Eppendorf Cloud Software Engineer Challenge

We at Eppendorf follow a cloud native and serverless development approach on AWS to build the next generation of our IoT platform for laboratory equipment.

Challenge

In this challenge we want you to implement an authentication function. The authentication function could be part of a more sophisticate authentication component (this is not part of the challenge). The authentication function checks if provided credentials (username and password) are correct according to an entry in a DynamoDB table. To keep things simple credentials are username and password as known as BasicAuthentication.

- Create a Lambda function that verifies credentials stored in DynamoDB table.
  - create a function that reads the dedicated header field `Authorization: Basic ...` provided by the http request towards the function.
- Create a DynamoDB table that stores username and password in a secure way.
  - Provide some credentials to test your code.
- Create the infrastructure as code to deploy the corresponding infrastructure components (Lambda function and DynamoDB table).
  - Preferred Terraform but its also fine if you go for alternatives you are more familiar with.
- Provide documentation regarding your solution and how to run and deploy it.

Bonus

If you have time to kill expose your lambda function via an API Gateway and specify the endpoint using Open API Spec.

Additional Notes

- It's up to you what technologies/libraries/frameworks you use. You should be able to justify your decision though.
- Quality is key! Think of how to ensure the quality of your solution and how to measure it.
- We do not expect a production ready solution here. Focus on providing a clean and reasonable codebase. Additionally consider typical challenges which come with a cloud based environment in a growing project setup.
- We love Git. So feel free to send us the link to your Git repository on GitHub, GibLab or alike.

We value your personal life and you probably have a full-time job. Please timebox yourself and don't put too much time and effort into the completion of the challenge.

Have fun & Good luck!