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SOFTXPERT Inc. Version 1.0



Web Developer Task: Task Management System API

Overview:

You are assigned to develop a RESTful API for a Task Management System. Your goal is to create a robust and scalable API that adheres to industry best practices.

Requirements:

Main Business Requirements:

- Main endpoints:
 - Authentication (For already seeded system actors).
 - Create a new task.
 - Retrieve a list of all tasks, and allow filtering based on status, due date range, or assigned user.
 - Add task dependencies with other tasks. A task cannot be completed until all its dependencies are completed.
 - Retrieve details of a specific task including dependencies.
 - Update the details of a task including the following:
 - Update the task title, description, assignee, and due date.
 - Update of the task status (e.g., pending, completed, canceled).
- Endpoints Authorizations: Implement Role-based access control based on the following criteria:
 - Managers can create/update a task
 - Managers can assign tasks to a user
 - Users can retrieve only tasks assigned to them
 - Users can update only the status of the task assigned to them

Main Technical Requirements:

- Design the system endpoints in the way that you find most fits with restful standards.
- Implement the tasks with the correct practices you know of such as data validations, stateless authentication, error handling, and DB migrations/seeders
- Implementing containerization is a plus

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Submission:

Please provide the following:

- Source code in a version-controlled repository (GitHub, GitLab, etc.).
- Postman collection for all the implemented endpoints.
- A complete ERD for the DB.
- Brief documentation on how to set up and run your application.

Feel free to use any programming language and framework. The task is designed to evaluate your backend development skills and your ability to handle advanced features in a real-world scenario. Happy Coding & Good luck!

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