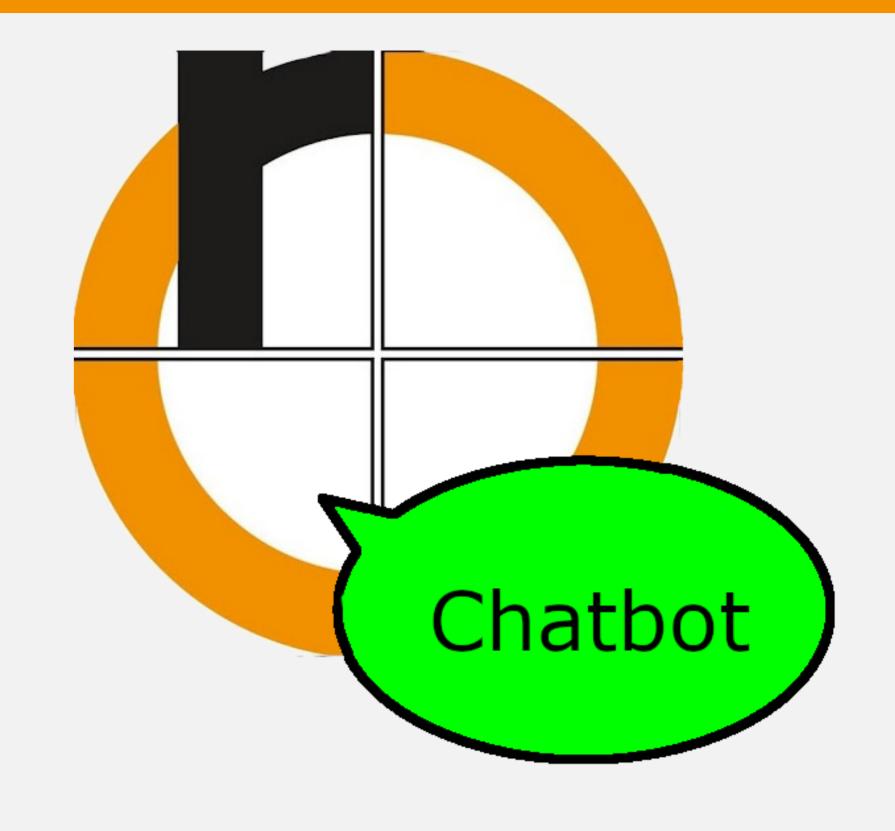
Innovationlab



TH Rosenheim Chatbot



Motivation and goals

Emails get flooded with questions regarding application process. We want to reduce the amount of Emails the administration office receives

