1. **Introduction: Task Management System**

A web application that manages tasks locally while synchronizing with an external API (JSONPlaceholder). The application enables users to create tasks that are stored locally and simultaneously synced with an external service, providing a unified view of both local and external tasks.

1. **Key Features**
   1. Frontend Features

**Task Creation**

* Interactive form for creating new tasks with
* Real-time form validation
* Visual feedback during task creation

**Success/Error Handling**

* Success messages for successful task creation
* Error messages for failed operations
* Loading states during API calls

**Task Display**

* Separate tables for local and external tasks
* Clear status indicators (Pending/Completed)
* Organized display of task IDs, titles, and status
  1. **Backend Features**
* Creation of tasks
* Handling requests
  1. **External API Integration**
* Synchronizes with JSONPlaceholder API
* Handles external API failures gracefully
* Stores external task references
  1. **Database Management**
* Efficient task storage and retrieval
* Maintains relationships between local and external tasks
* Proper timestamp management

1. **Technologies**

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| --- | --- |
| Use | Technology |
| Backend | Laravel |
| Frontend | React + Vite and Tailwind css |
| Database | MYSQL |
| Extrnal API | JSONPlaceholder |

1. **How to setup?**
   1. **Frontend.**

**Step 1: Clone the repository**

* git clone https://github.com/Ahlam-allem/task-app.git

**Step 2: Navigate to project directory**

* run “cd task-frontend

**Step 2: Install dependencies**

* npm install

**Step 5: Start Development**

* Run “npm run dev”
  1. **Backend**

**Step 1: Clone Repository**

* Git clone https://github.com/Ahlam-allem/task-app.git

**Step 2: Navigate to backend directory**

* Run “ cd task-app-backend”

**Step 3: Install Dependencies**

* Run “composer install”

Or setup is downloadable via <https://getcomposer.org/download/>

**Step 4: .ENV file configuration**

Since .env files contain sensitive information, they are sent separately via email.

To configure the project:

1. Download the .env file from email

2. Copy it to the project's root directory

3. Run:

* php artisan config:clear

**Step 5: Generate application key**

* Run “php artisan key:generate”

**Step 6: Run DB Mitigation**

* Run “php artisan mitigate”

**Step 7s: Start backend server**

* Run “php artisan serve”
  1. **Development**

Run “php artisan migrate”

1. **Development Notes**

* Backend runs on http://localhost:8000
* Frontend runs on http://localhost:5173
* External API: https://jsonplaceholder.typicode.com/todos