EE/CprE/SE 492 WEEKLY REPORT 1

1/23/2025 - 1/30/2025

Group number: 42

Project title: Grid GPT 2.0 AI Virtual Assistant

Client &/Advisor: Dr. Gelli

Team Members/Role:

Luke Eitzmann - Power Co-Lead

Ian Louis - Power Co-lead

Scott Rininger - Power Co-lead

Aditi Nachnani - Full Stack AI Co-Lead

Ian Bussan - Full Stack AI Co-Lead

Weekly Summary

 We got together as a group and reviewed our final presentation and report to plan out how we would be continuing our work on the project. We scheduled weekly meetings with our client and with the team. The AI team also looked into LangChain AI pipelines and reviewed documentation and code.

Past week accomplishments

- **Luke Eitzmann**: Reviewed last semester's feedback and developed a game plan/strategy on how to tackle this semester's goal.
- **Ian Louis**: Ian reviewed last semester's work and plan for how to move forward on developing DSO_GPT. Ian also re-familiarize himself with my code from 491.
- Ian Bussan: Experimented with LangChain to test ML and AI pipelines and review documentation. Also tested our current implementation of docker to see our current progress. Additionally, Ian reviewed feedback from our last semester to know what we need to improve.
- Aditi Nachnani: Aditi downloaded all softwares needed for the project and set up her laptop. Also reviewed the code for dss_gpt and created a plan with changes to make. Aditi also experimented with LangChang to see how it can help us with

our LLM models.

• **Scott Rininger**: Scott reviewed our faculty panel from last semester and internalized the faculty's feedback.

o **Individual contributions**

individual contributions			
<u>NAME</u>	Individual Contributions (Quick list of contributions. This should be short.)	<u>Hours this</u> <u>week</u>	HOURS cumulative
lan Bussan	Experimented with LangChain, tested Docker application, and reviewed feedback from last semester	4	4
lan Louis	Reviewed the feedback given from our professors and faculty review panel from 491. Made a plan to continue my work on DSO_GPT	4	4
Aditi Nachnani	Downloaded all necessary software; reviewed the code and made a plan on what to accomplish for the meeting with our client	4	4
Luke Eitzmann	Reviewed last semester's feedback and developed a gameplan/strategy on how to tackle this semester's goal.	4	4
Scott Rininger	Reviewed work performed last semester and made a plan on how to move forward	4	4

o Plans for the upcoming week

- **Luke Eitzmann**: This week's goals will be to begin working with the power team to make progress on the DSO_GPT.
- Ian Bussan: Continuing to implement DB_GPT, hoping to complete the implementation of this with Neo4j and InfluxDB. Also will be testing an implementation of a LangChain AI pipeline, and view documentation on how it can be used.
- Aditi Nachnani: Aditi will continue working on dss_gpt and ensure that the MML reads dss files appropriately and answer user's questions regarding the dss files.
 The client recommended using LangChain, so Aditi will review the documentation and see how to incorporate that into the LLM.
- Ian Louis: Ian will continue working on DSO_GPT. His goal is to have a plan by the

- end of the week for how he will complete all his individual tasks for the semester.
- **Scott Rininger:** Scott will continue working on DSO_GPT. Scott will be working with the rest of the Grid team to finish DSO_GPT and provide a deliverable to the client.

o Summary of weekly advisor meeting

• The team's first meeting this semester has been scheduled for Friday, the 31st.