations to simulate casual conversations
- Increased context (images, descriptions, etc.) in scenario roleplay settings
- Immediate feedback for spelling or grammar mistakes
- Lessons and suggestions for audio input, rather than current audio-to-text input