



**CodEvo**

Coding the Future, Evolving the Present

# **DATA ANALYST TASKS**

## **(90 DAYS)**

# **TASKS**

Task 1: Analyzing Restaurant Reviews (Beginner Level)

Task 2: Analyzing Public Library E-Book Lending Trends (Beginner Level)

Task 3: Analyzing Public Bike Sharing Ridership (Intermediate Level)

Task 4: Analyzing Consumer Smartphone App Reviews (Intermediate Level)

Task 5: Analyzing Indian Government Open Data (Advanced level)

Submit Before 15 July 2024

# TASK 1: ANALYZING RESTAURANT REVIEWS

1 Point

## Description:

Gain experience with real-time website data. Collect, organize, and summarize reviews to understand customer sentiment. Develop skills in data handling and analysis.

**Data Source:** Yelp: A popular online review platform for restaurants(<https://m.yelp.com/>).

## Requirements:

- Choose any restaurant. Read through recent customer reviews, paying attention to overall customer sentiment (positive, negative, or neutral).
- Organize data in a spreadsheet with ratings and key points (min. 20-30)
- Analyze data to find average rating and frequent positive/negative reviews. (e.g., "delicious food," "slow service," etc.).
- Present findings in a concise report highlighting key aspects. Include the average rating, along with a few key points about the most common positive and negative aspects mentioned in reviews.
- Make it accessible on your GitHub repository.

## TASK 2: ANALYZING PUBLIC LIBRARY E-BOOK LENDING TRENDS

1 Point

### Description:

Explore e-book lending trends using a public dataset. Clean, analyze, and visualize data to reveal insights on virtual library usage. Present findings in a clear and visually engaging manner.

**Data Source:** <https://www.kaggle.com/datasets/saurabhbagchi/books-dataset>

### Requirements:

- Explore e-book lending trends using this Free E-Books dataset.
- Clean and analyze data to identify popular genres and download trends over time(e.g., fiction vs. non-fiction).
- Create visualizations using Excel or Tableau Public(e.g., bar chart, line chart, pie chart and scatter plot etc.).
- Prepare a clear and concise report summarizing your project(you can include screenshots or embedded visualizations).
- Summarize findings in a concise report for portfolio showcase can include key insights(Popular genres, trends over time.), limitations(Doesn't capture borrowing durations.) or future(Explore user demographics, borrowing patterns.).

## TASK 3: ANALYZING PUBLIC BIKE SHARING RIDERSHIP

4 Points

### Description:

Explore public bike-sharing data to analyze ridership patterns. Clean, analyze, and visualize data for insights. Present findings in a clear, visually appealing format.

**Data Source:** <https://www.kaggle.com/lakshmi25npathi/bike-sharing-dataset/tasks>

### Requirements:

- Explore Bike Sharing dataset on Kaggle.
- Clean and analyze data to identify peak ridership periods, popular stations, user type variations, and weather influences.
- Use Tableau Public or Power BI to create visualizations like line charts, maps, and stacked bar charts.
- Prepare a clear report summarizing insights and limitations.
- Discuss how this approach could adapt for Indian bike-sharing data by focusing on specific cities and relevant data points.
- Deliverables include a concise summary, interactive dashboards, and considerations for adaptation to Indian context.

## TASK 4: ANALYZING CONSUMER SMARTPHONE APP REVIEWS

4 Points

### Description:

Analyze user reviews for popular smartphone apps, showcasing data cleaning, advanced analysis, and sentiment analysis techniques. Present insights visually for a clear understanding.

**Data Source:** <https://www.kaggle.com/datasets/prakharrathi25/google-play-store-reviews>

### Requirements:

- Exploring Google Play Store reviews dataset on Kaggle.
- Clean data, conduct sentiment analysis, and analyze trends in app ratings.
- Visualize insights using Tableau Public or Power BI, including sentiment distribution , word clouds and rating trends.
- Create insights on sentiment trends, frequently mentioned keywords, and app rating trends over time.
- Prepare a concise report summarizing methodology and key findings. Deliverables include interactive dashboards showcasing insights.

## TASK 5: ANALYZING INDIAN GOVERNMENT OPEN DATA

5 Points

### Description:

This project aims to demonstrate proficiency in data cleaning, analysis, and visualization using datasets from India's Open Government Data Platform. Explore relevant datasets, apply advanced techniques, and present insights interactively.

**Data Source:** <https://data.gov.in/>

### Requirements:

- Embark on an insightful journey leveraging datasets from India's Open Government Data Platform.
- Select a dataset aligned with your interests, ensuring manageability within the project scope.
- Employ data acquisition techniques to procure the chosen dataset in CSV or Excel format.
- Execute meticulous data preprocessing and cleaning, addressing missing values and formatting discrepancies adeptly.
- Dive into data analysis, unveiling trends and disparities across sectors or regions.
- Utilize visualization tools like Tableau Public to craft interactive dashboards, employing bar charts, line charts, and maps to convey findings vividly.
- Embrace the challenge, navigating through Indian data formats and unlocking valuable insights.

# SCORES

Tasks	Level	Points
Task 1	Beginner	1
Task 2	Beginner	1
Task 3	Intermediate	4
Task 4	Intermediate	4
Task 5	Advanced	5

❖ **SCORE 15/15 FOR SUCCESSFUL COMPLETION OF INTERNSHIP**



# INSTRUCTIONS

- ☐ You will need to complete all 5 tasks (2 Beginner, 2 Intermediate and 1 Advanced level) and score 15/15 for successful completion of the internship.
- ☐ The internship program will run from April 15, 2024, to July 15, 2024 (90 days).
- ☐ Maintain a separate GitHub repository (name as “CodEvo Solutions DA” for all the tasks and share the link of the GitHub repo in the task submission form (it will be given later through email).
- ☐ Update your LinkedIn profiles.
- ☐ A TASK SUBMISSION FORM will be provided to you via email shortly. In the meantime, please proceed with your assigned tasks.
- ☐ To showcase your work, create a video demonstrating your efforts and the outcomes of the tasks. The video should highlight your problem-solving skills, coding proficiency, and creativity in implementing solutions.
- ☐ Once created, host the video on LinkedIn to showcase your work and build credibility among your peers and potential employers. Tag @CodEvoSolutions in your post and include the hashtag #CodEvoInternship to ensure maximum visibility.
- ☐ Additionally, use relevant hashtags such as #DataAnalytics, #DataAnalysis, #Internship, #CodEvo and #CodingChallenge to reach a wider audience and attract potential collaborators or mentors.



# **THANK YOU**

Team CodEvo Solutions

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