EE/CprE/SE 492 WEEKLY REPORT 3

02/14/2025 – 02/27/2025

Group number: 35

Project title: Universal Response Engine: LLMs for Good

Client &/Advisor: Ahmed Nazar and Mohamed Selim

Team Members/Role:

Abrahim Toutoungi - Stakeholder Liaison

Gabriel Carlson - Communications Manager

Halle Northway - Meeting Coordinator

Brianna Norman - Project Deliverables Manager

Ellery Sabado - Timeline Coordinator

Emma Zatkalik - Assignment Manager

Weekly Summary

Our team split into two teams, one for the front end and one for the back end. The front-end team worked on getting the website UI created and making it as aesthetically pleasing and accessible as possible. Front-end also came up with the strategy of passing the entire chat history from the front end to the back end, which avoids having to manage multiple sessions in the back end and easily gets rid of chat history when the user leaves the session. The back-end team focused on dataset collection, RAG chains, and chat history handling.

Past Week accomplishments
   - Logo created and on website
   - UI is making good progress

Pending Issues
   -

Individual Contributions

Name	Individual Contributions	Hours this week	Hours cumulative
Abrahim Toutoungi	- Researched and collected datasets for various states. - Got a logo from Emma and got it digitalized and cleaned up and put it on the front end - Reviewed PRs - Worked on cleaning up styling	12	81

	- Took feedback from the advisor and other team members to work with the front-end team to implement the feedback. - Created labels and some issues in git		
Gabriel Carlson	- Worked on disclaimer - Worked on connecting the frontend and backend - Refactored abes JS - Added a loading icon - Worked on error handling - Fixed CORS - Setup Nginx to work just as a static file server - Setup Gitlab Runners - Setup CI/CD pipeline for frontend - Updated Landing page with category cards - Added more categories - Added TTS prototype implementation	12	76
Halle Northway	- Gathered housing and suicide prevention resources for 18 states in the United States - Web-scraped data from Iowa resources and organized into a .csv file - Visually centered and cleaned up title page of user interface - Added logo to title page - Fixed text overflow issue with user messages - Added example prompts for medical, immigration, and housing categories to user interface	14	76
Brianna Norman	- Web scraping for Iowa data set - Gathering data sets for other states - Worries on backend RAG chain - Tested And merged Emma's branch	12	80
Ellery Sabado	- Collected and researched more datasets for more States and my topics - Worked on testing the state of Iowa and the categories of each topic that I researched. - Took screenshots of LLM response for test cases (future use) - Covereted some websites and	12	81

	datasets into csv files to fix the text splitter chuck issues.		
Emma Zatkalik	- Worked on getting backend on VM with chat history implementation - Putting multiple resources in the RAG chains with different categories - Continuous dataset research - Collaboratively came up with a name and logo for our chatbot	12	81

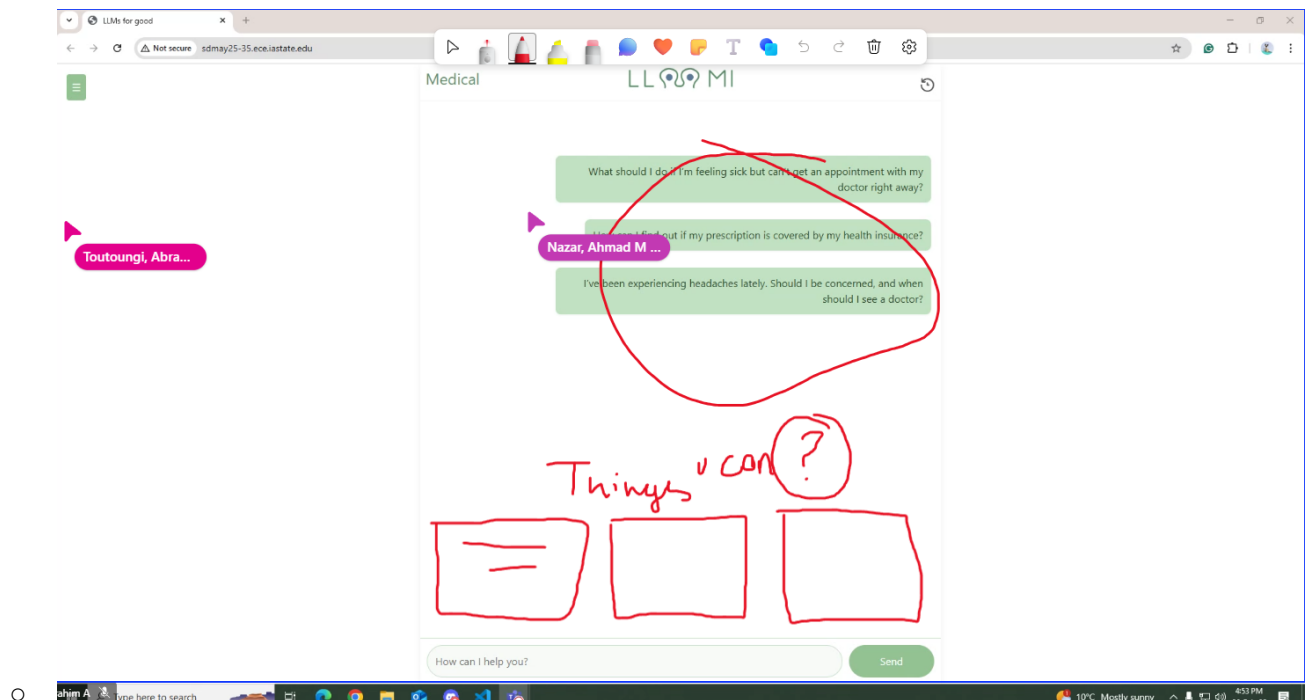Comments and extended discussion (optional)
N/A

