

**Name: Kotha Vishwak**

**Project title: Financial Analysis**

**Team Name : Team Blue**

**Name of the mentor: Pravindra Kumar Gole**

## Expectations

# My expectations before the Applied Project Development program

- **Enhancing Technical Skills:** Gaining deeper knowledge in python and flask for back end
- **Interdisciplinary Skills:** Learning Latex for documenting the project in a proper manner
- **Teamwork:** I expected to work in enthusiastic team environment with members from different domain and learn along with them
- **Management Techniques:** I expected to learn effective project management techniques, including planning, scheduling, and resource allocation, to ensure timely and successful project completion using technologies like jeera, notion etc.



# Learning

## My learning from the Applied Project Development Program

- **Technical:**
  1. Improved my grip on python for data analysis and learnt flask framework for backend .
  2. Even though I was not a part of frontend team I have gained some knowledge in building dynamic and responsive user interfaces using React with the help of our frontend team.
- **Interdisciplinary:**
  1. Learnt how to use jeera for managing and tracking the work process.
  2. Learnt latex for documenting the work done and writing the project reports.
- Enhanced my presentation skills by presenting ppts in google meets to overcome fears



# Step forward

## Step forward

- Mastery of backend and frontend technologies is crucial for developing comprehensive web applications.
- Effective teamwork is essential in a professional environment to ensure project success
- The ability to solve problems and innovate is key to overcoming project challenges and improving process.

### Gaps to Cover

- Need to deepen knowledge in advanced data analysis techniques to provide more sophisticated financial insights
- Enhance knowledge of DevOps practices and tools to streamline the deployment process and ensure continuous integration and delivery



# My Journey

## My role in the project and why ME?

- My role in backend development was pivotal in ensuring that the financial analysis tool was robust, secure, and efficient. By focusing on API development, database management, performance optimization, and seamless integration with the frontend, I contributed to creating a reliable and user-friendly application
- My deep understanding of Python, made me an ideal candidate for handling backend development. I had prior experience in developing RESTful APIs and web applications using Flask, which was crucial for this project
- Maintained thorough documentation for the backend APIs, database schema, and key processes
- Ensured that documentation was up-to-date and accessible to team members



## Strengths

### What are your strengths?

- Proficiency in Python: Extensive knowledge and hands-on experience with python, enabling me to build robust and scalable backend applications
- Performance Optimization: Ability to identify and address performance bottlenecks, optimize queries, and enhance server response times
- Problem-Solving: Strong analytical and problem-solving abilities, allowing me to tackle complex issues efficiently
- Attention to Detail: High level of attention to detail, ensuring accuracy and comprehensiveness in documentation
- Organization skills: Strong organizational skills, allowing for structured and well-organized documentation



# Project Research and Initiation

## Project Research and Initiation

- Initial project document: Initial project documentation was done through research like reading blogs, research papers and taking suggestions from mentor.
- How did you use surveys: Surveys are used to gain knowledge and make a roadmap for development of project, to know the process of data acquisition.
- We identified stakeholders through a structured process involving brainstorming sessions and stakeholder analysis. Internal stakeholders included the project team, management, and relevant departments, while external stakeholders comprised clients, investors, and regulatory bodies. Financial analysts and executives were key end-user
- The project had several limitations. Data accuracy depended heavily on the quality of the input, and any errors in the initial data could skew results. Limited resources and time constraints hindered extensive testing and optimization. Integration challenges arose due to discrepancies between backend and frontend technologies



# Project Research and Initiation

## Project Research and Initiation

- Interactions with my mentor during the initial project document preparation were highly constructive. They provided valuable guidance on project scope, objectives, and structure, offering feedback to refine the document. Their insights helped clarify requirements and align the project plan with best practices, ensuring a solid foundation for development
- I made choices regarding alternative solutions and technologies by evaluating their pros and cons, considering project requirements and constraints. I researched best practices, consulted with team members, and tested potential options to assess performance and compatibility. This approach ensured informed decisions that balanced functionality, efficiency
- planned and prioritized tasks using a project management tool, breaking down the project into manageable phases. Tasks were scheduled based on their urgency and impact, with regular reviews to adjust timelines. Prioritization was guided by dependencies, team availability, and project milestones to ensure timely and efficient





# Project Research and Initiation

## Project Research and Initiation

- The Applied Project Development program will significantly advance my career by enhancing my technical skills and practical experience. Working on real-world projects sharpens problem-solving abilities, while mastering technologies like Flask, React, and MySQL improves my technical expertise. The experience of managing projects, collaborating with teams, and engaging with stakeholders builds essential professional skills. Additionally, the program's focus on documentation and user-centric design strengthens my ability to communicate complex ideas clearly. These skills and experiences are highly valued in the industry, making me more competitive and prepared for future roles and opportunities in technology and project management
- Before the program, my non-technical skills included strong project management, communication, and teamwork abilities. Effective project management helped me organize tasks, set priorities, and meet deadlines. Clear communication ensured that ideas and requirements were conveyed accurately among team members. My teamwork skills facilitated collaboration, problem-solving, and conflict resolution within the team. These skills were crucial for coordinating efforts, managing resources, and achieving project goals, allowing me to contribute effectively to the project's success and maintain a cohesive working environment



