

# **429 Manager Application**

This repository contains the code for a web application that helps streamline the student application process for the CS429 class at UMass Amherst. The application uses NextJS on the frontend, and it uses Firebase to handle logins and to store data.

## **Code and File Structure**

The code structure follows a standard NextJS file structure, and it was created with create-next-app. The most important folders are the components folder and the pages folder. The pages folder contains each page in the application as its own file. Since NextJS has automatic routing, each name in the pages folder is a route to the corresponding page. So for example, the route /login will take you to the login page, which is stored in login.js in the pages folder. The components folder contains React components that are used by the pages in the pages folder.

The main pages are login.js, fillApplication.js, and viewApplications.js. The login page simply allows you to login as a student or a professor using a Google account. If you login as a professor, you will be redirected to the View Applications page, which allows you to review applicants and accept/reject them. If you login as a student, you will be redirected to the Fill Application page, which allows you to apply for 429 sections

## **How to run**

First, you will need to make sure you have all the necessary packages by running `npm install`. Once all the packages are installed, you can run the web app locally by running `npm run dev` and going to [localhost:3000](http://localhost:3000). This will bring you to the login page where you can begin using the application.

## **Testing**

To test the application, we tried inputting invalid fields, such as non-pdf files for the transcript, or not filling out required fields.

## **Attributions**

Non-trivial components were sourced from ChatGPT, Stack Overflow, and Material UI Templates. Material UI templates were used to get skeleton code for certain components, and then was further changed to better suit our use case.

ChatGPT was mostly used for skeleton code to give us a general idea of what code layout looked like. We then modified the code to fix bugs and implement the specific feature we wanted to use.

Stack Overflow was for small bug fixes that we couldn't figure out on our own.

## Bugs and Limitations

Limitations include missing features we would like to implement later like more pop ups on successes and errors. Ultimately, we want to integrate this app with SPIRE but there is no functionality for that yet.

## Github Repo

The github repo can be found at:

<https://github.com/gabrielgordbegli/429-manager-application/tree/main/pages>