

SealHub

Kittle Consulting, LLC d/b/a SealHub

ABOUT US

SealHub is an early-stage EdTech venture operated by Kittle Consulting LLC, building a SaaS platform that enables K–12 districts to administer, verify, and report student credentials while giving colleges, employers, and the public privacy-safe insight into credential attainment and impact.

Our first credential is the Colorado [Seal of Climate Literacy](#), a state-recognized diploma endorsement awarded by Colorado districts since 2024. Similar credentials are emerging in other states, creating a scalable opportunity beyond Colorado.

The need is immediate. Founder LeeAnn Kittle helped advance the Colorado Seal legislation while at Denver Public Schools and saw the infrastructure gap firsthand: districts lack a purpose-built system to track requirements, verify credentials, share evidence, and report outcomes.

At one Colorado district, participation grew from 171 students to more than 400 in its second year, demonstrating demand while exposing the limitations of spreadsheets and manual processes.

SealHub aims to become the infrastructure layer for emerging K–12 credentials, turning policy into measurable, verifiable, and portable student outcomes to advance a green workforce.

Preferred team size: Team of 4 (range 3-5) **Location:** Remote/In-Person Optional

MARKET & VALUE PROPOSITION

Primary users: K–12 school districts, schools, and Local Education Providers (LEPs) administering student credentials.

Key beneficiaries: Students, colleges and universities, employers, chambers of commerce, and workforce boards seeking evidence of climate literacy and preparation for the emerging green economy.

As the Class of 2027 enters college and the workforce, employers and higher education will increasingly need reliable signals of climate and sustainability knowledge. SealHub makes that credential verifiable, portable, and meaningful beyond the diploma.

Our first paid district pilot is targeted for the 2027–28 school year. The current engineering stack includes React/TypeScript, Supabase (Postgres, Auth, Storage), TanStack Start, Stripe, and Resend, with development underway in Lovable.

THE WORK

The team will design, build, and deliver the MVP of SealHub, a multi-role SaaS platform for managing student portfolios for the Colorado Seal of Climate Literacy. The existing Platform Admin console is complete; the team will build the three role-specific experiences below.

Feature 1 — Student Workflow

Students authenticate through Supabase, create portfolio submissions, upload PDF/image/video artifacts, and track status from Draft through Approval. They can view reviewer feedback, revise, and resubmit. Students only access their own submissions.

Feature 2 — Reviewer Workflow

Teachers assigned as reviewers see only the student submissions from their own school. They review each student's uploaded work, score it against a rubric the administrator has set up, leave feedback on each criterion, and either approve the submission or send it back for revisions. Reviewers cannot see submissions from other schools — that boundary is enforced at the database level, not just hidden in the interface.

Feature 3 — Public Impact Map

A public webpage, no login required, showing total Seals awarded, participating schools and districts, county-level results on a map, and year-over-year trends. To protect student privacy, any group smaller than five students is suppressed, and the map never displays names, IDs, uploaded work, or other identifying information.

End-to-end deliverables: A mobile-friendly, accessible web application that is securely hosted and works across devices. The team will build the user login, file storage, database, and security features; test the system thoroughly; document how it works; and deploy both testing and live versions. All development will use fake/synthetic student data; no real student information will be used.

Stretch Goals

School and district administration workflows, deeper Platform Admin engineering work, and Student Information System integrations such as Infinite Campus and PowerSchool.

If the MVP is on pace, teams can pursue these in priority order:

- District Admin Workflow — District-wide oversight, school comparisons, trends, and aggregate reporting.
- School Admin Workflow — Manage submissions, assign reviewers, and view school-level dashboards.
- District Dashboard/Map — Authenticated drill-down from the public map to school and cohort data.
- Platform Admin Engineering Review — Review architecture, testing, and RLS boundaries with targeted refactoring and a written engineering assessment.

Success = all three MVP features shipped, tested, documented, and deployed on time. Strong teams may have capacity for stretch goals beyond the MVP.

