

PROJECT IMPLEMENTATION THE TANGLED OAK + CRAFT COLLECTIVE WEBSITE

Aimee Reilly
CIS 320 - Project Management
Winter 2024

The goal of this project was to design, build, and deploy a fully functional e-commerce website for *The Tangled Oak + Craft Collective*, showcasing a curated selection of artisan-made products with a clean, accessible, and scalable interface.

The site needed to support browsing by category, connect to a secure checkout (via Square), and reflect the unique branding of the collective.

Project Schedule

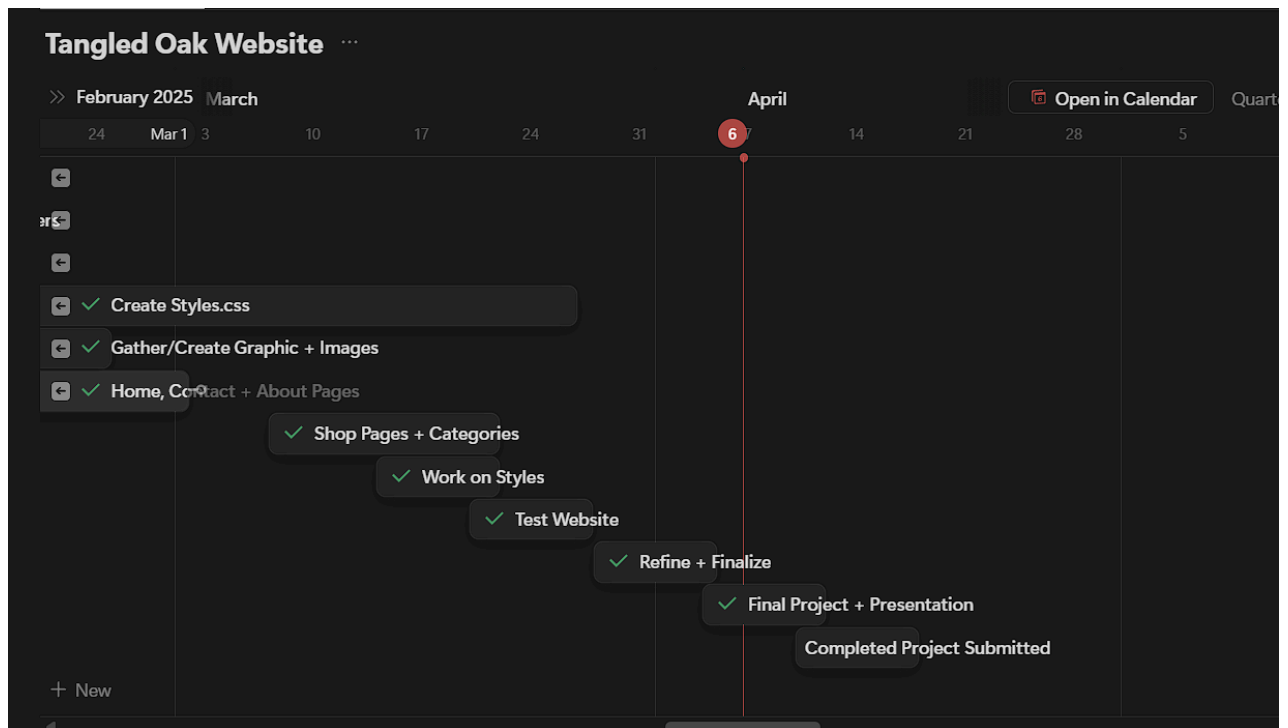
Full stack web deployment using Netlify for frontend and Render.com for backend. Using goDaddy.com for the Domain.

- Integrated product listings dynamically through backend API.
- Connected the shop UI to the live **Square storefront** for secure checkout.
- Customized and responsive **CSS styling** with hover effects, sidebar navigation, and visual consistency.
- Developed reusable page structures including Home, Contact, About, and Shop.
- Performed **thorough testing** and fixed layout and functionality bugs based on feedback.
- Added **aesthetic enhancements** like falling leaf animations and a semi-transparent branded background logo.
- Implemented a scalable category system for product browsing.

