

# Assignment 1: First Design Cycles

**Due date:** see Canvas

In this assignment, you will undertake your first few design cycles. You will conduct need-finding, develop low-fidelity and high-fidelity prototypes of a design, and implement a very simple version of this design. The purpose of this assignment is for you to develop an intuition for the simplicity and speed with which interfaces can be prototyped and evaluated following a user-centered design process.

Review the **submission guidelines early** to make sure you leave enough time for packaging up the results of your work into the accepted submission format.

## Project Brief

You have been hired as the sole user interface designer and frontend developer for *CoolWeather*, a small company whose main product is a weather app. They have asked you to develop an HTML/CSS prototype of the home screen of the weather app.

The problem is, they do not know what information about the weather people want to see on the home page, and how it can be presented to help people find the information they want most easily. This is where you come in.

So, your job is to develop an understanding of what people want to see on the home page of their web app, and to develop this interactive prototype.

## Process

### Stage 1: Need-Finding

Develop an understanding for what information people most want to see on the home screen of their weather app. Find at least 2 *people* who have used a weather app in the past, and then ask them to speak with you. Ask them questions about what information they most want to see in

their weather app. And then ask them to open up the weather app on their phone and comment on what they like and what they do not about how this information is presented in their current app. Take notes as soon as you can right after your conversations, writing down as much as you can about how an home screen for a weather app could be better designed for the person you talked to than the current apps they use. From your interviews, write a **description about the key features you will include in your weather app home screen** (maximum 200 words).

## Stage 2: Low-Fidelity Prototyping

Make **3 sketches** of an home screen of the weather app, each addressing at least one of the design opportunities you identified from your need-finding. The sketches should be rough; make them as quickly as you can. These three sketches should represent different ways of organizing and presenting information to users. Be wild and creative with some of the ideas! Keep personal notes about what you like about each of the designs, and what you do not, and how you might mix and match the best ideas from each sketch.

## Stage 3: High-Fidelity Prototyping

Create a **high-fidelity paper prototype** of the most promising idea that you have for a home screen. This paper prototype should be the size of a phone screen. You may use an Adobe tool, Canva, or Figma and print out your prototype if you prefer that to drawing on paper directly. Make a paper phone “shell” to nestle the paper prototype in that you can have people hold when they are critiquing your design. Both the shell and the prototype of the screen should be made out of stiff construction paper. Aim for high-fidelity in the design—try to get the look-and-feel really good. To achieve high fidelity, your prototype should incorporate color (use markers or colored construction paper), and crisply-drawn graphics, text, and iconography.

## Stage 4: Discount Usability Testing

**Bring your paper prototype to class on Monday, January 23.** During this session, you will ask your peers in the class to provide feedback on your prototype. After the studio session, take careful notes on the biggest opportunities for improving your design that arose during your conversations with your peers and the teaching staff. You will submit a **summary/description of these notes** (maximum 200 words).

## Stage 5: HTML/CSS Prototype

First, create an updated sketch of your ideal design on the basis of the feedback you have received. Then, create an **HTML and CSS implementation** of your best design for a home screen. You will develop this implementation on your laptop and test it out in your browser, like the websites you developed while doing the programming practice assignment. While you develop, resize your browser window so it is approximately the same size as a phone screen.

Try to get your implementation looking as close as possible to your ideal conception of the design. If this is your first time using HTML and CSS, you may need to look at Mozilla Developer Network documentation, Stack Overflow, and consult with the teaching staff for specifics on implementing your ideal visual design (i.e., fonts, colors, alignment, etc.).

## Submission

Submit, as part of one Google Docs document:

1. [From Stage 1] A clear, coherent description of a few big inspirations you have for how to motivate a better design of an home screen for a weather app, grounded in your conversations with prospective users (maximum 200 words)
2. [From Stage 2] High-resolution, crisp scans or photos of your 3 sketches.
3. [From Stage 3] A high-resolution, crisp scan or photo of your paper prototype.
4. [From Stage 4] A clear, coherent description of a few big inspirations you have for improving your design, grounded in feedback you received from studio (maximum 200 words)
5. [From Stage 5] A screenshot of your implemented HTML/CSS prototype, and a link to a public GitHub repository where we can see your HTML/CSS code.

## Grading

A detailed rubric appears on Canvas. A grade will be given both on the basis of completion of each of the deliverables, as well as the quality of those deliverables (i.e., the actionability of design insights from need-finding, the variety of the low-fidelity prototypes, the crispness of the visual design of the high-fidelity prototypes, etc.).