Tasks for Co-Committee Interviews 24-25

Note:

1. **All the below tasks are optional! However, doing so lets us know your skills.**
2. All tasks can be attached to the given recruitment form at the end.
   a. Tech and Events Tasks are to be submitted via **GitHub (mandatory)** and the GitHub Link is to be provided as a Task Submission Link.
   b. Other department Tasks are to be submitted via the **Google Drive Link**. Make sure to give view access to **info.djss4ds@gmail.com.**

Technical Tasks

Task 1: GitHub Skills

You have to:

* Fork the **repo** with the repository name as your_name_s4ds:

  Link of the repository: https://github.com/vedantnaik09/s4ds_task1.git

* Clone the forked repo from **your** account to your code
* Create a new branch named '{your_name}_dev'. Make sure you are on that branch
* Fix the issue in the issues tab of the repo
* Once your task is done create a PR with your branch with the updated fixed codes.

Note: This task is only to assess your GitHub skills.
Resources:
How to fork and create pull requests:
https://youtu.be/a_FLqX3vGR4?si=HUK0vq9A7XNHIL1p

Task 2: Fetching API

In today's fast-paced world, people constantly look for new and exciting recipes to try at home. However, finding the right recipe can be a challenge. Existing recipe websites often have cluttered interfaces, irrelevant search results, and effective filtering options.

This leads to frustration for users who spend significant time browsing through countless recipes before finding something that suits their dietary needs, skill level, or available ingredients.

We need a user-friendly recipe discovery website that addresses these challenges by:

- Providing a clean and intuitive interface for easy browsing.
- Implementing effective filtering options based on cuisine, difficulty level, meal type, and dietary restrictions.
- Offering a robust search functionality to find recipes by name or specific ingredients.
- Displaying clear and concise recipe information, including preparation and cooking times, ingredients list, and detailed instructions.
- Add a feature to search/filter recipes
- Pagination

This website will empower users to discover delicious and suitable recipes quickly and efficiently, ultimately enhancing their home cooking experience.

NOTE: Your code should be pushed on GitHub with proper commits from time to time. We want to see your progress. Refer GitHub instructions below

👏**Brownie Points:**
- Hosted website
- Responsive
- UI/UX
- Tailwind
- Animations
- Use of external libraries

Refer to the videos below:
Github basic commands tutorial: https://youtu.be/HkdAHXoRtos?t=42
React Tutorial: https://youtu.be/f55qeKGgB_M?si=CUx9EvKMySfqMpjP (Skip firebase project part)
For handling the fetched data using the map function: https://youtu.be/tEMrD9t85v4?t=368 (Watch till 1:00:00)

Task 3: Previous Work Submission (if any)
Objective: Showcase your previous work in the following areas:
- Web Development
- Full Stack or any other backend related projects
- UI-UX Design

Instructions:

Attach Github Links to your previous works in the provided Google Form and **make sure its visibility is set to public.**

👏 **Brownie Points:**
Provide a brief description of the work and the tools used for each
Submission

Feel free to contact below for any queries related to the Technical Tasks:
Aaron Sequeira : +91 8291694896

Events Task

Task 1: Come up with a unique problem statement for Datahack 3.0.

Description: Give the judging criteria for the above (how will you score it .Explain what all is expected for one to make out of the PS)

👏**Brownie Points**: Think of a unique idea using your creativity to create an event for our committee.

(Refer to our website, Instagram page, or LinkedIn and understand the types of events that we do)

Task 2: Preprocessing and EDA

Objectives for EDA:

- Use the given dataset to find underlying insights and patterns. Observe the trends seen in the data to come up with an informed conclusion.
- Pay close attention to the data to find any anomalies and outliers which lead to unusual inferences.

Requirements for the task:

- Load up the data and perform relevant preprocessing tasks (checking the tendencies of the data, ensuring cleanliness, etc.)
- Visualize the data with suitable plots, identifying the relationship between the variables as well as the outliers and anomalies
- Come up with meaningful conclusions about the data based on your observations

You have to:

1. Fork the repo with the repository name as your_name_s4ds:
   https://github.com/priyansh1908/S4DS-TASK.git
2. Clone the forked repo from your account to your code
3. Create a new branch named '{your_name}_s4ds'. Make sure you are on that branch
4. Add your work to the respective folders and commit the changes

REFERENCE: EDA

Task 3: Model Fitting

Objectives for Model Fitting:

- Accuracy: Achieve high predictive performance on unseen data.
- Generalization: Ensure the model performs well across data.

Requirements for Model Fitting:

- Make sure that the data is clean and is applicable to a model
- The selection of the algorithm should be done taking into consideration the nature of the data and the context of the problem
- Evaluate the performance of the model by employing relevant cross-validation techniques.

