EyeROV™

Problem Statement for Senior Full-Stack Developer

About EyeROV

EyeROV is the maker of India's first commercial Underwater Drones/Remotely Operated Vehicle. EyeROV is a young and dynamic company, funded by BPCL, GAIL reputed Oil and Gas Companies in the Industry which builds marine robotics solutions for Energy, Defense, Infrastructure and Maritime Industry.Founded in 2017 by IIT Alumnus, EyeROV has been delivering world-class products and solutions to national and global clients like DRDO, BPCL, Maersk, Railways etc.EyeROV has won numerous awards including National Startup Award 2021 by TDB, Department of Science & Technology, Best Tech Design Award in 2020.

Task 1

For this assignment, you will be creating an image-map dashboard that has to convey some information in the best possible UI format.. The data is provided as JSON shown below.

```
{
     "title": "Step - Apron step",
     "coords": "55,167,764,270",
     "shape":"rect"
  }
```

Create a react.js based application in which the app needs to create an image map according to the JSON data. Create the app without using any other image-map libraries.
You can use HTML image map for the development. You can create the UI according to your interest ,but make sure you are solving the task as mentioned above.

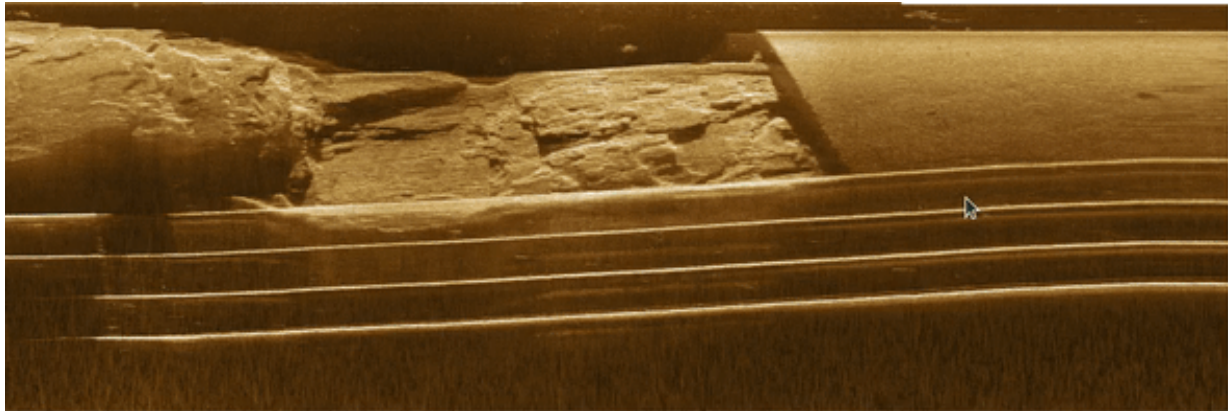| title	Title for the area
coords	Coordinates of the area
shape	Shape of area

Table 1

Fig. 1

1. Read the data from the provided JSON '' and display the image map according to it
2. When the user hovers the area, show an infobox showing the contents from `"title":` property.

Task 2

Create a form in which the user can input the data as shown in Table 1. After submitting, 3 input fields should be reflected in the JSON file as well as to the user. The form needs to collect data from the user and at the backend, the code needs to update the JSON file.
You can use express.js or similar web frameworks for the node.js backend.

Please ensure that your repository/project has a README.md which lists the exact steps required to run your application.

Scoring details

The solution that you submit will be judged on the following parameters —

- **[20 Points]** - The app should have good UI/UX with regards to the spacing, layout.
- **[15 Points]** - Quality of the code, i.e. using same variable names, breaking the code into smaller functions/components if required, using comments as and when required etc.
- **[5 Points]** Submit code as GitHub link.
- **[5 Points]** Complete both task 1 and task 2

Input data

[Sample JSON data](#)

[Sonar map image](#)

Submission Details

1. You can submit the project as a zip file or as a GitHub link. (Submitting as a GitHub link will give you additional points)
2. You can send your doubts/clarification to all people (**reply to all**) in a consolidated email
3. You can submit task1 and task2 independently if you wish. Submitting both in single mail is preferred.

We hope you will have fun with the assignment!. While we're interested in the complete implementation of the task, feel free to submit your solution even if you feel it's not up to the mark; we're as interested in your method of solving the problem as we're interested in the end result itself.