SKILLS & TEAM EXPECTATIONS

We are looking for a **team of four** passionate and collaborative members (range of 3-5 acceptable) who are excited to learn new tools and build something that will have a real user on the other side.

The following are the primary tools and technologies used in SealHub. Students are not expected to know all of these coming in; the goal is to gain practical experience while building the product.

- React / TypeScript
- Supabase / PostgreSQL
- Git / GitHub
- REST APIs
- Tailwind
- Vite / TanStack
- Testing and data visualization

What matters most is the willingness to learn, ask questions, solve problems, and build something end-to-end. We encourage students to ask the founder directly when something is unclear rather than make assumptions. Onboarding materials and pair-programming support will be available during the first two weeks.

The team will meet bi-weekly in alignment with the CSCI 370 Fall schedule, with additional meetings during the initial ramp-up and final sprint as needed.

The client will provide a written project brief, synthetic seed data, and a Supabase staging environment. The team will be expected to take ownership of its process, communicate blockers, participate in sprint reviews, and ultimately deliver a tested, documented, working MVP.

Most importantly, we want this to be an opportunity to experience what it is like to build software for a real-world problem, work directly with a founder, and ship something that can move beyond the classroom.

LOGISTICS, IP & INTERNSHIP OPPORTUNITY

Where the team will work. The team will work remotely, joining meetings via Zoom or Google Meet. Optional in-person working sessions may be arranged in the Denver Metro area for teams that want them, but remote will always be available. Because the work is remote, no student travel or mileage will be required.

Intellectual property. Students participating in this project will be asked to assign all intellectual property in their work to Kittle Consulting, LLC (d/b/a SealHub), similar to how the company engages independent contractors. Students will execute a simple assignment agreement at the start of the session confirming disclosure of their work and assignment of rights. Students will also confirm their work does not infringe on any third-party intellectual property.

Non-disclosure. Students will be asked to sign a short mutual non-disclosure agreement covering non-public product plans, unreleased features, pilot-district conversations, and any synthetic data derived from real district structures. The NDA will not restrict students from including the project in their portfolios or from describing the work publicly at a general level.

Conflict of interest. Students will be asked to disclose any current or planned role with organizations building competing K–12 credentialing, student portfolio, or education AI products. Disclosure is not disqualifying; it lets us scope roles appropriately.

Internship opportunity. SealHub can't guarantee a paid internship or full-time role, but there's a real chance we'd invite one or more of the strongest contributors to continue as paid contractors after the field session, helping build the stretch-goal features that weren't completed during the semester. Every team member will leave with a portfolio-ready product, public credit, LinkedIn recommendations, reference letters, and introductions to SealHub's investor, educator, and workforce network.

WHY THIS, WHY NOW?

The world students are entering is changing quickly. The transition to a cleaner, more resilient economy is creating new careers, industries, and skills, but K–12 education needs better ways to recognize and communicate when students are prepared to participate in that future.

That is why the Colorado Seal of Climate Literacy was created. The credential gives students a way to demonstrate that they have developed meaningful knowledge and skills related to climate, energy, and sustainability. It also gives schools a way to recognize preparation for a workforce and economy increasingly shaped by climate and energy transition.

The problem is that the credential exists, but the infrastructure does not. Districts need a way to administer these programs efficiently. Students need a credential they can actually prove and carry with them. Colleges and employers need a way to understand what that credential represents. Communities need data that shows where this emerging talent is being developed.

SealHub is about building that infrastructure.

The vision extends beyond Colorado. As states develop similar credentials, SealHub can create a common digital system for tracking, verifying, and understanding this growing population of climate-literate graduates. Over time, that data could help colleges identify regions with concentrations of students prepared for sustainability programs, help employers and workforce organizations connect with emerging talent, and help communities understand where their future green workforce is coming from.

Students who choose this project are therefore participating in something bigger than building another software application. They are helping build the digital infrastructure for a new generation of credentials tied to the energy transition and the future workforce.

You won't just be coding a platform. You'll be building the infrastructure that recognizes the next generation preparing to shape the climate economy — and you, as CS students entering that same economy, are part of that generation too.