Node.js Engineer

Your task is to develop a Node.js based server application that does the following. This should purely API’s that accept JSON inputs and produces JSON outputs.

User Authentication Via username/password:

Build API’s that allow clients to send username and password and the API should respond appropriately based on the validity of the username and password with a token.

Consideration for this module is below:

* Username can be an email or phone number
* Password can be a string of any length with minimum of 5 characters
* API should be rate limited. Choose your own logic for rate limiting and please justify the same as to why it was chosen.
* User account locking after N attempts, Where N can be configured somewhere.

User Authentication via one time link:

API to accept an email or phone number and generate a link. For the purpose of the interview & time, please do not actually send email or SMS. Instead, the API can respond with the one-time link as response.

Upon navigating to the link, the response should be a valid token for the respective user.

Considerations for this module are below:

* Link can be used only one time.
* Link should be valid for X minutes, where X is configured somewhere.

Get Time API:

This API is to be implemented to validate and verify the authentication process as part of the authentication modules.

This API takes in the token generated by the Authentication module and responds with the current time of the server. In case the token is invalid, it should respond with a status code of 401

Kickout API:

The purpose of this API is to kick out users from the server. This API is intended to be called only by an Admin person internally and hence authentication can be ignored for this in the current scope.

This API should accept the username of the user and invalidate all the tokens for the user. After calling this API, the user with the username that was kicked out should not be able to use any of their existing tokens to get a valid response from the “Get Time API”

Note: In case you are applying for a full stack, please implement the UI of your choice to use this API from the UI.

Considerations and limitations for solving the above problem:

* Please use bare minimum libraries to solve the problem.
* On the server side a framework as simple as express or something similar can be used. Please do not use any frameworks that generate API using commands.
* No other backend libraries are allowed for this problem.
* Use a database of your choice. Please include any SQL queries needed to generate the table and for seed data.
* For UI
  + please use minimum libraries. In case you are using React, please use only react and react-router. No other libraries are allowed.
  + Do not use any UI libraries like Material UI, bootstrap, Ant Design etc. Keep the UI plain and simple using the basic HTML elements.
* Keep it simple and easy to understand.
* Send the problem as a zip or push it on of the SCM tool from here and share us access to it. GitHub or bitbucket or Gitlab.