

Class 6 • Project Studio

Student exercise • Name: _____

Today: connect screens to one backend and database. January 2027 begins weekly capstone homework; today you are collecting possibilities, not choosing your final project.

1. Open your workspace

1. Download the class starter ZIP from the digital link below. Extract it first. Open the folder containing package.json in VS Code and your coding agent.

[Download Project Studio starter](#)

Copy prompts from this digital document. Select only the text between the markers. Windows: Ctrl+C / Ctrl+V. Mac: Command+C / Command+V.

PROMPT 1 — LOCAL SETUP

COPY FROM HERE

Open the extracted Project Studio folder containing package.json. Preserve my other projects and existing data. Check Node 22+ (24 LTS preferred) and npm. Run npm ci to install the locked dependencies, including local Wrangler 4.151.1. Run npm run types, npm run db:migrate, and npm run db:seed, then start npm run dev. Use local bindings only. Do not log in, deploy, create cloud resources, or erase .wrangler/state. Give me the actual app URL, Local Explorer URL ending /cdn-cgi/local/explorer, and restart command. If setup fails, explain the exact error and stop for help.

STOP HERE

App URL: _____ Restart command: _____

2. Make it mine

Save one fictional idea first. Choose a direction: space observatory, botanical notebook, neon studio, or your own style. Pick two or three design changes.

PROMPT 2 — MAKE IT MINE

COPY FROM HERE

Help me make Project Studio feel like mine. Ask up to three short questions about my theme, colors, layout, dark mode, and animation. Offer examples if I am unsure, then implement my choices across every route. If I choose a light/dark toggle, remember its setting after reload. Keep animation subtle and respect reduced-motion settings. Preserve the routes, Worker, D1, saved records, and all existing behavior. Keep forms readable, keyboard controls usable, and phone layouts tidy. Show me the changed files and let me test both appearance and behavior.

STOP HERE

3. Search your ideas

PROMPT 3 — SEARCH YOUR IDEAS

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Keep Project Studio's shared routes, Worker backend, D1 database, and saved records. Add a labeled search box to Idea Lab that filters idea titles and audiences, ignoring letter case. Clearing it must restore every card. Show a useful no-results message. Dashboard totals must still count all saved ideas. Keep the existing add, rename, delete, and linked-project behavior. Match the current visual style. Show me the changed files and explain the search code. Start the local app so I can test it myself.

STOP HERE

4. Follow the information

Open Local Explorer using the link in the app sidebar, or add `/cdn-cgi/local/explorer` to your running server's origin. Choose D1 Databases > DB > ideas. Keep the terminal running.

PROMPT 4 — INVESTIGATE THE SYSTEM

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Do not edit files. Trace one saved idea through this actual project: the browser form and request, Worker API handler, parameterized INSERT, D1 ideas table, and dashboard query. Show each real filename and relevant code. Help me open Local Explorer and locate my row's id and title. Explain how `projects.source_idea_id` links to `ideas.id` and what happens if that idea is renamed or deleted. Have me point to the files and row myself.

STOP HERE

My idea title: _____ Row ID: _____

Browser file: _____ Backend file: _____

5. Test and explain

- Try every route in your new design. Check readable forms, keyboard navigation, and a narrow window. If added, the theme toggle keeps its setting after reload.
- Add an idea. Idea Lab and Overview show the same saved record. Refresh: it remains.
- Try an empty title. It must not create a record. Add a normal title afterward.
- Search by part of a title and by audience. Try different letter case, no matches, and clearing search. Overview still counts all ideas.
- Open `public/styles.css` yourself. Change `--accent`, predict the result, save, and refresh. Check text contrast. Record what happened.

Direct edit / prediction / result: _____

Bug evidence: action _____ expected _____

actual _____ file or request investigated _____

Stretch goals — choose one

- Relationships: make a project from an idea. Rename the source idea; verify its ID and link stay stable. Explain why the project title stays independent.
- Portable data: export ideas as JSON. Test an empty list and several saved ideas.
- Craft: add a backend validation test, or add editing for one more idea field.

Exit: show your design, saved row, shared dashboard data, search test, and direct code edit. Save the project path. You do not need a public link or a Cloudflare login today.