

Data Analytics Tasks & Instructions — CodeAlpha

Data Analytics — Internship Overview

This internship program provides hands-on experience in data analysis, visualization, and interpretation. CodeAlpha is a leading software development company focused on data-driven decision making and business intelligence. The internship empowers students to work with tools like Python, SQL, and visualization libraries to extract insights from large datasets. Interns will learn data cleaning, statistical analysis, and reporting techniques, gaining practical exposure through real-world projects. Expert guidance and a collaborative environment will help interns develop skills to support data-driven strategies effectively.

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
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Instructions for Interns

1. Share your internship status on **LinkedIn**, tagging **@CodeAlpha**.
 2. Complete the **assigned projects** within the mentioned time frame.
 3. 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 3 or 2 out of the 4 tasks** listed below (from your domain).
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Data Analytics Task List

(Complete any 2 or 3 of the following tasks)

TASK 1: Web Scraping

- Use Python libraries like **BeautifulSoup** or **Scrapy** to extract data from websites.
 - Identify and collect **relevant datasets** from public web pages.
 - If you don't code, use automated tools like **Octoparse** or **ParseHub**.
 - Learn to handle **HTML structure and web navigation** to gather accurate data.
 - Create **custom datasets** tailored to specific analysis needs.
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✓ TASK 2: Exploratory Data Analysis (EDA)

- **Ask meaningful questions** about the dataset before analysis.
 - **Explore the data structure**, including variables and data types.
 - Identify **trends, patterns and anomalies** within the data.
 - **Test hypotheses and validate assumptions** using statistics and visualization.
 - Detect potential **data issues or problems** to address in further analysis.
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✓ TASK 3: Data Visualization

- Transform raw data into **visual formats** like charts, graphs, and dashboards.
 - Use tools like **Matplotlib, Seaborn, or Tableau** for creating visuals.
 - Design visuals that **enhance understanding** and reveal insights clearly.
 - Craft **compelling data stories** that support decision-making.
 - Build a **strong portfolio** with impactful and well-designed visualizations.
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✓ TASK 4: Sentiment Analysis

- Analyze text data to classify it as **positive, negative or neutra**.
 - 2. Use **NLP techniques** and lexicons to detect specific emotions.
 - 3. Apply analysis on data from sources like **Amazon reviews, social media, and news sites**.
 - 4. Understand **public opinion and trends** through sentiment patterns.
 - 5. Use results to **inform marketing, product development, or social insights**
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Important Note

Internship Completion Criteria:

To be eligible for the internship certificate, participants must complete a minimum of **two or three tasks**. Submitting only one task will be considered **incomplete** and certificates will **not** be issued in such cases.



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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