Node.js – Team 3

Problem Statement

Over the course of the next month or so, you will be building a distilled clone of GitHub. The service should allow you to create an account and login to the website. A user can then create repositories (with support for metadata – for eg. a README file) to which tarballs can be uploaded. At a later stage, you will extract these tarballs and walk through the directory structure as well. Any user can download the tarballs.

You will only be building the backend. The service will be accessible via a REST API. The project will be developed incrementally.

Task 2

This task deals with securing the REST API endpoints made in Task 1:

1. Security has to be an integral part of any development project, each API request should come with some sort of authentication credentials which must be validated on the server for each and every request.
2. Implement authentication for the REST API endpoints using JWT or Passport.js
3. Come up with a detailed list of functionalities that you think would suit an application of this nature. Do not worry about whether they are implementable or not.

Notes

-   You can implement JWT token authentication yourself even without PassportJS.
-   If you have old projects which use EJS/ Any other templating engine, try out local strategy of passport JS.
-   For testing your endpoints, use Postman. Create a collection and add all your endpoints to it with basic descriptions for each.
-   Ensure that you use async/await and relevant ES6 syntax only. Do not use callbacks.
-   Optionally, set up ESLint and a code formatter (for eg. Prettier) for the project. You will have to do this at some stage or the other anyway

Submission

Create a public repository on GitHub and create a branch called **task_2**. Add commits incrementally to this branch. After you are done with the entire task, **merge** it with the **master** branch but do not remove the branch. As you progress, you will be creating copies of the master branch for each task, and will be working on those only.

Resources

-   http://www.passportjs.org/docs/
-   https://expressjs.com/en/guide/using-middleware.html
-   https://medium.com/swlh/a-practical-guide-for-jwt-authentication-using-nodejs-andexpress-d48369e7e6d4
-   Git and GitHub Crash Course: https://www.youtube.com/watch?v=SWYqp7iY_Tc
-   For project structuring: https://github.com/djunicode/masters-information-portal/tree/development
-   For ESLint setup: https://www.youtube.com/watch?v=SydnKbGc7W8

Timeline

You have one week for this task. The task is relatively simple so try to spend more time on understanding the basics and read as much as you can about backend services and web applications. Get back to us for any doubts or queries. All the best!