Plans for upcoming week
- Implement more feedback on the frontend
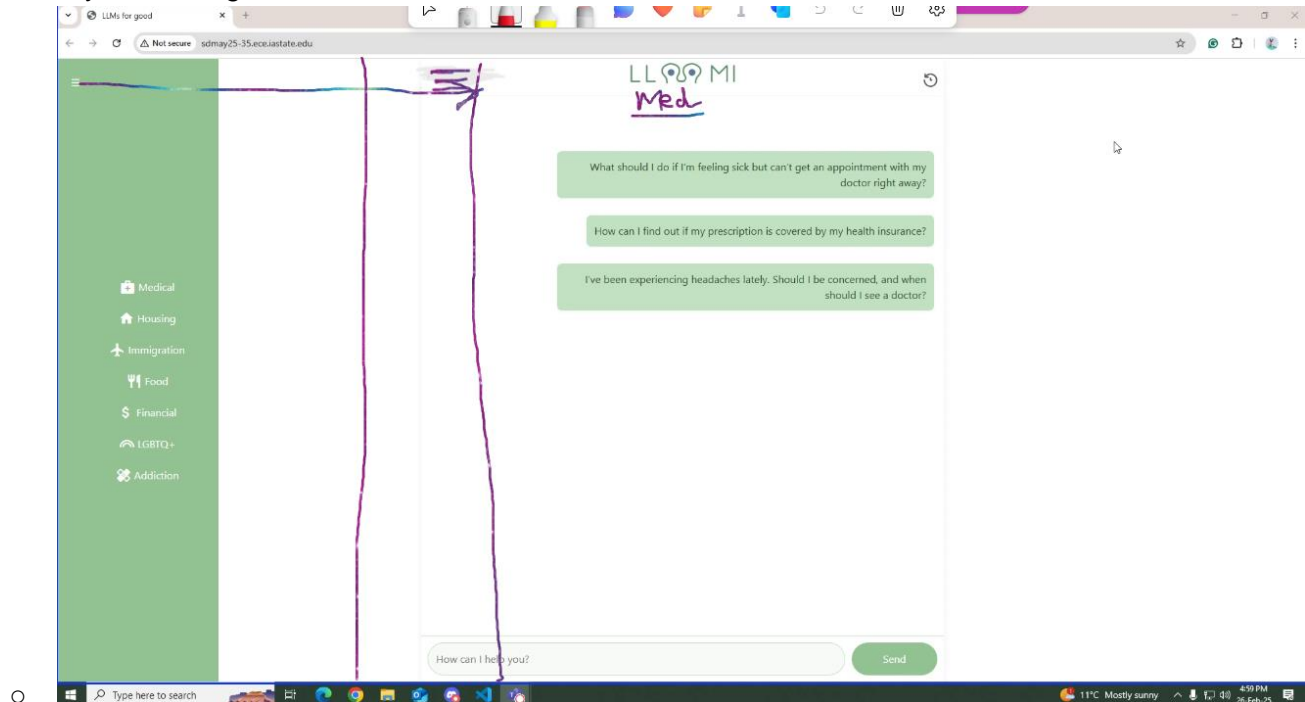- Continue collecting data for the United States

Summary of weekly advisor meeting
Selim attended meeting and review
● Abe discussed a recap of our semester so far
● Selim improvements
  ○ Adding more data for different countries
  ○ Ask for location data to return better results
  ○ Talked about future plans and goals
● Amhed Notes
  ○

- ○ Move things you can ask down
- ○ Try combining addiction resources

- ○
- ○ Switch history to trash icon
- ○ Add before variable for context in the prompt:

  Based on {chosen_catgeory} answer in the following formats

  if medical: explain long or short depending on dataset

  if mental health, be more empathetic and long and validating

  if legal, be concise while also considering the user requests

More user oriented and helps answer question of how it responds based on different scenarios

- ● Use output parsers for removing markdown from output