

Project Tracker Application

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The Project Tracker is an application developed to help users to monitor, manage, and track the progress of various aspects within a project to meet all the defined requirements.

Overview of the **functionalities** of the app:

- Add, modify and delete projects / tasks
- View the added projects / tasks as a well-defined table
- Download the project details as a csv file
- Provide insightful visualizations of the progress made on each project
- Store data collected in a JSON file to maintain history

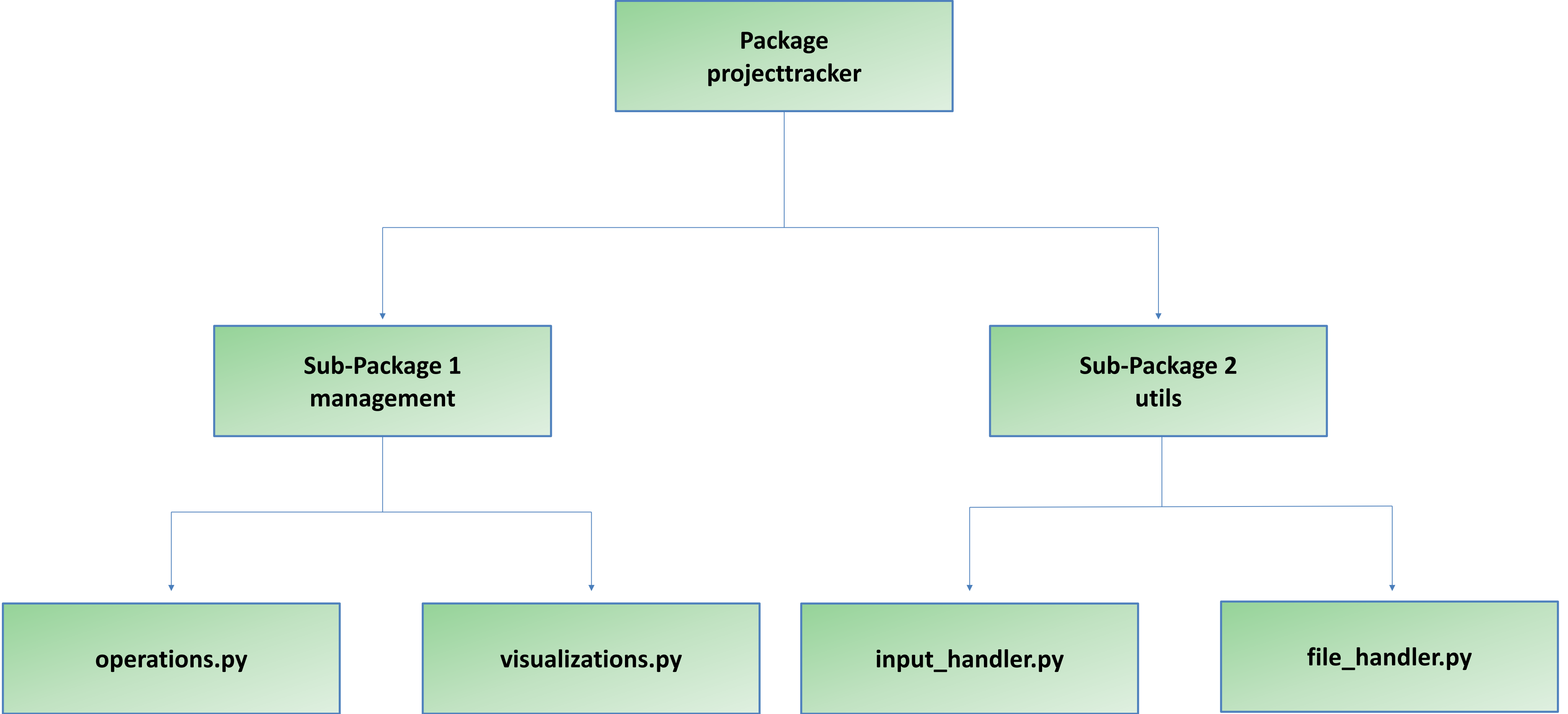


Package (projecttracker)

Introduction & Context

- **Purpose:** Its primary aim is to enhance project visibility, facilitate effective communication, and ensure timely completion of tasks and milestones.
- **Objectives:** Highlight the specific objectives of your project tracker, such as streamlining project workflows, optimizing resource allocation, and improving team collaboration





Sub-Package 1 (management) Module 1 (operations)

Introduction & Context

The management sub-package facilitates better control and organization of project-related activities.

operations Module:

- The module handles core project / task operations, such as task assignment, progress tracking, and team coordination.



