

# Reflection Report

## Eduvance Project



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## 1. Introduction

- The EduVance project was a collaborative effort aimed at developing a comprehensive educational management system.
- The project spanned multiple sprints, focusing on features like authentication, user management, class and course management, and attendance systems.
- This report summarizes our experience, challenges faced, and key takeaways from the project.

## 2. Key Experiences

- **Team Collaboration:**
  - Daily standups and sprint meetings helped us stay aligned and address issues promptly.
  - Roles were flexible, allowing team members to explore front and backend development.
- **Technical Learning:**
  - Gained hands-on experience with **TypeScript**, **MongoDB Atlas**, and **Cloudinary** for file management.
  - Learned to implement **JWT-based authentication** and **authorization** for secure access control.
- **Agile Methodology:**
  - Adopted Agile practices, including sprint planning, task division, and retrospective meetings.
  - Learned to prioritize tasks and adapt to changing requirements.

## 3. Challenges Faced

- **Communication Gaps:**
  - Miscommunication about database schema and task overlaps led to rework and delays.
  - Resolved by improving documentation and holding regular feedback sessions.
- **Technical Hurdles:**
  - Faced issues with API integration, route conflicts, and dependency management.
  - Challenges with **MongoDB connectivity** and **TypeScript conversion** were resolved through research and teamwork.

- **Time Management:**

- Balancing project tasks with academic commitments (e.g., midterm exams) was difficult.
- Addressed by adjusting sprint lengths and prioritizing critical tasks.

## 4. Key Takeaways

- **Importance of Planning:**

- Proper sprint planning and task division are crucial for efficient project execution.
- Breaking tasks into epics, user stories, and subtasks helped us stay organized.

- **Adaptability:**

- Flexibility in sprint lengths and task assignments allowed us to handle unexpected challenges.

- **Testing and Debugging:**

- Learned the importance of thorough testing to identify and resolve issues early.

- **Teamwork and Communication:**

- Regular standups and retrospectives improved team coordination and transparency.

## 5. Conclusion

- The EduVance project was a valuable learning experience that enhanced our technical and project management skills.
- Despite the challenges, we successfully delivered key functionalities and improved our ability to work as a team.
- We look forward to applying these lessons in future projects to achieve even greater success.