Practice: Importing Modules

Instructions

In this practice, you will use `require` to import and use both custom and built-in Node.js modules to create a simple task manager application. This activity focuses on reinforcing the concept of modular programming and the use of `require` to connect different modules.

Preparation

1. Create a new project folder named `task-manager`.
2. Inside the folder, create the following files:
   - `taskManager.js`: A custom module for managing tasks.
   - `fileHandler.js`: A custom module for saving and reading tasks from a file.
   - `app.js`: The main file that will import and use the other modules.

Tasks

1. **Create the `taskManager.js` Module**:
   - Define and export the following functions:
     1. `addTask(tasks, task)`: Adds a new task to the task list.
     2. `listTasks(tasks)`: Logs all tasks to the console.
2. **Create the `fileHandler.js` Module**:
   - Use the `fs` (File System) built-in module to define and export the following functions:
     1. `saveTasks(filePath, tasks)`: Writes the tasks to a file in JSON format.
     2. `loadTasks(filePath)`: Reads and parses the tasks from the file. If the file doesn't exist, return an empty array.
3. **Use the Modules in `app.js`**:
   - Import the custom modules (`taskManager.js` and `fileHandler.js`) and the `path` built-in module.
   - Implement the following functionality:

1. Load existing tasks from a file named `tasks.json`.
2. Add new tasks to the list.
3. List all tasks.
4. Save the updated task list back to the file.

Requirements

- Use `require` to import all modules.
- Test the program by adding, listing, and saving tasks.

Setup

For this activity, you will create your own repository to store your code:

1. Create a new repository.
2. Name it: practice-importing-modules[Your First Name]-[Your Last Initial]
3. Make sure the repository is public.
4. Clone the repository to your local machine.
5. Start working on the code.
6. When you are finished, commit your changes and push them to your repository.

Submission

Submit the url for your GitHub repo in the field below.