Data Science Tasks & Instructions — CodeAlpha

Data Science — Internship Overview

This internship program offers practical experience in data science, machine learning, and statistical modeling. CodeAlpha is a leading software development company specializing in data-driven innovation and Al solutions. The internship empowers students to work with tools like Python, R and libraries such as Pandas, Scikit-learn, and TensorFlow. Interns will learn data preprocessing, exploratory data analysis, building predictive models and deploying machine learning solutions. With expert mentorship and hands-on projects, interns will gain the skills needed to solve real-world problems using data science techniques.

🎁 Internship Perks

- Internship Offer Letter
- Completion Certificate (QR Verified)
- Unique ID Certificate
- Letter of Recommendation (based on performance)
- Job Opportunities / Placement Support
- Resume Building Support

📌 Instructions for Interns

- 1. Share your internship status on LinkedIn, tagging @CodeAlpha.
- 2. Complete the **assigned projects** within the mentioned time frame.
- Upload your complete source code to GitHub in a repository named: CodeAlpha_ProjectName
- 4. Post a video explanation of your project on LinkedIn with GitHub repo link.
- 5. Submit your completed task using the **Submission Form**.
- 6. Complete any 1 out of the 2 tasks listed below (from your domain).

Data Science Task List

(Complete any 1 of the following tasks)

TASK 1: Car Price Prediction with Machine Learning

- Collect car-related features like **brand goodwill, horsepower, mileage**, etc.
- Train a **regression model** to predict car prices based on these features.
- Handle data preprocessing, feature engineering, and model evaluation
- Use Python libraries like Pandas, Scikit-learn and Matplotlib for the workflow.
- Understand real-world applications of machine learning in price prediction.
- DOWNLOAD DATASET FROM <u>here</u>

TASK 2: Sales Prediction using Python

- Predict future sales based on factors like advertising spend, target segment and platform.
- Prepare data through cleaning, transformation and feature selection.
- Use regression or time series models to forecast sales.
- Analyze how changes in advertising impact sales outcomes.
- Deliver actionable insights for business marketing strategies.
- DOWNLOAD DATASET FROM here

Important Note

To be eligible for the internship certificate, participants must complete the first task.

Submission of the *first task* **is compulsory.** If the first task is not submitted, certificate generation may not be possible.

Please complete and submit your first task carefully using the official submission form.

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Submission Details

A submission form will be shared in your respective **WhatsApp group**. You are required to submit your completed task only through that form. Please follow the instructions mentioned in the form carefully to ensure your submission is accepted.

Contact Information

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