

OOP: Project Weekly Billing

Overview

- Data : [Weekly Timesheet of the Team](#) (csv file)
- Config : Create a manual config file where the user changes the settings. (INI File / JSON File)
- Report : Report should be generated as HTML and JSON file

Implementation

Create Project and Employee classes

Project (+ are properties and – are methods)

- + employees - All the employees working in the project
- + tags - All the tags related to the project
- + billing_amount_in_inr - Total billing amount for the project
- + billing_amount_in_usd
- + total_hours_spent
- calculate_activity_summary() → Table with Rows as Tags and Columns as Employees
- calculate_employee_summary() → Table of Employee vs hours_spent
- write_report_to_json()*
- write_report_to_html()**
- display_bar_chart() → Shows employee vs billing amount

Employee (+ are properties and - are methods)

- + projects - All the projects the employee is a part of
- + tags - All the tags used by the employee
- + billing_rate_in_usd
- + total_hours_spent
- + total_billing_amount
- calculate_activity_summary() → Dictionary - {tag: hours_spent}
- calculate_project_summary() → Dictionary - {project: hours_spent}
- write_report_to_json()*
- write_report_to_html()**
- display_bar_chart() → Shows Project vs Billing amount

General instructions

1. Read how can a custom object be serialized into json
2. Handle errors wherever necessary. The program should not crash at any cost. It should gracefully exit
3. * Understand the information present and come up with your own json format which provides a summary of project/employee
4. ** No need to implement in the first version.