

Data Engineering Final Project

Teamwork Reflection

Self-Reflection

Creating a Flask app with an HTML-based UI for stock predictions has been an enriching experience. I've gained a solid understanding of Flask fundamentals, learning how to set up routes, handle templates, and integrate them with HTML to build a functional user interface. Exploring various stock prediction models has been fascinating, requiring data preprocessing and analysis to derive meaningful insights. Challenges emerged, particularly in acquiring reliable real-time stock data and refining prediction models for accuracy. These hurdles highlighted the significance of data quality and iterative model improvement. Additionally, deploying the app introduced me to server configurations and scalability considerations, enhancing my understanding of application deployment. Looking ahead, I aim to further refine prediction algorithms, improve the UI/UX, and explore additional features while staying updated with the evolving landscape of Flask and predictive modeling. Overall, this project has not only expanded my technical skills but also emphasized the importance of persistence, user-centric design, and continuous learning in application development and data analysis.

Peer Review

1. Revanth Chowdary Ganga

This team member exhibits a robust proficiency in handling live data using Azure Databricks, demonstrating a keen grasp of data pipelines and real-time processing. Their capacity to extract valuable insights from this data presents a promising avenue for enhancing stock prediction accuracy. Moreover, their effective communication and collaborative skills ensure seamless data integration with other project components. However, potential challenges arise from inconsistent or unreliable live data sources, which could significantly affect prediction accuracy. Additionally, managing and optimizing data pipelines within Azure Databricks might pose hurdles, potentially impacting the efficiency of data processing.

Furthermore, juggling multiple project deadlines could lead to difficulties in maintaining focus and prioritization, potentially impacting overall project delivery.

2. Divya Sharma

Demonstrated expertise in deploying applications via Azure Web App, guaranteeing a seamless transition from development to production while understanding crucial scalability factors for potential traffic surges. Additionally, their proficiency in Docker Hub enables efficient encapsulation of the app into containers for smooth deployment. However, there might be room for improvement in documenting the code more comprehensively, potentially enhancing clarity and ease of understanding for future maintenance. Moreover, managing multiple project deadlines could pose challenges, necessitating a prioritization strategy to identify and allocate efforts to the areas that would yield the most significant benefit.

3. Ayush Gupta

Substantial contributions to the project's documentation and communication efforts by crafting a comprehensive README, facilitating a clear understanding of the project's structure and requirements. Additionally, their creation of a demo video enhances presentation and explanation of the project's functionality. However, there might be a potential risk of overemphasizing documentation and communication, possibly leading to excessive time allocation in these areas. It could have been beneficial to focus on making more pushes to the repository to ensure continuous integration and updates. Moreover, managing multiple project deadlines may have presented challenges in maintaining a balance between documentation efforts and other project tasks, possibly impacting overall productivity and progress.