REFERENCE: Model Deployment, Scikit learn documentation, Scikit learn video

👏**Brownie Points**: Deploy your model on a suitable platform.

(FOR TASK-2 AND TASK-3)

You have to:

1. Fork the repo with the **repository** name as {your_name}_s4ds:

   Link of the repository: https://github.com/priyansh1908/S4DS-TASK.git

2. Clone the forked repo from your account to your code
3. Create a new branch named '{your_name}_task'. Make sure you are on that branch
4. Add your work to the respective folders and commit the changes

Feel free to contact below for any queries related to the EventTasks:
Jenil Shah : 8779552946

<u>Creatives Task</u>

Task 1: UI-UX Website Design

Objective: Design a creative and functional website for DataHack 3.0
Theme: Marvel.
Requirements:

● Homepage:
  ○ Prize Pool:
    🥇 First Prize: ₹60,000
    🥈 Second Prize: ₹30,000
    🥉 Third Prize: ₹20,000
  ○ Domain Section: Showcase domains such as Data Analysis, Machine Learning, GenAI, MLOps
  ○ Navigation Bar: Include navigation options for easy access to different sections.
  ○ Timeline for Events: Provide a schedule for how the events will proceed. (you can use your imagination here)
  ○ Prices Section: Highlight the prize pool for the event.
  ○ Footer: Include a footer with relevant information and links.

Instructions:
- **Figma is the preferred tool**
- Use your imagination to make the website as creative as possible.
- Incorporate the Marvel theme throughout the design.
- Upon completion, include the link to your design in the provided Google Form.

👏 **Brownie Points:**
- Add an interactive element or animation to the homepage.
- Make a responsive design suitable for Mobile view!

Task 2: Poster Making

Objective: Create a poster for Data Hack 3.0 with a Marvel theme.
Requirements:
- Event Date: 5th August.
- Prize Pool:
  🥇 First Prize: ₹60,000
  🥈 Second Prize: ₹30,000
  🥉 Third Prize: ₹20,000
- Theme: Marvel.
- Additional Information: Use your creativity to include any additional details you find relevant.

Instructions:
- **Use only Canva to make the posters**
- Design the poster using the given specifications.
- Incorporate the Marvel theme prominently.
- Submit the poster design in the provided Google Form.

👋**Brownie Points:**
- Include a QR code that links to the event registration page or a promotional video.

Task 3: Previous Work Submission (if any)

Objective: Showcase your previous work in the following areas:
- Video Editing
- Poster Making
- UI-UX Design

Instructions:
Attach links to your previous works in the provided Google Form.

👋 **Brownie Points:**
- Provide a brief description of the work and the tools used for each submission.

Submission
- All tasks should be submitted via the provided Google Form.
- Ensure all links and files are accessible and correctly formatted.

Feel free to contact below for any queries related to the Creatives Tasks:

Aayushi Singh : 8108143536

Marketing Task

Task: Market Research
- Find at least 10 companies who would be willing to partner with us.
- Find a Point of Contact(POC) from that company who would help us connect to the company, for example, Marketing Managers, product managers, business development executives, CFOs & CEOs(For small companies).
- You can use tools such as LinkedIn to find companies and apollo.io to find the emails of the POCs.

👋**Brownie Points:**
- If you can find the phone number of the POCs.

NOTE:
- Focus more on local companies and startups, and domains such as Artificial Intelligence, Data Science, and Machine learning.
- Please do not add companies such as Google, Tesla, apple, etc.
- You can have multiple POCs from the same company.
- Create a new sheet with your name, copy the format from the sample sheet, and fill in the data in the sheet.

Link to Sample Sheet
How to use Apollo

Feel free to contact below for any queries related to the Marketing Tasks:

Jay Topiwala : +91 7021369396

Editorial Task

Task 1: Article Writing

Objective: Write a short article/blog on any one of the following topics:
- An introduction to ResNet-152.
- Data Analysis in Medicine

Instructions:
- Write an appropriately formatted article (150-200 words) on any one of the following topics, and break it into paragraphs and headings.
- Images and visuals can be incorporated to make the article more interesting.
- Ensure that your ideas transition smoothly from one to the next. Use transitional phrases to guide the reader.

👏Brownie Points

- Provide relevant and credible sources at the end of the article.
- Avoiding the use of jargon and making sure the article is understandable to a person not in the tech field

Task 2: Story Writing

Objective: Write a short story introducing yourself. Your story should include at least two characters and a dolphin.
Use the characters to reveal interesting facts about yourself, weaving these details naturally into the narrative. Candidates will be penalised if AI-generated content is caught

Submission
To be presented on the day of the interview. The written content can be shown on a mobile phone or laptop at the convenience of the candidate.

Feel free to contact below for any queries related to the EditorialTasks:

Vanshik Waghela : +91 83560 10837

Contact Us: