Portfolio Manager Project - Simple Version for Students

What Is This Project About?

Your team will create an **application to manage a financial portfolio**. This means you will **store and manage data about money and investments**, like:

- © Cash
- Stocks
- Bonds
- 6 Other assets

You will build:

- 1. A **backend API** using Node.js + Express (first step)
- 2. A frontend interface (later in the project)

Main Goal

Your main task is to build a Portfolio Manager REST API.

The API should allow:

- \$\Rightarrow\$ Saving investment records (e.g., add a stock)
- \$\rightarrow\$ Getting all portfolio records (e.g., show everything)

☐ What Is a REST API?

It's just a set of web links (endpoints) that:

- Accept data (using POST)
- Send back data (using GET)
- Delete or update data (using DELETE or PUT)

■ Example Features

Later, when you build the frontend, the user should be able to:

- 2. See how the portfolio is performing (charts if possible)
- 3. + Add new investments
- 4. Delete/remove investments

O You Don't Need

- X Login or user management
- **X** Multiple users Just assume one person using the app

☆□ Step-by-Step What to Do

Technical Checklist

- 1.

 ✓ Create your project folder structure

- 4.

 ✓ Make sure every team member can access and pull/push code
- 5.

 ✓ Design a very simple data model start with:

```
{
  id: 1,
  stockTicker: "AAPL",
  volume: 10
}
```

- 6.

 ≪ Write your first backend APIs:
 - o GET /portfolio \rightarrow get all items
 - o POST /portfolio \rightarrow add a new item

* Project Management Checklist

- 1. P Discuss as a team:
 - o Who will work on backend?
 - o Who will work on frontend?
 - o Who will test or document?
- 2.

 ✓ Make a task list (you can use Trello if you know how)

- 3. □ Start building small working parts first
- 4. ⊘ Don't try to build everything at once **keep it simple**
- 5. \square When the instructor comes, show your progress and ask questions
- 6. Agree on what data you will store (e.g., stocks, cash, bonds)