# Project Development Lifecycle

## Project Development Lifecycle

- I was able to understand and take up my obligations, responsibilities, roles, and duties effectively during the program. I clearly defined my role in backend development, which included database management, and performance optimization. I also identified potential risks, such as security vulnerabilities and integration challenges, and proactively addressed them through careful planning and mitigation strategies. Understanding these aspects allowed me to manage my tasks efficiently, contribute to team objectives, and ensure the project's success. My awareness of responsibilities and risks ensured that I met project requirements and handled issues that arose during development
- I was able to commit effectively to the team, workload, and schedule. I adhered to deadlines and delivered my tasks on time, contributing consistently to the backend development and documentation efforts. My commitment to the team was reflected in my active participation in meetings, collaborative problem-solving, and support for team members. I managed my workload by prioritizing tasks and balancing them with other responsibilities, ensuring that all project milestones were met. This dedication helped maintain the project's momentum and ensured that we achieved our objectives within the set schedule



# Project Development Lifecycle

## Project Development Lifecycle

- Responsibilities were divided as per the project tech stack and strengths of team members , such as Backend, Database and Frontend.
- Team member contributions were assigned based on individual expertise and project requirements. Tasks were divided into categories such as backend development, frontend design, database management, and data visualization. Each member's workload was weighted according to task complexity and time commitment, ensuring equitable distribution. Contributions were recorded using a project management tool, where each task was tracked, and progress was logged. Weekly meetings were held to review progress and make adjustments as necessary. This systematic approach ensured transparency, accountability, and balanced workload distribution, fostering effective collaboration and project success.
- Relevant records have been kept such as Jira,



# Project Development Lifecycle

## Project Development Lifecycle

We would like to showcase our project using

**1. Presentation:** Start with a clear presentation of the project scope, objectives, and key deliverables using visual aids like slides or dashboards. Highlight milestones and completed outcomes.

**2. Demonstration:** Provide a walkthrough of each deliverable, showing how it meets the initial requirements. For software, offer live demos or videos; for physical products, present the final items.

**3. Testing Evidence:** Share details of the testing process, including test results and quality assurance measures. This proves that outcomes meet the required standards.

**4. Feedback Integration:** Show how stakeholder or user feedback was incorporated into the project, demonstrating responsiveness and improvement.

**5. Documentation:** Offer comprehensive documentation, including design documents and test reports, for transparency and validation of project alignment with the scope.



# Project Reflection

## Project Reflection

- **My contribution:** My primary contribution to the project was focused on backend development and documentation. I was responsible for designing and implementing and managing the MySQL database and ensuring data integrity a. Additionally, I handled performance optimization, including query optimization and server response time improvements. I also played a significant role in creating comprehensive documentation. This ensured that the project was not only functional but also maintainable and easy to understand for future developers and users.
- **Comparison to position before the program:** Before the program, my experience with data analysis was limited to smaller projects and theoretical knowledge. Participating in this project allowed me to apply my skills in a real-world scenario, Dealing with complex problems and finding practical solutions. It enhanced my understanding of integrating various technologies and managing project workflows effectively. This experience has significantly boosted my confidence in handling larger projects and has made me more adept at both backend development and technical documentation
- **Added Value from Development Project:** The project development process has added immense value to my skill set and professional growth. It has provided me with hands-on experience in using Flask for backend development, integrating it with React for the frontend, and managing a MySQL database. Additionally, it has refined my problem-solving abilities and my capacity to work under pressure and within tight deadlines. The exposure to real-world challenges and the need to find efficient solutions have been invaluable in preparing me for future roles in software development and project management.



# Project Reflection

## Project Reflection

- **Experience and Expectations:** The experience of working on this project has met and, in many ways, exceeded my expectations. I anticipated gaining technical skills, but the project also offered valuable lessons in teamwork, project management, and stakeholder communication. The complexity of the tasks and the need for meticulous planning and execution provided a comprehensive learning experience. The successful completion of the project and the positive feedback from stakeholders validated the efforts and strategies employed, making the overall experience highly rewarding
- **Team Participation:** The participation of my team members was crucial to the successful execution of the project. Each member brought their unique skills and perspectives, contributing to the development, testing, and refinement of the application. Regular meetings, collaborative problem-solving sessions, and open communication channels ensured that everyone was aligned with the project goals and deadlines. The team's dedication and collaborative spirit were key factors in overcoming challenges and achieving the project objectives efficiently
- **Development of Additional Skills:** In addition to enhancing my technical skills, this project allowed me to develop several non-technical skills. I improved my project management abilities, learning how to prioritize tasks, manage timelines, and coordinate with a team effectively. My communication skills were also improved, as I needed to convey complex technical information clearly to stakeholders and team members. Furthermore, I gained experience in risk management, identifying potential issues early and developing strategies to mitigate them, which is essential for successful project execution. These additional skills have made me a more well-rounded professional, capable of handling diverse aspects of project development