Milestones

	Due Date	Description	Artifact
Milestone 1	Jan 19/2025	Work Plan + Gantt Chart	
Milestone 2	Jan 30/2025	Set up Development Tools and Folders	Set up the IDE environment. Set up folders to contain all website information.
Milestone 3	Jan 30/2025	Skeleton HTML	Create a skeleton code of the website to be able to fill in the content
Milestone 4	Feb 6/2025	Create Styles.css	Visual representations of user interactions with the system.
Milestone 5	March 7/2025	Gather/Create Graphics and images Home, About Pages	Gather all images and create im Complete all pages not related to the Shop Pages ages needed for the website
Milestone 6	March 20/2025	Shop page	Complete all pages related to the Shop Pages
Milestone 7	March 21/2025	Work on Styles	Clean up styles
Milestone 8	March 28/2025	Test the website	Test the Website and Record anything that doesn't work how it should
Milestone 9	April 4/2025	Refine and Finalize	Refine any problems found during testing. Finalize the website for launch
Milestone 10	April 11/2025	Final Project and Presentation	Create a final presentation to show off the website project

Project Timeline



Challenges & Workarounds

- **Styling delays during Milestone 4:**

Early in the project, I faced challenges designing the visual layout without having graphics or page content in place. This made it hard to visualize how the final product would look. To stay on track, I began working on Milestones 5 and 6 in parallel, which gave me the content and images I needed to better shape the styling work.

- **Checkout system decision:**

Originally, I considered building a custom cart and checkout flow. However, I realized that linking directly to my existing Square Online store was a smarter choice for this phase. It let me focus on site design, navigation, and branding while still ensuring a fully functional shopping experience. It's also scalable for now and something I can replace later with a custom POS if needed.

- **Sidebar submenu behavior & layout refinements:**

Getting the sidebar and submenu to behave consistently across screen sizes took longer than planned. I had to tweak both HTML structure and CSS interactions several times, but the final setup works smoothly and aligns with the site's aesthetic.

- **Platform insight (after the fact):**

After completing most of the project, I discovered that using WordPress with a theme and e-commerce plugin could've significantly reduced development time. While that was a missed opportunity for speed, building it from scratch gave me valuable coding experience and more control over the layout and features.

Current Status

It's live and fully deployed at www.tangledoak.ca — I've configured the DNS, SSL, and redirects myself.

- All milestones (1–10) are complete.
- The site is live on Netlify and connected to a purchased domain through GoDaddy.
- Visitors can browse products by category and check out securely through Square.

Future Plans & Scalability

- **Ongoing Maintenance:** Content updates, vendor/product additions, seasonal refreshes, add in a blog and some free art projects.
- **Database Expansion:** Will explore migrating from Square to a custom MongoDB backend.
- **POS System:** Possible development of a proprietary POS system tailored to business needs if it's more cost-effective and scalable long term.
- **Additional Features:** Vendor portal, or blog-style updates may be added in future phases.

Lessons Learned

Working through this project taught me how different stages of development come with unique challenges, especially when managing both technical implementation and business goals. Some of my key takeaways include:

- **Project Planning.** The Gantt chart and milestone breakdown helped me stay on track even when certain tasks ran longer than expected.
- **Parallel workstreams.** When one milestone got delayed, I learned how to move forward on other milestones without losing focus and getting stuck.
- **Functionality over perfection.** I had to make practical decisions, like using Square instead of building a cart system from scratch, to meet deadlines without sacrificing usability.
- **Time estimation.** Some tasks (like styling or setting up DNS and deployment) took longer than I thought, reminding me to build in extra time for future projects.
- **Full-stack development.** This project gave me hands-on experience with frontend design, backend integration, and live deployment. This was one of my main goals when starting the computer programmer course.

Final Thoughts

Completing this project has been both challenging and rewarding. One of the biggest takeaways for me is that styling a website is much harder than it looks—getting things to look right across screen sizes and making small visual adjustments often took more time than expected.

I also learned that implementing APIs can be time-consuming, especially when connecting backend functionality and making everything work smoothly together.

With more time, I know I could have added more features—like a custom cart or integrated database—but I'm proud of where the project stands now. It's fully functional, it reflects my brand, and it's something I can continue building on over time. This site is a strong foundation, and I now have the skills to improve and scale it as my business grows.