Software Development Internship

Technical Assignment

Content

1 Overview

Thank you for applying to our internship program. This short technical challenge is designed to evaluate your programming fundamentals, logical thinking, and ability to write clean, understandable code. You are free to use any programming language of your choice.

2 Objective

Build a small command-line program to demonstrate your ability to structure code, solve problems, and follow clear requirements.

You may choose one of the following tasks.

3 Option 1 – File Organizer

Write a script that organizes files in a given folder by file type.

3.1 Requirements

- User provides a folder path as input.
- The script scans that folder (not subfolders).
- It creates subfolders such as: Images, Documents, Videos, Others.
- Each file is moved into the appropriate subfolder based on its extension.

3.2 Bonus

- Show a summary of the number of files moved per category.
- Add a --simulate mode that shows what would happen without moving files.

4 Option 2 – Command-Line To-Do App

Create a simple task manager that runs in the terminal and stores tasks in a file.

4.1   Requirements

- add "Buy milk" → adds a task

- list → lists all tasks with index numbers

- done 2 → marks task #2 as done

- delete 3 → deletes task #3

- Store tasks in a file (e.g., tasks.txt or tasks.json)

4.2   Bonus

- Store creation timestamps or priorities.

- Support tags or categories.

5   Option 3 – Word Frequency Analyzer

Write a program that analyzes a .txt file and reports word frequencies.

5.1   Requirements

- Accepts a path to a text file.

- Ignores punctuation and case.

- Displays the top 10 most frequent words with their counts.

5.2   Bonus

- Generate a simple bar chart of the top words.

- Handle large files efficiently.

6 Submission Guidelines

- Upload your code to a GitHub repository (or send as a ZIP if needed).

- Include a README.md file with:

  - Which option you chose

  - How to run your program

  - Which language and tools you used

  - Any extra features or notes

- Use clear file and folder names.

- If you use Git, meaningful commit messages are appreciated.

7 Use of AI Tools

You are allowed to use online resources, including AI tools, as part of your workflow. However, you must be able to understand, explain, and modify your code. If selected for the next step, you may be asked to:

- Walk us through your code in a short review session.

- Make small live changes to demonstrate understanding.

8 Evaluation Criteria

- Code clarity and structure

- Problem-solving approach

- Functional correctness

- Optional: Git usage and documentation

- Bonus: Extra features, test coverage, attention to detail

9 Deadline

Please submit your solution by **Wednesday 13 Aug 2025 11:59 pm**. If you need more time or have any questions, let us know.

10 Company Information

10.1 Company Profile

[Click here to view the company profile.](#)

10.2 Company Projects Portfolio

[Click here to view the company projects portfolio.](#)