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DEPARTMENT OF COMPUTER STUDIES
ITEC 116 – IT ELECTIVE 4 (SYSTEM INTEGRATION AND ARCHITECTURE 2)

ACTIVITY NO. 1 TO-DO LIST API + UI

Title of Activity

ConVINCE Task Manager

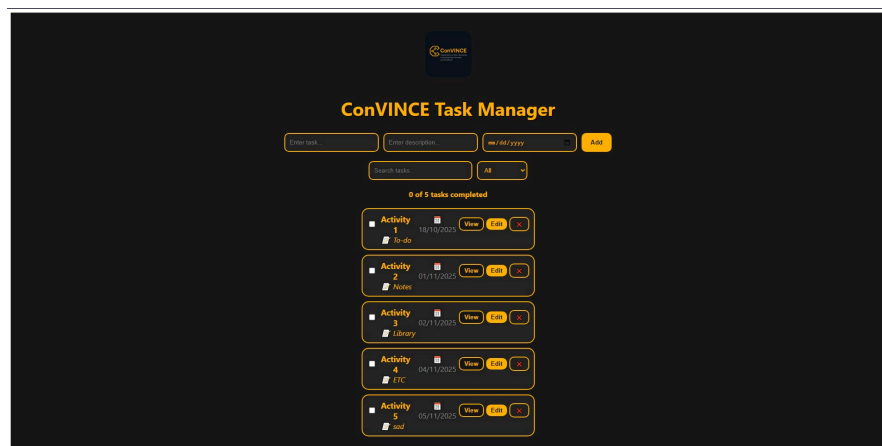
Short Description(What the app does)

The **ConVINCE Task Manager** is a full-stack To-Do List web application that helps users organize and track their daily tasks. It allows users to **add, view, edit, delete, search, and filter tasks** with deadlines and completion tracking. The **frontend** is developed using **React.js (Vite)**, while the **backend** is powered by **NestJS**, providing a structured **REST API** for **task management** and integrated **Swagger documentation** for **API visualization**.

Screenshot(s) of working system (UI and API example)

User Interface (Frontend):

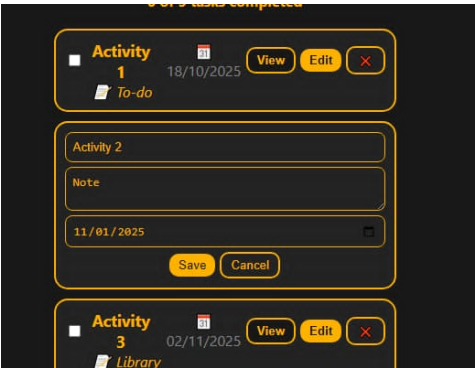
- Task List (Main UI)



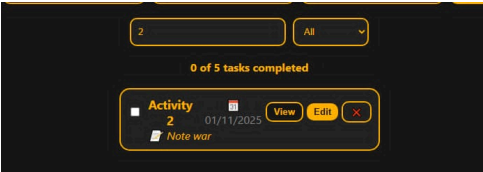
- Task View (Modal Popup)



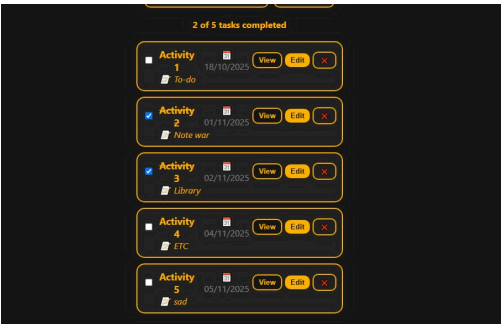
- Task Edit Form



- Search and Filter Section

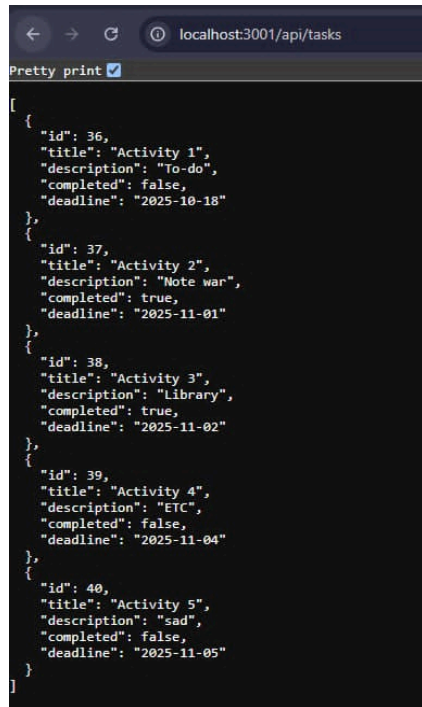


- Progress Tracker



API Backend:

- API Endpoint (GET /api/tasks)



```
localhost:3001/api/tasks
Pretty print ☒
[
  {
    "id": 36,
    "title": "Activity 1",
    "description": "To-do",
    "completed": false,
    "deadline": "2025-10-18"
  },
  {
    "id": 37,
    "title": "Activity 2",
    "description": "Note war",
    "completed": true,
    "deadline": "2025-11-01"
  },
  {
    "id": 38,
    "title": "Activity 3",
    "description": "Library",
    "completed": true,
    "deadline": "2025-11-02"
  },
  {
    "id": 39,
    "title": "Activity 4",
    "description": "ETC",
    "completed": false,
    "deadline": "2025-11-04"
  },
  {
    "id": 40,
    "title": "Activity 5",
    "description": "sad",
    "completed": false,
    "deadline": "2025-11-05"
  }
]
```

Instruction on how to run the project

Requirements

- Node.js
- npm (comes with Node.js)
- Web Browser (Google Chrome, Edge, Firefox, etc.)
- Visual Studio Code
- NestJS
- React.js (Vite)
- TypeORM
- Swagger UI
- Git / GitHub

Steps to run the Project

1. Clone or download the project from GitHub.
2. Open the project folder in Visual Studio Code. (VScode)
3. Open a terminal and go to the backend folder:

```
cd backend
```

```
npm install
```

```
npm run start:dev
```

→ **Runs the backend (NestJS) at <http://localhost:3000/>**

→ **Swagger UI: <http://localhost:3000/api>**

4. Open another terminal and go to the frontend folder:

```
cd frontend
```

```
npm install
```

```
npm run dev
```

→ **Runs the frontend (React + Vite) at <http://localhost:5173/>**

5. Open the browser and go to the frontend URL to use the system.