-> Chatbot that can answer them on the website directly

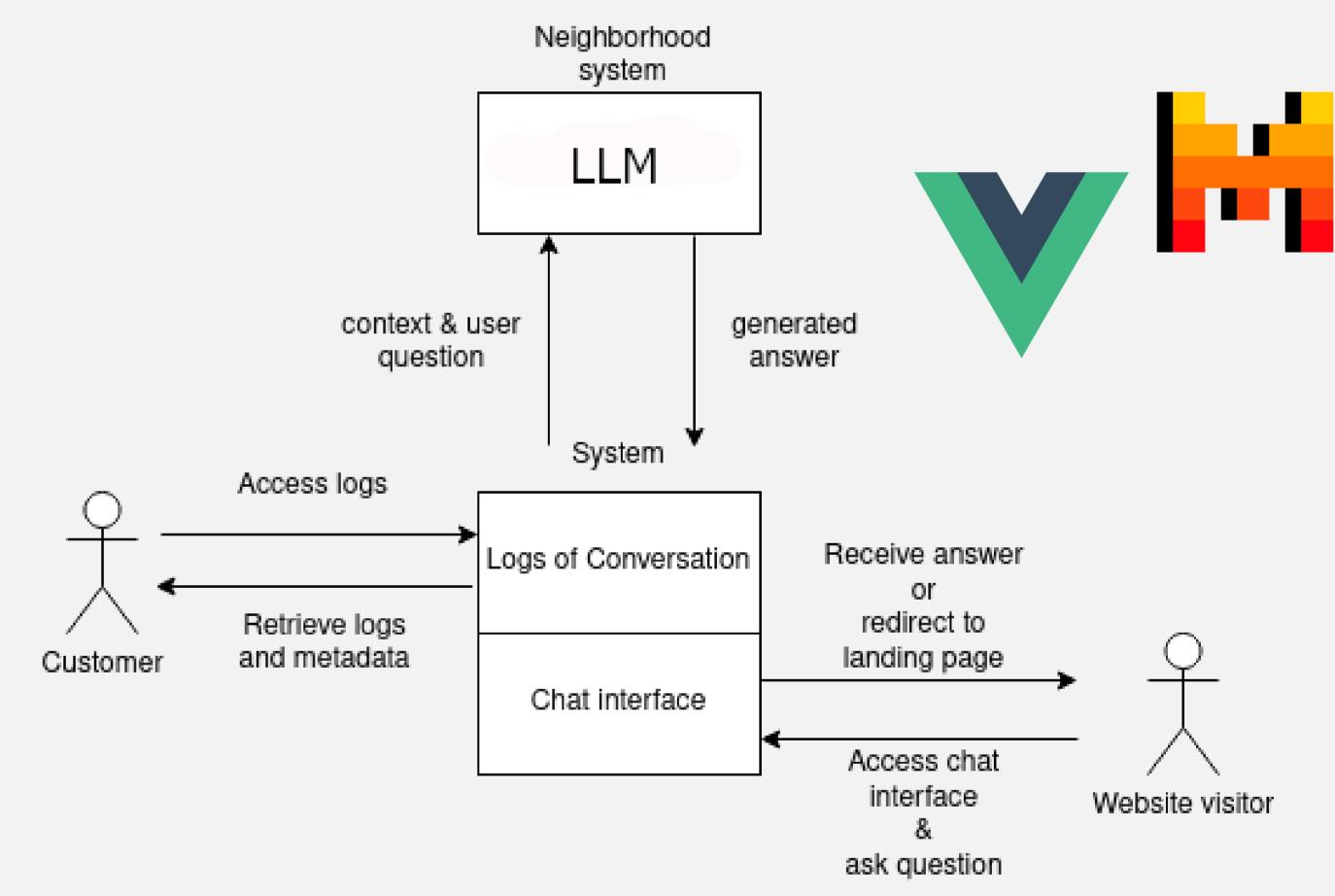
Architecture and technology

- Python Backend in Flask
- JavaScript Frontend in Vue.js
- Mistral and LangChain

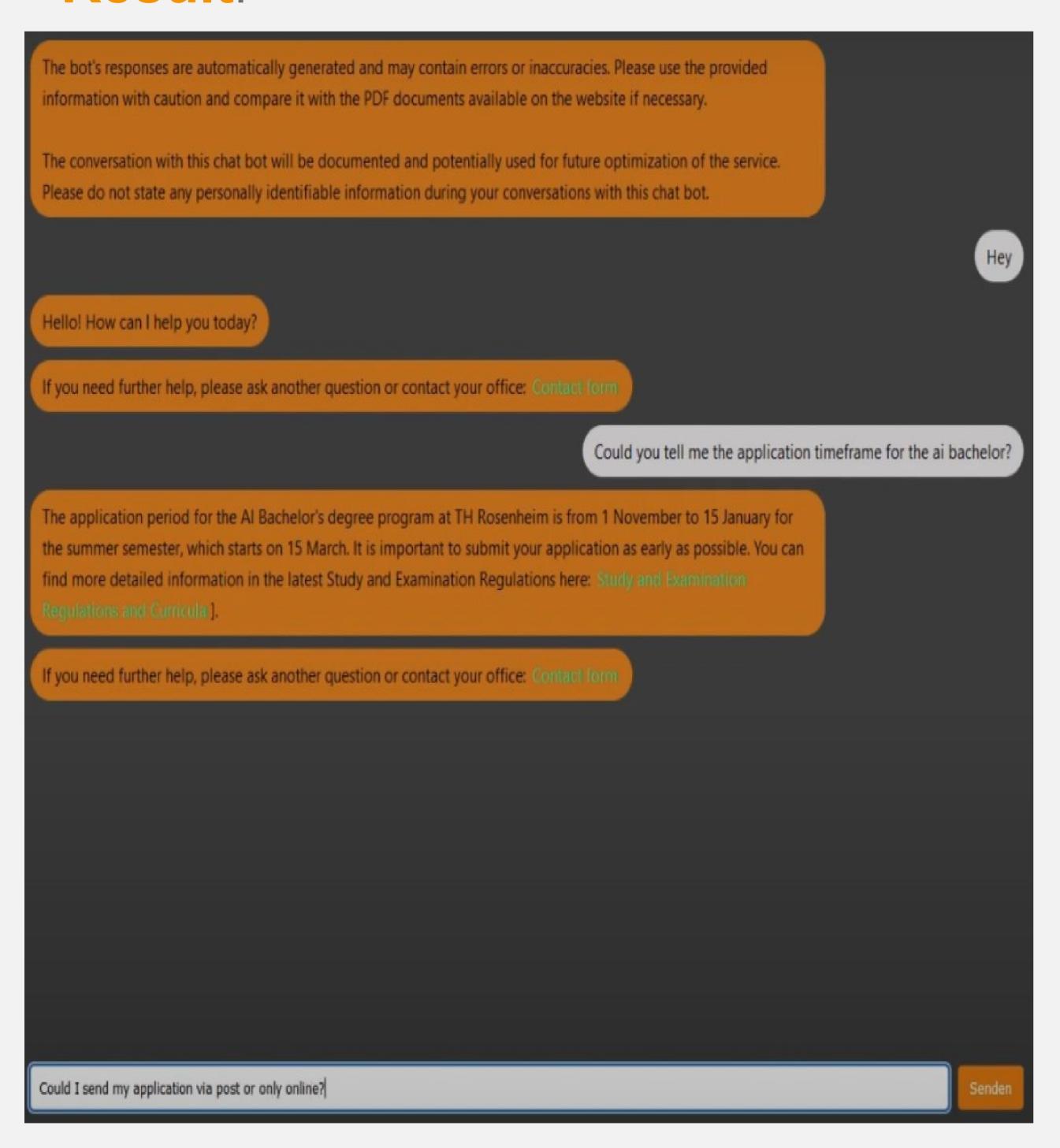
MVP

- Is able to answer questions on the application process from predefined checklist pdfs
- Utilizes GPU power to calculate answer in mere seconds
- Chat interface to interact with
- Functional RAG model

Frontend User interface - Web/Mobile Chat Python backend Python backend Al processing layer - LLM Instance - Mistral & LangChain instances



Result.



Challenges

- Design the system in a way that it can be extended to include not only pdf checklist but also content of the website (using a Web Crawler)
- First implementation using ChatGPT didn't produce intended results -> switch to Mistral/LangChain
- Response times were really bad initially because of only using CPU (5 mins) -> added GPU support, which reduced them to a few seconds