HACKATHON 01/12/23

01 Dec 2023 / 6 Days Hackathon

OVERVIEW

It's true that being a specialist in one's field and gaining mastery of a particular aspect of technology has distinct advantages, but as technology rapidly expands and evolves, industries are constantly changing. With this change comes the need for skills branching out to multiple technologies and the ability to build end to end products to potentially transform the way people live around the world!

This hackathon is open to all developers who have an eye for design and passion for code. Participants can either hack individually or as a team of two. Take advantage of this opportunity to learn with other teams, showcase your talent, and compete for prizes!

What are we looking for in the submission?

We are looking for prototypes that are innovative, technologically advanced and unique. We require MEAN stack applications that help us to manage Sensor data files uploaded to an aws s3 account . Participants who are interested in Frontend can handle frontend tasks alone, same applicable to Backend interested candidates as well. Or as a team of two one can handle Frontend and other can handle Backend. Full stack expertise participants can handle both Frontend and Backend tasks. You can make submissions based on the requirements below.

Minimum Requirement (Entry level)

On Frontend (Angular preferred)

- Implement a feature to upload json file to s3 account (s3 bucket)
- Implement a feature to view all uploaded files to s3 account (s3 bucket)
- Implement a feature to read the file directly from S3 and display the data (voltage & time) in a line chart in your frontend application when you click on view file button (please find the sensor_data.json data attached)

On Backend (Nodejs preferred) :

- Implement a REST API which can handle the following logic
- load the aws s3 credentials from config
- Implement a feature to upload file to s3 account (s3 bucket)
- Implement a database in the backend (MongoDb preferred) to store all data
- You are supposed to store information like file name , s3 upload url and date of upload to the database used (MongoDb preferred)
- The data shared between frontend and backend should be in json format
- Implement a REST endpoint to read the json file and send data to frontend (to identify file use file id or name as parameter)

Plus Points (Intermediate)

- Implement proper error handling and show error messages to users
- Proper documentation of code and proper documentation of deployment instructions

- Aesthetically styled responsive frontend (you can use custom css or sass or any third party styling framework like bootstrap)

Extra Points (Experienced / Wizard)
- Implement a feature to enter aws s3 credentials for the first time application starts and store it in the database for further use instead of loading it from config.
- Deploy the application (for example to heroku) and share the link

NOTES

If you complete any or all of the above mentioned levels please do submit. Also in team submissions please mention your role.

IDEAL STACK

MEAN Stack (Preferred), you can also submit any technology of your choice.

PREREQUISITE

- Github/Gitlab/Bitbucket/heroku account
- Aws s3 account (you can create a trial account)

If you have any doubts regarding the requirement or anything related to the activity, Email me at kiran.g@cavliwireless.com