PROJECT 0 — (GITHUB) SETTING UP YOUR CSCI 4208 PORTFOLIO REPOSITORY

Instructor: Dr. Ted Holmberg

PROJECT GOAL

Build a public "portfolio + project board" you'll use all semester to (1) list and link your labs/projects/capstone, (2) track work with GitHub Issues and a Project (v2) board, and (3) use light automation (GitHub Actions) and GitHub Pages for client-side deployments.

LEARNING OBJECTIVES

- Practice project management in GitHub (Issues, labels, milestones, boards)
- Use git/GitHub workflows (forks, commits, pushes)
- Run and interpret GitHub Actions (workflows)
- Deploy client-side web apps to GitHub Pages (no server required)

PREREQUISITES

- A GitHub account
- Basic git knowledge (commit/push) or comfort using the GitHub web UI

WHY WE'RE USING GITHUB'S TOOLS & SERVICES

GitHub's Repositories, Issues, Project boards, Actions, and Pages are industry-standard. You'll finish the course with a public artifact (portfolio + board) you can include in résumés and interviews that demonstrates planning, execution, and delivery.

TOOLS & SERVICES WE'LL TOUCH

- GitHub Repositories
- GitHub Actions ·
- GitHub Issues ·
- GitHub Project (v2)
- Views (Roadmap, Table, Board) ·
- GitHub Pages

SECTION A — GITHUB REPOSITORIES (CREATE YOURS)

A1. Fork the template

- 1. Open the template: https://github.com/scalemailted/csci4208-portfolio-2025
- Click Fork. Name your repo exactly: csci4208-portfolio-2025.

A2. Turn on required features (in your fork)

- Settings → General → Features → check Issues
- Open the **Actions** tab → click **Enable** (first time only)

A3. (Recommended) Turn on GitHub Pages now

- Settings → Pages → "Deploy from branch" → Branch: main, Folder: /
- Your site (after a minute):

https://<username>.github.io/csci4208-portfolio-2025/

A4. Required settings — checklist

- □ Issues: ON (Settings → General → Features → Issues)
- □ Actions: Enabled (open Actions at least once)
- □ Pages: ON (Settings → Pages → main / /)
- □ After you make a Project board later, set Project → Settings → Make public

A5. Repository layout (where things go)

```
/

├─ index.html (your portfolio landing page; add links here)

├─ labs/ (each lab in its own folder: labs/lab-01/, labs/lab-02/, ...)

├─ projects/ (pointer folders: projects/project-01/README.md → external project repo + live URL)

├─ capstone/ (pointer folders per milestone: capstone/capstone-01/README.md → team repo + board)

└─ _docs/ (this handout / course how-to notes)
```

Notes:

- Labs: submit source here; if static, use index.html as entry (lab document will specify).
- Projects: code lives in a separate public repo; in this repo you provide a pointer README + demo steps.
- Capstone: team repo + team Project board; each milestone folder here contains a pointer README + links.

SECTION B — GITHUB ACTIONS (AUTOMATION)

B1. Seed / Update Roadmap Issues (Action #1)

What it does:

Pulls the instructor roadmap and **creates/updates Issues** with labels and milestones (Modules).

How to run:

Actions → "Seed / Update Roadmap Issues" → Run workflow

When to run:

After the instructor posts changes, or allow the nightly schedule (if enabled) to run.

B2. Update README Submission Table (Action #2)

What it does:

Rewrites a compact table in your README showing **Item | Key | Status** based on Issue **labels** (or open/closed).

How to run:

Actions → "Update README Submission Table" → Run workflow

Also runs:

nightly (if scheduled), after seeding, on issue changes (opened/edited/labeled/closed), and on pushes to

- labs/**,
- projects/**,
- capstone/**,
- index.html.

Tip: If a job "does nothing," open its run logs—logs explain what changed or why nothing changed.

SECTION C — GITHUB ISSUES (YOUR SINGLE SOURCE OF TRUTH)

C1. What Issues are (and your role)

Every roadmap item (lab, project, capstone milestone) is an **Issue**. It includes an **Acceptance** checklist you must satisfy before asking for approval.

C2. Issue properties (what you'll see)

- **Title:** assignment name (e.g., "Lab-02 CSS: Crash Course")
- · Labels:
- Type: lab, project, capstone
- Key: lab-01, project-01, capstone-01 (do not change; updates match by key)
- Tracks: Frontend, Backend, DB, Security (apply all that fit)
- Status: reviewed, ready-for-approval, blocked, completed, approved, deployed
- Parent tag: task (added automatically)
- Milestone: the Module (used for grouping on the board)
- Checklist: deliverables to satisfy (tick all before requesting approval)

C3. Changing state & labels

- Open/Close: use the button near the title. Keep open while working.
- Labels: right sidebar → Labels (apply/remove status & track labels).