Functions of Module 1 (operations)

Introduction & Context

Functionalities to operations:

- **add_proj:** This function is responsible for adding new projects to the tracker.
- **add_task:** This function is responsible for adding new tasks to the tracker.
- **modify_item (project/ task):** This function enables the modification of project/task details based on their ID.
- **delete_item:** This function enables onw to delete the project/task based on their ID from the tracker.
- **view_item:** This function allows the viewing of project/task details.



Sub-Package 1 (management) Module 2 (visualizations)

Introduction & Context

visualizations Module:

- Showcase how data visualization aids in understanding project metrics, enabling informed decision-making and analysis.
- The visualize module provides insightful visualizations on different aspects of the project.
- It allows users to check on the progress made in each project and identify any critical tasks that need to be worked on immediately.



Functions of Module 2 (visualizations)

Functionalities to visualizations:

- **bar:** Provides the number of tasks added for each project.
- **gantt:** Illustrates the schedule for each project.
- **pie:** Shows the proportion of tasks that are not yet started, in progress or completed.
- **scatter:** Visualize the relationship between Duration and Priority of a project.



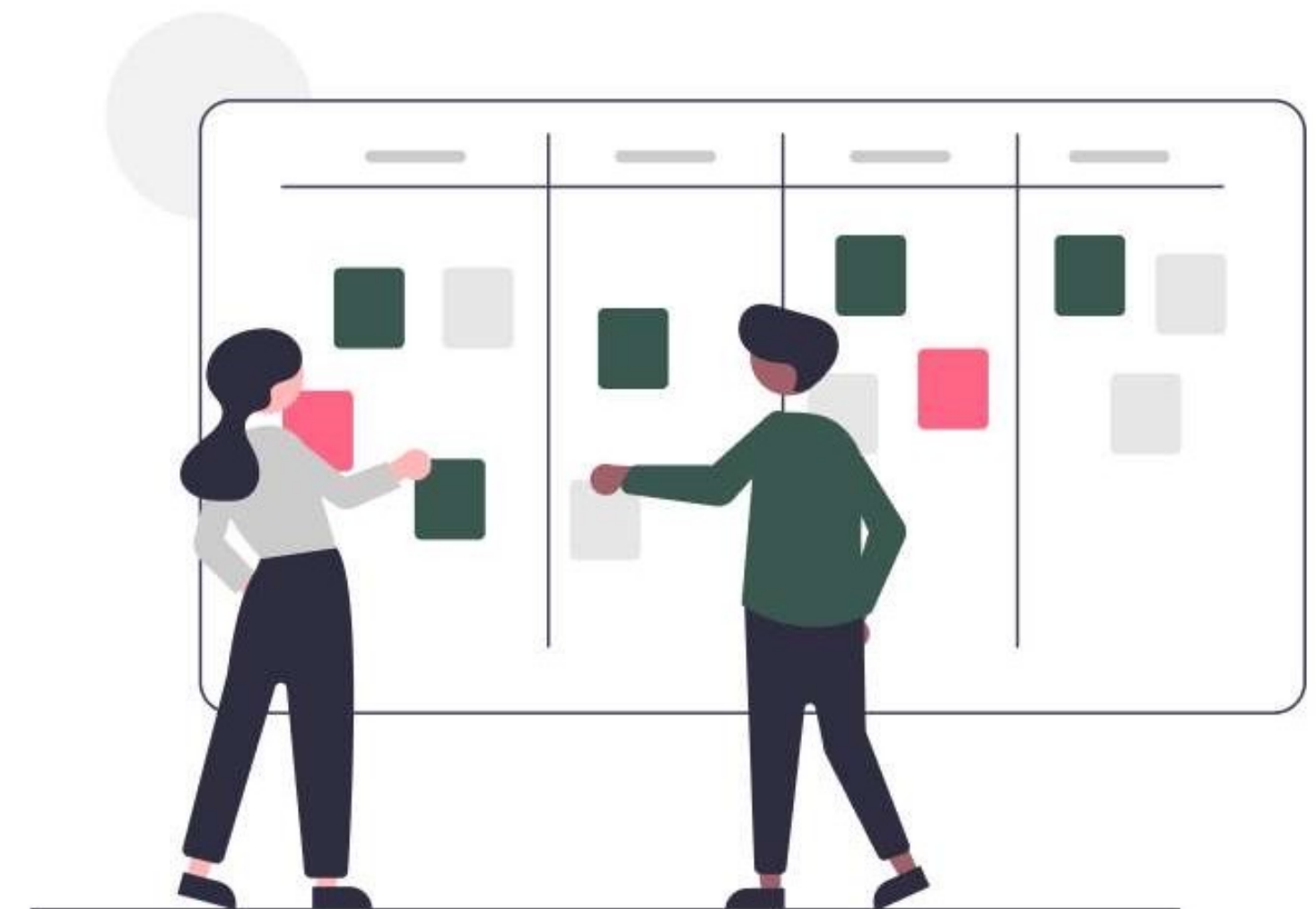
Sub-Package 2 (utils) Module 1 (input_handler)

