

ENSF 607 – Project Proposal Dr. Ronnie de Souza Santos, PhD.

Description: For this project, you are tasked with proposing, designing, and implementing an **innovative application or website** that meets the technical requirements below. You are encouraged to think creatively and propose ideas that offer **unique solutions** or enhance the user experience in new ways. This project must be fully functional, deployed, and ready for use by the deadline. Your project must demonstrate the application of **advanced software development and architecture principles** covered in the course, including scalability, maintainability, and performance. The following technical requirements must be met:

- Cross-Platform Compatibility: Your application or website must run on different devices, meaning it should be accessible on both desktop and mobile platforms (e.g., through responsive web design or dedicated mobile and desktop versions).
- Database Connection: Your application or website must connect to and utilize a database to store and manage data (e.g., user data, product data, transaction data). You are free to choose the type of database (SQL, NoSQL, etc.) that best suits your application.
- 3. **LLM Integration:** Your project must connect to a **Large Language Model (LLM)** (such as GPT, Gemini, Copilot, Meta, or any other) to perform at least one essential action. Examples of LLM usage include:
 - o Providing personalized content recommendations based on user inputs.
 - Automating customer support using a chatbot powered by the LLM.
 - Summarizing or generating content for the user.
 - Using the LLM for smart data processing or analysis.

Submit and show to the TA a 500-word summary describing the software you will develop, including the following:

- 1. Project Idea: Briefly describe the concept of your application or website. Explain what problem or need your project addresses and how it offers a unique solution. Describe the target audience and how the solution will benefit users.
- 2. Technological Stack: Specify the tools, frameworks, and languages you plan to use for development. This should include front-end and back-end technologies, expected LLM service provider (e.g., OpenAl, Microsoft, Google).
- 3. Team roles: Describe the composition of the team, including name of the participants and main role in the software development process, e.g., requirements analyst, software engineer, data scientist, test engineering, software project manager, etc.

Evaluation Criteria

Component	Points	Description
Delivery	3	Document delivery
Demonstration	2	Discuss the document with the TAs during check in 1.
Total	5	