1.Challenges.

• Explain the most difficult technical challenge you encountered in this second week. This answer must be more than 200 words.

I embarked on the development of NoteShare, with a team of four developers (two front-end and two back-end). We anticipated several technical challenges. However, we discovered a number of unexpected hurdles that were not apparent during our initial research.

One significant issue was the <u>inadvertent downloading and integration of an incorrect version of our primary framework.</u> This mistake caused compatibility issues and delayed development as we had to backtrack and reinstall the correct version, ensuring all dependencies were properly aligned.

Another major challenge was <u>dealing with merge conflicts during code</u> <u>integration</u>. As multiple developers worked on different parts of the application simultaneously, integrating their code into the main branch often led to conflicts. These conflicts required additional time and careful resolution to ensure the stability of the application.

<u>Time and availability of all team members also posed a significant challenge</u>. Coordinating schedules for meetings and collaborative coding sessions was difficult, especially given the diverse time zones and personal commitments of team members. This often resulted in asynchronous communication and delays in decision-making processes.

- 1. To address the issue of downloading the wrong framework version, we implemented a more rigorous verification process for setting up development environments. Each team member now follows a standardized setup guide and cross-verifies versions and dependencies before proceeding with development. This has minimized the risk of similar mistakes in the future.
- 2. For merge conflicts, we adopted a more structured branching strategy, including feature branches and regular merging into the development branch to identify and resolve conflicts early. Additionally, we scheduled regular code review sessions to ensure that integration issues are addressed promptly.

3. To tackle the challenge of team member availability, we introduced more flexible and asynchronous collaboration tools eg. Trello Board. With the Trello board you can assign different activities to different team members and add a deadline. We started using project management software to track tasks and progress, and we scheduled regular but brief stand-up meetings that accommodate different time zones. This approach has helped streamline communication and keep the project on track despite varying schedules.

2. Describe the most difficult non-technical challenge you encountered in this second week. This answer must be more than 200 words

One unexpected non-technical challenge was managing the expectations and communication with stakeholders. Early in the project, we received conflicting feedback and feature requests from stakeholders, which sometimes deviated from our initial MVP scope. This required us to carefully manage and prioritize feedback, ensuring that we stayed focused on our core objectives while keeping stakeholders informed and satisfied.

Another non-technical challenge was maintaining team morale and cohesion, especially during periods of intense workload and tight deadlines. Ensuring that all team members felt valued and motivated required regular check-ins, recognition of individual contributions, and fostering a supportive team environment.

Discuss the challenges and/or success your team has had with collaborating Collaboration within our team of three developers and one full-stack developer has had its ups and downs. One of the main challenges we faced was the previously mentioned issue of merge conflicts. With multiple developers working on the same codebase, synchronizing changes became a significant hurdle. However, through the adoption of a more structured branching strategy and regular code reviews, we managed to mitigate this issue effectively. On the positive side, our team has successfully utilized various collaboration tools to enhance communication.

Tools like <u>Whatsapp group for instant messaging, Googlemeet for video</u> <u>conferences, and Trello for task management have been instrumental in keeping everyone aligned.</u> Additionally, our practice of holding daily stand-up meetings has fostered transparency and ensured that everyone is aware of each other's progress and challenges.

One particular success story was our ability to collaboratively troubleshoot and solve complex bugs. By leveraging the diverse skill sets within our team, we were able to approach problems from multiple angles, leading to more robust solutions.

Project Updates

Outline any changes you are making to your portfolio project's deliverables. Provide reasoning for each.

Framework Version Verification:

Initially, we did not include a detailed verification step for setting up the development environment. Due to the challenges faced with the wrong framework version, we have now incorporated a comprehensive setup guide and verification process to prevent future issues.

Enhanced Branching Strategy:

To address merge conflicts, we have revised our branching strategy to include more frequent merges and dedicated feature branches. This change ensures smoother integration and early conflict resolution.

Stakeholder Communication Plan:

Given the challenges in managing stakeholder expectations, we have established a more structured communication plan. This involves regular updates and meetings with stakeholders to align on priorities and manage feature requests effectively.

Progress

On a scale of 1 to 10, how would you rate the progress you've made this week? I would rate our progress this week as a 7.

How are you measuring your progress?

Progress is measured based on the completion of key milestones, resolution of major technical issues, and adherence to the project timeline. We track our tasks and <u>milestones using a project management tool</u>, and we measure progress through completed sprints, resolved tickets, and successful integrations

The rating of 7 reflects significant progress in resolving critical issues such as the incorrect framework version and merge conflicts. We have also made substantial headway in developing core features and improving our collaboration processes. However, there are still areas that need improvement, such as *further refining our stakeholder communication and enhancing the user interface*.

Provide an explanation of your progress assessment this week.

Based on our current progress and the measures we've implemented to address the challenges, The major technical hurdles have been addressed, and the remaining tasks are well-defined and manageable within the given timeframe.

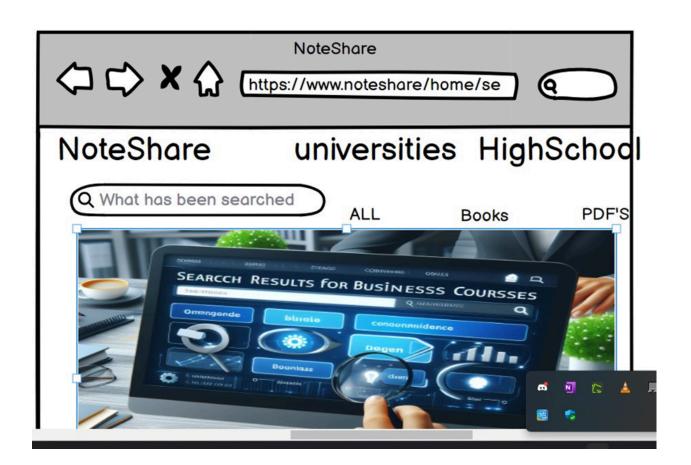
• What parts of your project are completed as planned?

We have completed both backend and frontend implementations and designs.

What aspects of your project are incomplete?

A few framework Versions and branching Strategy.

Screenshots



NoteShare