Introduction & Context

The utils sub-package oversees user-input management, facilitating storage and retrieval from files. Additionally, it offers the functionality to download data in CSV format.

input_handler Module:

- Administration and cleaning of user inputs is centralized through the utilization of the input_handler module.
- All other modules employ the functions encapsulated within the input_handler, allowing the retrieval of user-entered values.
- This approach minimizes the need for redundant input statements, as any duplicates can be replaced by invoking the relevant functions with the input_handler.



Functions of Module 1 (input_handler)

Introduction & Context

Functionalities to input_handler:

- **get_user_choice:** Handles the user's choice of addition, modification or deletion of projects / tasks.
- **get_project_input:** Returns the name of the project to be added.
- **get_priority_input:** Returns the priority of the project / task to be added.
- **get_continue_choice:** Handles the user's choice of continuing an operation that they had chosen.



Sub-Package 2 (utils) Module 1 (file_handler)

Introduction & Context

file_handler Module:

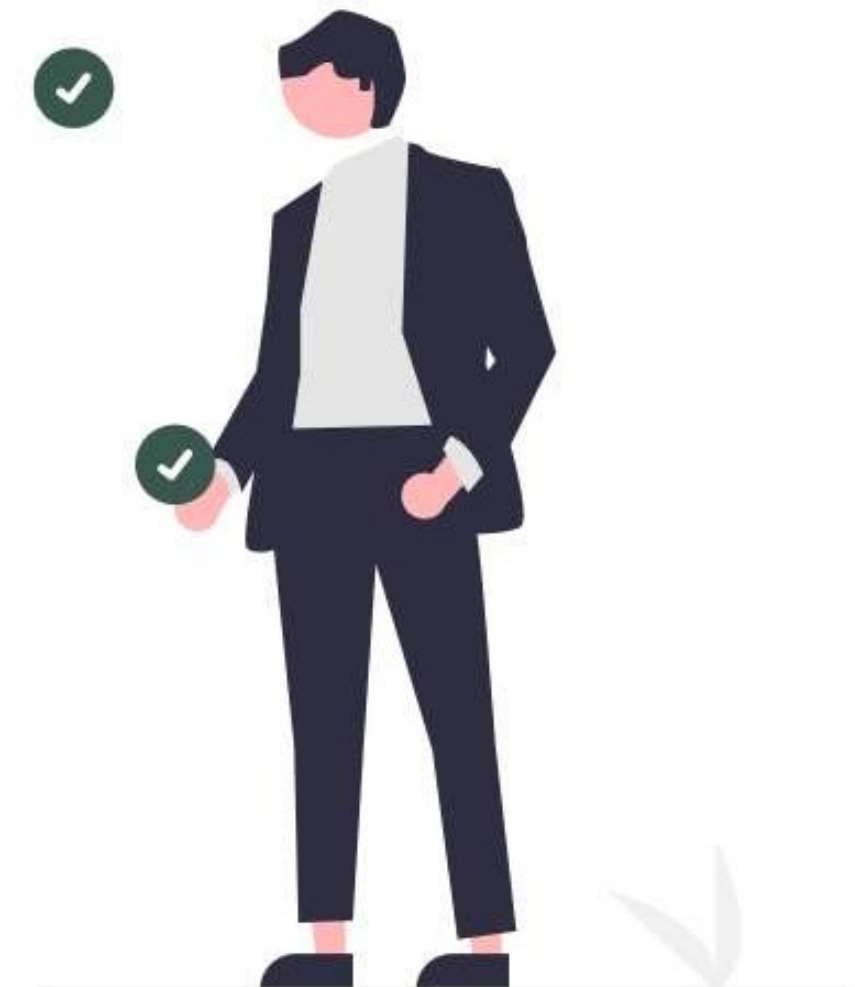
- The file_handler module oversees the retrieval and storage of the data collected through this application.
- Additionally, it provides users with the capability to download a csv file directly to their preferred directory.



Functions of Module 1 (file_handler)

Functionalities to file_handler:

- **read_file:** Read the JSON file to display the collected data.
- **write_file:** Write any new data or updates into the JSON file.
- **download_csv:** Download the data as a CSV file into the directory provided by the user.



Thank You!