

Final Project: Design & Launch

Introduction:

This project will combine several topics we have covered this semester. You'll create and document a new product idea, walking through the entire **SDLC**, doing basic **market research**, and publishing a **landing page** online using HTML/CSS.

Resources:

Refer back to our in-class lecture notes if you need assistance coming up with ideas or building out your SDLC. [Excalidraw SDLC Phases](#)

Using AI tools is encouraged, but you don't have to use them if you don't want to. If you do decide to use AI at any point, make sure you keep track of how it helped you. You can do this in one of two ways:

1. Write down the prompts you used and explain which parts of the AI's responses you ended up using in your work, **or**
2. Share links to the full conversations so I can see how you used the tool.

[Keeping track of this helps me understand how you're using these tools, adjust my teaching if needed, and figure out what I can do to help you and future students be more productive with them.](#)

Project Steps

Part 1 – Brainstorm & Competitor Research

The first step of product development is deciding what problem to solve (sometimes called *problem discovery* or *ideation*). This almost always involves multiple iterations of brainstorming, market research, validation, and refinement, not just one cycle. For this project, however, you are only going to complete a single cycle.

- Brainstorm and write down 3 product ideas (1–2 sentences each).
 - [If you need help, remember this:](#)
 - Think about a problem in your daily life...
 - It involves more than one person.
 - It happens regularly.
 - It could be improved with technology.
 - Its realistic ([I added another one here which will help down the line](#))
- Decide which one you think is the best and create an existing competitor analysis table:
 - 3 existing products or services in the same area

- *Keep in mind: no competitors could mean opportunity or no demand*
- If you can't find any competitors, look beyond identical products. What are people currently doing to solve the same problem?
 - What they do well
 - What they're missing (your opportunity)

Part 2 – SDLC Documentation

At this point, you've decided on an idea and done some market research. The next step is to start thinking about your software development life cycle. Before stepping into analysis, decide what lifecycle best fits your idea: **Agile** or **Waterfall**?

1. Analysis:

- Who is the audience?
- What problem does it solve for them directly?
- What are the core features to solve this problem?
 - i. Distinguish between **must-haves** and **nice-to-haves**.
- If using Agile, what will your MVP **need**? *Remember the brick/fire analogy!*
- Also, I want you to consider security in your application. If you have users, how will you keep them (and their data) safe? *Think of the products you use and what they do.*

2. Design:

- Draw wireframes (at least 2 pages/screens).
- Note features and layout.

3. Implementation:

- What tools will you use (starter HTML/CSS template, AI help, etc.)?
- What content and images will be on the page?

4. Testing:

- How will you check links, readability, and accessibility (basic mobile-friendliness and alt text for images)?

Part 3 – Landing Page

A landing page isn't always necessary, but it can be a powerful tool to...

1. Test interest before building a full product.
2. Collect emails and build an audience.
3. Refine your message by testing headlines and calls-to-action.
4. Look credible to users, partners, or investors.
5. Get feedback from early supporters.

Realistically, the landing page should also need its own SDLC plan since it is technically part of your overall product. However, for brevity, we'll treat it as a simpler deliverable and focus mainly on how it supports testing your idea and gathering early user interest.

I want you to start with a few different mockups and then decide on the one you gravitate towards.

- Use the provided HTML/CSS template.
- Page must include:
 - Product name and description
 - At least one image (stock or AI-generated is fine)
 - Contact link or “Learn More” button
 - You don’t need to collect any personal info; placeholder email is fine.
- Try to go further than the bare minimum, consider what type of site would be compelling/convincing to you. Check out dribbble.com for inspiration if you need it. *Hint: search for “landing page”*

Part 4 – Future Feature + Reflection

You’ve made it this far, which is great! But your product journey is only beginning. Now, I want you to start thinking about the next steps.

- Brainstorm and pick one big future feature (like user accounts, mobile app, or something else).
- Write the Analysis & Design phases for the *next* SDLC cycle (no coding).
- Write a short reflection (1/2 page):
 - What did you learn about the SDLC?
 - What was the hardest part?
 - Also, here’s where you note your AI usage as well. Copy/paste entire AI conversation doesn’t count for the half page length.

Grading

Task	Points
Idea Brainstorm & Pick	10
Market Research Table	15
Main SDLC	30
Live Landing Page	20
Future Feature SDLC	15
Reflection	10
Total	100