INTRODUCTION
The goal of this project is to improve the Purdue Office of Engagement's system for receiving, storing, and processing student grant applications. The current system has issues with workflow and user experience. Our priorities are to redesign the front-facing website for students to submit applications, the website for staff to process applications, and the database. We also focused on creating more insightful data visualizations for staff to help decision-making.

By creating a more efficient system, the Office of Engagement will be in a better position to fulfill its mission to:
- Support service-learning & community service projects
- Promote economic vitality and enhanced quality of life
- Connect Purdue with communities and individuals
- Develop the next generation of leaders and innovators

RESEARCH METHODOLOGY
During the first semester, we researched, learned the skills necessary to start this project, and planned. We divided into front-end and back-end teams based on skills we wanted to develop.

Front-End Development
- React.js: user interface framework to develop website
- TypeScript & JavaScript: programming languages
- Visual Studio Code: application for programming and debugging
- GitHub: platform for version control and collaboration on code

Back-End Development
- GitHub: imported project to Git
- Docker: platform to run application
- Prisma: server to test and implement code
- TypeScript & JSX: programming languages
- Express.js: server-side framework
- Migrate Database to Postgres
- Set up Docker, WSL, and other necessary tools
- Express API Server
- Facilitating SMTP mail services

CONCLUSION
Over the course of the last two semesters, our team worked on developing a new website and application for the Office of Engagement.

Our team completed the following:

Front-End Development
- New, cleaner navigation bar
- Intuitive spreadsheets and tables
- More website tools for the client
- Organized website layout and styled pages
- Implemented email template form
- Redesigned application form

Back-End Development
- Made a new database schema
- Made a server for API requests
- Functions to access, edit, add, and delete data

FUTURE GOALS
In the future, we would implement the following features to continue improving the user interface and project management flow:
- Style the website for aesthetic appeal
- Add a notification feature for staff to see tasks
- Create an automatic emailing system connected to all Purdue campuses
- Include a save button on applications linked to a student's Purdue ID
- Enable staff to see data by assigned roles in the system
- Implement BoilerKey

ACKNOWLEDGEMENTS
We appreciate Lindsey Payne, Lisa Duncan, David Glass, Carly Evich, and Mahima Mahotra for spending time and effort into pushing this project forward.

The Data Mine Corporate Partners Symposium 2023