Back End Developer

CHALLENGE

Context: We would like you to build a small API to test your knowledge of Back End Development and related technologies.

The server, once an hour, should connect to the API (refer to the below url) which shows recently posted articles about Node.js on Hacker News. It should insert the data from the API into a database and also define a REST API which the client (e.g. Postman) will be used to retrieve the data.

Hacker News URL: https://hn.algolia.com/api/v1/search_by_date?query=nodejs

The service should return paginated results with a maximum of 5 items and should be able to be filtered by author, _tags, title and also be searchable by month word (e.g. september) using the “created_at” field. Also, this should permit the user to remove items and these ones should not reappear when the app is restarted.

In order to access the endpoints, an authorization parameter with a JWT must be sent in the headers.

STACK

You must use the following technologies to build the app:

- Active LTS version of Node.js + NestJS.
- Database: MongoDB or PostgreSQL.
- ORM: Mongoose or TypeORM.
- API Doc: Swagger, should be exposed at /api/docs.
- Docker

CONSIDERATIONS

- Node.js version active LTS
- The server component should be coded in TypeScript.
- At least 30% test coverage (statements) for the server component.
- The whole project has to be uploaded to GitLab.
- The artifacts (server API) **must be** Dockerized.
- To start the project there should be a docker-compose that uses both images and the database image.

BONUS

- Tests and linters should run on a GitLab pipeline (gitlab-ci.yml).
- Good use of Typescript

Other than that, you are free to use any suitable npm or other libraries.

Send us your completed code as a public Gitlab repo URL emailed to nika@applydigital.com.

Include a README which explains anything we need to do to run the demo app, for example: setting up a database, forcing a data refresh to populate the DB for the first time, etc.

If you have any questions about the task, please let us know.

Once again, thank you for your time and we are looking forward to seeing the results!