Development of a multi-page dashboard using Streamlit

This project involves developing a multi-page dashboard application using Streamlit. The dashboard will support user authentication and provide a wizard-like experience to guide users through various steps such as data upload and visualization. It will feature a dynamic, resizable layout and offer multiple templates tailored for different use cases.

Objectives:
- Develop a multi-page dashboard application using Streamlit.
- Create a wizard interface to guide users through data upload and visualization steps.
- Enable drag-and-drop and resizable layouts for dashboard components.
- Design and implement 12 initial templates for different use cases.
- Integrate plotting libraries for creating interactive graphs.

Responsibilities:
- Research and utilize Python libraries to enhance interactivity, such as PyDeck for advanced mapping capabilities.
- Develop custom Streamlit widgets for the wizard interface.
- Design and implement 12 customizable templates for various use cases including demand forecasting, after-sales services, and document digitization.
- Implement a system for sending and receiving notifications within the Streamlit app.
- Optimize dashboard performance for smooth user interactions.

Tech stack. The project will utilize Streamlit for rapid data app development, with user authentication via Authlib. Bokeh will provide interactive visualizations, while Pandas will manage data manipulation. Requests will handle HTTP operations, and Streamlit's session management will preserve user state across pages. Styling will leverage Streamlit's theming or external CSS.

Expected Learnings. Through this project, the student will gain experience in building complex web applications using Python and Streamlit, managing user authentication, designing user-friendly interfaces, and implementing interactive visualizations to represent large datasets succinctly.

Expectations from the company: We will provide consistent supervision, regular check-ins, access to necessary software services, and other essential resources to foster an environment that supports the student in achieving their learning goals, acquiring new skills, and successfully completing the project.