StudyBuddy Monorepo Setup Guide

0) Final folder layout

```
StudyBuddy/
apps/
frontend/ # Vue 3 + Vite + Tailwind v4 + DaisyUI
backend/ # Node + Express
db/ # optional
package.json # optional root workspaces + scripts
gitignore
README.md
```

1) Create project + folders

```
mkdir StudyBuddy && cd StudyBuddy
mkdir -p apps/backend apps/frontend db
```

2) Frontend — Vue + Vite

```
cd apps/frontend
npm create vue@latest .
npm install
npm run dev
```

Tailwind CSS v4 + DaisyUI

```
\ensuremath{\text{npm}} i -D tailwindcss @tailwindcss/postcss postcss autoprefixer \ensuremath{\text{npm}} i -D daisyui
```

postcss.config.js

```
export default {
  plugins: {
    '@tailwindcss/postcss': {},
  },
};
```

tailwind.config.js

```
export default {
  content: ["./index.html", "./src/**/*.{vue,js,ts,jsx,tsx}"],
  theme: { extend: {} },
  plugins: [require("daisyui")],
};
```

src/assets/main.css

```
@import "tailwindcss";
```

3) Backend — Node + Express

```
cd ../../apps/backend
npm init -y
npm i express
npm i -D nodemon
```

apps/backend/package.json

```
{
  "name": "backend",
  "type": "module",
  "main": "src/server.js",
  "scripts": {
    "start": "node src/server.js",
    "dev": "nodemon src/server.js"
},
  "dependencies": {
    "express": "^4.19.2"
},
  "devDependencies": {
    "nodemon": "^3.1.0"
}
}
```

apps/backend/src/server.js

```
import express from "express";

const app = express();
const PORT = process.env.PORT || 4000;

app.use(express.json());

app.get("/api/health", (_req, res) => {
   res.json({ ok: true, service: "backend" });
});

app.listen(PORT, () => {
   console.log(`API listening on http://localhost:${PORT}`);
});
```

4) Root workspaces (optional)

```
{
  "name": "studybuddy",
  "private": true,
  "workspaces": ["apps/frontend", "apps/backend"],
  "scripts": {
    "dev": "concurrently -k -n FRONTEND,BACKEND \"npm:dev --workspace apps/frontend\" \"npm:dev --workspace "build": "npm run build -w apps/frontend && npm run build -w apps/backend"
},
  "devDependencies": {
    "concurrently": "^9.0.0"
}
```

5) Git + GitHub

```
.gitignore
```

```
**/node_modules/
**/.env
**/.env.*local
dist/
build/
.cache/
.vscode/
.DS_Store
logs/
*.log
Initialize & push:
git init
git add .
git commit -m "Initial commit"
git remote add origin https://github.com/<your-username>/StudyBuddy.git
git branch -M main
git push -u origin main
If remote has commits already:
git fetch origin
git merge --allow-unrelated-histories origin/main
git push -u origin main
```

6) Verification Checklist

- Frontend dev server: http://localhost:5173 - Backend dev server: http://localhost:4000/api/health - Proxy works: /api/health - Tailwind + DaisyUI: