Brainwave

MATRIX SOLUTIONS

TASK LIST FOR 2nd PHASE OF INTERNSHIP

Below are the details of the Task 2 assigned to you in your respective domain. Some domain might have two options separated with "or". Interns are free to do any one of the tasks.

All the best and we wish all of you achieve all your desires and future aspirations.

Regards
Training Management Team
Brainwave Matrix Solutions

1- Blockchain Technology Intern

a) Basic smart contract on Ethereum

Create and deploy a basic smart contract on the Ethereum blockchain using Solidity. This project helps you understand the basics of smart contracts and the Ethereum network. Deploy the contract on an Ethereum test network using tools like Remix and MetaMask.

OR

b) Supply chain tracking system

Develop a supply chain tracking system using blockchain technology to ensure transparency and traceability of products. This project involves creating smart contracts and a frontend for tracking products. Write smart contracts for recording and tracking product information.

Report submission before 27 June 2024.

2- Mobile App Development Intern

NEWS READER APP

As an intern, your task is to Design and develop a news reader app in which latest and updated news are displayed. You can add as many features you like.

OR

FITNESS TRACKER APP

Build an app for tracking fitness activities such as workouts, runs, and calorie intake

Report submission before 27 June 2024

3- Web Development Intern

a) Create a blogging platform

Build a dynamic website where users can sign up, create, edit, and delete blog posts. Implement features like user authentication, comment sections, and a responsive design for optimal viewing on various devices.

OR

b) Create an e-commerce website

Create an e-commerce website using CSS, HTML,and JavaScript.You can add any features you can think of.

Report submission before 27 June 2024

4- UI/UX Design Intern

User-centered design for healthcare app

Design two designs for user-centered healthcare app that helps patients manage their health conditions, track medications, and communicate with healthcare providers. Conduct user research, create user personas, and prioritize accessibility and usability considerations in the design process.

Report submission before 27 June 2024.

5- Java Programming intern

Create a Hospital Management System

Develop a sophisticated Java program to manage various aspects of a hospital or healthcare facility. This system should include modules for patient registration, appointment scheduling, electronic health records (EHR), billing and invoicing, inventory management for medical supplies, and staff management.

Report submission before 27 June 2024.

6- Python Programming intern

Create a Inventory Management System

Build a Python program to manage inventory for a store or warehouse. The system should allow users to add, edit, and delete products, track inventory levels,

and generate reports such as low- stock alerts or sales summaries. Implement features like user authentication,
data validation, and graphical user interface (GUI) for better usability.

Report submission before 27 June 2024.

7- C++ Programming intern
Create an online banking system

Create a comprehensive C++ program for an online banking system. This system should allow users to create accounts, deposit and withdraw funds and transfer money.
Report submission before 27 June 2024.

8- AI/ML intern
CREDIT CARD FRAUD DETECTION

Develop a fraud detection model to identify fraudulent credit card transactions. Use techniques like anomaly detection or supervised learning with imbalanced data**.**

OR

Text to image generation Application

Develop a text-to-image generation application that takes textual descriptions as input and produces corresponding visual representations or images. The application should leverage techniques from the field of generative models

Report submission before 27 June 2024.

9- Cyber Security Intern
Create a malware detection project

Create any malware detection tool that can detect malwares or build a sandbox environment for analyzing malware samples in a controlled environment. Implement features for executing malware samples, monitoring behaviour, and analyzing malicious activities.
OR

PASSWORD STRENGTH CHECKER

Develop a tool to assess the strength of passwords entered by users. Implement algorithms to analyze factors such as length, complexity, and uniqueness to provide feedback on password strength.
Report submission before 27 June 2024.

10- Data Science/ Data Analytics

Social Media Sentiment Analysis

Analyze social media data (e.g., Twitter) to understand public sentiment towards specific topics, products, or events. Use natural language processing (NLP) techniques to preprocess text data, extract sentiment scores, and visualize sentiment trends over time.

Report submission before 27 June 2024.

11- Cloud Computing Intern

E-commerce site or any static website with cloud storage

This project involves creating a simple HTML/CSS website and deploying it to Google Cloud.

OR

Chat Application with Firebase

Create a real-time chat application using Firebase. This project involves using Firebase services like Firestore, Authentication, and Hosting.

Report submission before 27 June 2024.

12- Database Management Intern

Database Development

Develop a database for any entity you like i.e hospital ,library, school, movie rental, online store.This project involves more queries and database design.
For example: For a e store database you can design tables for products, customers, orders, and payments. Write SQL queries to handle customer orders.

Report submission before 27 June 2024.

13- Business Development/ Marketing/Finance intern

Conduct a comprehensive market analysis and develop a strategic business development plan which can be followed to get clients for our IT and Consulting Business and bring 50 followers to our linkedin page through your marketing skills and keep a track of it.

Report submission before 27 June 2024.

14 - Graphic Design Intern

Design 2 posters for a tech hackathon also design two designs for certificates for the winners of hackathon

Report submission before 27 June 2024.

15- Digital Marketing and SEO intern

Analyze any e-commerce website and marketing analytics data to track key performance indicators (KPIs) and prepare reports for management. This can include metrics such as website traffic, conversion rates, keyword rankings, and social media engagement and prepare a report listing ways to improve their site's SEO also bring 50 followers to our linkedin page through your marketing skills and keep a track of it.

Report submission before 27 June 2024.

16- Content Writing Intern

Create 2 High-Quality Blog Posts on Recent Tech Developments
Create a post depicting advantages of linkedin and how one can leverage them to ace their careers
Report submission before 27 June 2024.

17- Operations/HR intern

Develop and Implement an Employee Relations Support Program
Create a structured and efficient program that provides assistance with employee relations matters such as conflict resolution, disciplinary actions, and grievance handling. This can involve conducting initial investigations, documenting incidents, and providing administrative support to HR managers.**.**

Report submission before 27 June 2024.