Speer Technologies Write-Up Doc

BACK-END Project

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Points I am Proud of:

* Use of MongoDB NoSQL and Mongoose: I am very new to these technologies, but I wanted to learn how to use NoSQL, so I figured this was the perfect opportunity as it supports synchronous calls opposed to asynchronous database calls.
* Separations of server and routing logic: I learned how to separate the express server logic into several files to make the logic more digestible and scalable.
  + Note, in the future I would separate different request types (ie stocks, funds, login) into different files for better scalability and modularity.
* Use of Argon2 hashing for authentication: I made a point to make sure logins were secure.
* Error checking: all paths return appropriate and clear errors when problems arise.
* Correct use of promises: Use of callbacks and promises to insure synchronous code.
* Included sessions for logging in/out users as well
  + Would love to add JWT here later

Similar projects I’m proud of:

* The Shoppies (<https://github.com/tobiasschlagenhaufer/shoppies>) : really proud of this full-stack project that uses TypeScript, GraphQL, TypeORM, Apollo, and Express for a fully functioning Movie nomination website. This was an amazing chance to learn all about GraphQL hooks and REST (IMDB REST calls), while using React on the front-end to build modular components using Chakra-ui. The entire project is hosted on a docker container, and runs on Vercel (Next.js) on the front-end.
* CUScheduling (<https://github.com/tobiasschlagenhaufer/cuScheduling>) : proud of this as I learned how to use Ruby on Rails and MVC architecture to build a student course scheduling app used by over 1400 of my cohort at Carleton University.