

# Final Benchmark- Full Stack Application

**Due Date: Saturday, 5/15/21**

*Goal: Create a full stack application with a React front end, and use express/mongoose to communicate with a MongoDB database.*

## Project Overview

Here is the philosophy for this project. You have been working on this project for the entire semester, through countless feedback and hours of work. Your goal for this last part is to make this project cross the finish line. You must do the following four additions to your project from benchmark #4:

1. API Calls
2. Create an express backend
3. Link REST operations to mongoDB using Mongoose
4. Deploy the App

## Required Implementation

Let's talk about implementation requirements, you **must** have:

- **React Front End**
  - You must have at least three components
  - At least one of the components should use fetch to communicate with your backend
  - You must implement at least one of each of the following in your app (using fetch):
    - GET: The entire database
    - POST: Enter a specific entry
    - PUT: To update an entry
    - DELETE: To remove an entry
    - Optional: GET: Search for a specific entry
- **Express Back End:**
  - Create your own router
  - Must have a unique Schema in a separate folder
  - Must handle each of the above requests
  - Must integrate Mongoose
  - Database manages all dynamic data for your Application
  - Communicates with your database
    - Please leave your database URL and Password, I recommend leaving the default for each
    - Make sure to whitelist all IP addresses
- Deploy the application:
  - I don't care how you do it as long as we can access your app through a link!
- Integrate an API
  - You must make an API Call to an API of your choice at least once in your code!

- Fit and Finish
  - You know the deal! Make the app look deployment and internet ready.
  - You will get feedback to let you know if you need to work on this between Benchmark #4 and the final
- Include a README with any instructions needed to run your projects, please be descriptive!
  - Please include a link to your deployed app here!
- Place all code in a folder called "FinalProjectImplementation"

***Everything in BOLD is required in order to receive a good faith attempt in order to pass the class (even if mathematically possible with a 0 on the final!***