Fall 2019

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Link to Project

Zip will be attached separately.

Instructions to run My Verdict:

- Download and open zip
- Go to https://neo4j.com/sandbox-v2/
- Create an account
- Start an instance of a blank Neo4j Sandbox after signing in on the page
    - Once the page redirects you to a “Get started with your Neo4j Sandbox” page, go into the details of the blank sandbox.
    - In your editor of choice, open the .env file in the api folder
    - Change the NEO4J_URI=bolt://localhost:7687 to have the bolt number of your blank sandbox instance.
    - Change the NEO4J_PASSWORD to the password of your blank sandbox instance.
- In the terminal, cd into the api folder
    - Run npm install to get correct dependencies
    - Run npm start to start the api server
- In the terminal, cd into the ui folder
    - Run npm install to get correct dependencies
    - Run npm start to start the ui server

- Go to https://localhost:3000 to view the site.

Objective

The objective of our website was to build a social media website where you could review your peers based on interactions with them. The reviews could be over group projects, work interactions, or even on how good of a friend they are. To be able to write, receive, or see reviews, the user would have to create profile. This allows people who don't want to be reviewed the comfort of knowing they won't get reviewed as long as they don't make a profile. On each profile, you would see a profile picture, name, location, age, credibility score, and reviews. The credibility score tells other users on My Verdict how credible the reviews the user gives are. The credibility score is based on how credible other users think the reviews the user has left are. This can give other users an idea of how much to believe their reviews. To leave a review for someone, the user will go to the write a review page, where they will have to login in and put the name of the user that they are wanting to review.

Summary

For this project, we used GRANDstack, which consists of GraphQL, React, Apollo, and the Neo4j Database. GraphQL is a query language for APIs that allowed us to grab all the data we needed for a page on the website in one request, even if it came from multiple sources. React let us create a simple user interface that could efficiently update and render pages when our data changed.To learn React, we all took the Learn

React course on Codecademy. This allowed us to gain the knowledge we needed in order to create the front end of the website. Apollo is the “communication layer” that allows our React pages to connect seamlessly to our back end. Neo4j is the actual database that we used for the site. It’s a graph database, which works well with a social media style site because graph databases focus more on the relationship between objects instead of tables. We used a GRANDstack Starter Project for a beginning spot on the site. It showed us how to run and use Neo4j as well as starting the API and UI for local testing. This gave us a good platform to begin developing the site. Another tool we used on the site was Neo4j Sandbox. Neo4j Sandbox allowed us to be able to test and use the database without having a complete front end to work with. We also used reactstrap on our site. Reactstrap is the Bootstrap 4 component used in React. This allowed us to be able to scale the site to fix nicely on mobile devices and on browsers.

Member Pages

Dylan Lynn-In charge of front end work, making My Verdict appealing to look at and usable by people other than just programmers. Work began as soon as the project started, working on making the site phone compatible and friendly. There were many issues, including different ways that react handled bootstrap, found a different package named reactstrap, this was much more compatible. Another challenge was making sure that the site matches the common theme of similar sites so that it would immediately feel familiar to those who have never used our site but one like it.

Cole Sluggett-Took on the task of dealing with the graph database using Neo4j, creating a database that held users and reviews along with it being seamlessly pulled to the front end in real time along with creating queries to pull data correctly. Many issues arose with this part of the project, there was very little documentation for graph database querying along with implementation. This was overcome with hours of reading through graphql pages and react pages. Also helped out to have a desktop version of Neo4j so that local databases could be held and retrieved for testing.There was also a problem of getting react to render that data pulled and pushed correctly. This was resolved by reordering the order in which things were completed on the site.

Kayla Wheeler- Dealt with back end functionality along with Cole to create data for the database,general debugging. One issue that arose was when creating all the nodes for the graph database,our entire site broke. After this, hours of debugging ensued until the problem was finally solved by re-entering all the data into the database and making sure all attributes were accounted for.

Conclusion

Throughout building My Verdict, we learned how to use the GRANDstack applications. There was a bit of a learning curve since we have never used any of the applications before, but the tutorials we went through helped us be able to have a good starting point on building our website. We weren't able to get the social media verification, and the harassment detection done since we ran out of time, but it will be

something we work on in the future. If we were able to do this again, having more time to work on the project would have allowed us to get the functionality that we wanted done on the site.

References

https://reactjs.org/docs/getting-started.html

https://www.codecademy.com/learn/react-101

https://neo4j.com/sandbox-v2/

https://neo4j.com/docs/