C4. Searching & filtering (Issues tab)

- Open labs: is:issue is:open label:lab
- Module 1 items: is:issue label:module-01
- Ready for approval: is:issue label:ready-for-approval

SECTION D — GITHUB PROJECT BOARD

D1. Create & connect your Project board

- 1. **New Project** → choose **Board** view
- 2. Project Settings → Workflows → Auto-add to project
 - Repositories: select this portfolio repo
 - Filter: is:issue → toggle ON
- 3. Workflows → Item added: set Status = Todo (or similar)
- 4. In the view: **Column field = Status**, save as **Board** view
- 5. Optional: **Group by = Milestone** (rows per Module), save as **Roadmap** view
- 6. Optional: switch to **Table** view (filter/sort), save as **Table** view
- 7. Project **Settings** → **Make public** (shareable link for résumé/reviews)

D2. How to use the views:

- Board (kanban): daily flow (Todo → In progress → Done)
- Roadmap (Milestone rows): see items by Module
- Table: filter/sort by labels, milestones, assignees

Note: Our README status table uses Issue labels (token-free), not the board's internal Status.

SECTION E — GITHUB PAGES (DEPLOYING NO-SERVER WEB APPS)

E1. What qualifies

Client-side apps: HTML/CSS/JS only (no custom server). Typical for static labs and early projects.

E2. Enable Pages (once per repo)

- Settings → **Pages** → "Deploy from branch" → Branch: **main**, Folder: *I*
- Wait ~1 minute; visit https://<username>.github.io/csci4208-portfolio-2025/

E3. Place your entry file(s)

- Labs: labs/<lab-key>/index.html (link it from the root index.html)
- **Projects (static):** deploy in the **external project repo** to its own Pages URL, or include a static build and link to it.
- Use **relative paths** for assets (./css/style.css, ./img/...). Case matters.

E4. Verify & link

- Open your Pages URL and confirm it loads.
- Add the live link to the Issue and apply deployed.
- Add the live link to your root index.html portfolio page.

E5. Common pitfalls (and fixes)

- 404 after enabling Pages → wait; ensure there's an index.html at the target path
- Asset 404s → fix capitalization; keep . / relative paths
- Single-page frameworks → avoid custom client routing for this course unless instructed

SECTION F — DAILY WORKFLOW LOOP (WHAT YOU'LL REPEAT)

- 1. Pick an Issue from your board
- 2. Do the work in labs/<key>/ or in your external project repo
- 3. Commit/push; update the Issue checklist + apply a status label
- 4. Re-run the **README Submission Table** workflow (or let it auto-trigger)
- 5. Move the card on the **Board** (e.g., Todo \rightarrow In progress \rightarrow Done)

TROUBLESHOOTING QUICK LIST

- "Issues disabled" → Settings → General → Features → enable Issues
- "Actions didn't change anything" → open run logs (often the file already matched)
- Board empty \rightarrow Project \rightarrow Workflows \rightarrow **Auto-add** ON; use **Add items** once to backfill; or re-run the seeder
- Pages 404 \rightarrow ensure Pages is enabled, target has index.html, wait a minute, fix asset paths/case

CHECKLIST TO TURN IN WITH PROJECT 0

- □ Forked repo: csci4208-portfolio-2025
- □ Features enabled: Issues, Actions, Pages
- □ Project (v2) board created, auto-add ON, public
- □ Seeded roadmap issues appear (with labels/milestones)
- □ README status table shows items (Item | Key | Status)
- □ Root index.html exists with at least one link (lab/project)
- □ Submitted the three links (repo, board, Pages)

GRADING RUBRIC (PROJECT 0)

Part 1: [Repos]	Fork template; set description; update README; correct layout	[20%]
Part 2: [Actions]	Run seeder + README table actions; verify logs/changes	[20%]
Part 3: [Issues]	Keys/labels correct; Acceptance checklist used; filters shown	[20%]
Part 4: [Project]	Project: Auto-add ON; Board/Roadmap/Table views; public link	[20%]
Part 5: [Pages]	GitHub Pages enabled; root index.html; at least one live link	[20%]

DELIVERABLES

- Portfolio repo link: https://github.com/<username>/csci4208-portfolio-2025
- Public Project (v2) board link
- Live portfolio Pages URL

Make sure your board is **public** and your links are visible in your repo About or README.

SUBMISSION

• Post the link to your completed forked project in the Discord server in the GitHub channel