TECH*3500 SESMag Final Project: App development with AI – 100/1000 points (YK)

Class Activity

1. **Watch the video below before your class discussion: https://www.youtube.com/watch?v=JVkdNXVykJc.**
2. **Work in pairs:**
   a) **discuss with your teammate what you understand from the video about SESMAG and DAV persona, what are the assets and what are they used for in this study.**
   b) **open the following web page: https://obi2.kean.edu/~ykumar@kean.edu/sesmag/assets.html understand and discuss the Reliable Technology Slider and its possible placement toward left vs right side.**
3. **Assume you are evaluating YOU (what is not always the case). As a TECH*3500 student you want to prepare for a job interview and create a MySQL-PHP website with a Framework. In this scenario you never took the Database class and have never worked with any frameworks. The story is even worse in some sense (or maybe better). You are in a team of three and your teammates relate to different SESMAG personas. You need to use all the patience, teamwork, leadership, communication and other soft and technical skills to do make this work.**
   a) compare your own thoughts and preparedness to do that with your peers / classmates.
   b) place the Reliable Technology Slider in the positions you think are the most appropriate. You can choose colors too if you think appropriate.
   c) **Once both teammates individually placed the Reliable Technology Slider in the appropriate positions discuss your choices.**
   d) **The web page has several information and discussion questions/fields: once the discussion is completed individually answer all these and submit the form.**

4) Meet DAV: https://obi2.kean.edu/~ykumar@kean.edu/sesmag/slides.html
Skim through the slides with your teammate and discuss the DAV persona. Assume DAV is one of your peers and DAV is in the same situation (as in 3.) where you previously found yourself. They must develop a solid system from scratch. Move flags from their perspective. Choose DAV perspective from Drop-down, submit form and take a screenshot. Discuss with your teammate where the assets are appropriate and why.
5) Write a 2-paragraph summary on your understanding of SESMag and this part of the assignment. Was it easy/hard? What would you change in it?
Attempt to chat with DAV: https://chatgpt.com/g/g-jOBeEhIN9-dav

Observe more personas at https://gendermag.org/sesmag/foundations.php

Homework – Can be done individually or in a team of up to 3

1. Create an AI agent that mimics Fee fictional SESMag character and uses a ReactJS/NextJS/Vue or Angular in its frontend and a multimodal AI model in its backend (like ChatGPT-4o or Gemini Advanced) through API and accepts PDF files from the user. It then will provide a SESMag review from Fee point of view of the uploaded documents based on its internal (previously uploaded) knowledge about SESMag and its Fee persona.
2. Exhaustively test the app you developed to make sure that users will be able to upload their data and receive the best possible chat experience. The GUI of your app should have an appealing look and feel and interactive experience. Utilize CSS Frameworks like Bootstrap, Foundation, Tailwind, Materialize, Lightning CSS, etc. to provide modern and responsive design.
3. Create a new database of your choice (MySQL, Postgres, SQLite, etc) to store the history of the conversation and the uploaded files. Design and Create a DB schema (the necessary tables). Test connection to the database set up from Visual Studio Code Terminal.
4. Develop a backend code to handle form submissions and save data to the database. Implement necessary functions.
5. Ensure the application is responsive and works well in both desktop and mobile mode.

Submit screenshots of all parts of this assignment working in a single PDF file and attach the final source code as a .zip file(s), push final code to GitHub.