

CIS-5120: First Design Cycle

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Stage 1: Need-Finding

Interview 1: Anna

What weather app do you currently use, and what do you like most about it?

- I currently use the built-in weather app on my device, and I like the convenience of having it installed and integrating with the rest of my device.

What are the primary reasons you use a weather app?

- I use a weather app primarily to help me decide what clothing to wear based on the day's forecast, but also to adjust my home's AC or heating system for temperature control and to check if there are any school cancellations or delays due to adverse weather conditions, especially during winter.

Can you describe a recent experience where your weather app was particularly helpful or frustrating?

- Helpful Experience: Recently, my weather app proved to be very helpful when it predicted that the day was going to be excessively hot. Knowing this in advance, I adjusted my plans for the day to ensure I stayed indoors.
- Frustrating Experience: On the flip side, there was a frustrating incident where my weather app told me that a storm would begin at 12 PM, but it actually started at 8 AM. This was annoying because I relied on the app's timing for getting to work, and it caused me to get caught in the rain unexpectedly.

What features or information do you find most useful in a weather app?

- I find the hourly weather forecast the most useful for planning my day-to-day. Also, I started watching the air quality following the Canada fires.

Are there any specific weather conditions or forecasts that are most important to you? If so, why?

- Yes, particularly rain, storms, snow, and extreme heat because they directly impact my daily activities.

How often do you check the weather on your app, and what prompts you to do so?

- I check the weather on my app at least twice a day. In the evening, I do so when deciding what to wear for the following day, and in the morning, I check to determine when to leave for work and to stay informed about any rain expected during the day.

What do you think could be improved in your current weather app?

- I would really value push notifications for less severe weather conditions, such as simple rain expected in a couple of hours. This would provide more timely and relevant updates without the need for constant manual checking.

Do you find the user interface of your weather app intuitive and easy to navigate? Why or why not?

- Yes, it is very intuitive because of a small feature-set. Most information is readily available.

Are there any specific design elements or visual aspects of the app that you find appealing or unappealing?

- The background changes dynamically depending on the current weather conditions, which adds a visually engaging and informative aspect to the user interface.

How do you feel about the accuracy of the weather forecasts provided by your app?

- I feel really frustrated if the weather forecasts provided by my app are not accurate, as I rely on them for planning.

Are there any specific improvements or new features you would like to see in a weather app that you haven't found in your current one?

Do you have any concerns about the privacy and data security of the weather app you use?

- No, I trust it because it came built in.

How do you typically customize your weather app settings to suit your preferences?

- I do not customize the weather app, but I value that it updates the location automatically.

Have you ever switched from one weather app to another? If so, what motivated the change, and were you satisfied with the new app?

- I did not like the previous app that I used; I found it a more difficult interface, and generally annoying to use. The hourly forecast (which I use the most) was not immediately available.

Is there anything else you'd like to add about your experience with weather apps or any other thoughts you have on the topic?

- Accuracy is the most important quality.

Interview 2: Katelyn

What weather app do you currently use, and what do you like most about it?

- I use the built in iPhone weather app, most often as a widget on my homescreen.

What are the primary reasons you use a weather app?

- Mainly to decide what to wear for the day and to mentally prepare for the temperature of the day.

Can you describe a recent experience where your weather app was particularly helpful or frustrating?

- Helpful: I recently wanted to see what time it was raining to spot a gap and go to my car.
- Frustrating: I was in a zone without a good signal, and if you don't have data the app doesn't work. This could be solved by storing the latest forecast for two weeks or so offline.

What features or information do you find most useful in a weather app?

- Temperature
- Raining or sunny
- Humidity
- Wind
- UV Index

Are there any specific weather conditions or forecasts that are most important to you? If so, why?

- Mostly when it rains or whether it's sunny or cloudy.

How often do you check the weather on your app, and what prompts you to do so?

- I use it every day in the morning when getting dressed; or, if hosting an event that requires clear skies I will check out throughout the day.

What do you think could be improved in your current weather app?

- An offline feature (even if imperfect), and calendar integration for events.

Do you find the user interface of your weather app intuitive and easy to navigate? Why or why not?

- Yes - I love the big widget on the home screen that displays the current temperature, temperature over next hours, and high and low for the day.

Are there any specific design elements or visual aspects of the app that you find appealing or unappealing?

- Blue color makes me happy and I like the sky.

How do you feel about the accuracy of the weather forecasts provided by your app?

- It's pretty good.

Are there any specific improvements or new features you would like to see in a weather app that you haven't found in your current one?

- Offline, calendar integration (See above).

Do you have any concerns about the privacy and data security of the weather app you use?

- No.

How do you typically customize your weather app settings to suit your preferences?

- I set the widget size, but otherwise I use it as is.

Have you ever switched from one weather app to another? If so, what motivated the change, and were you satisfied with the new app?

- Never switched, I've tried others but went back to built-in for widget

Is there anything else you'd like to add about your experience with weather apps or any other thoughts you have on the topic?

- No.

Product Description

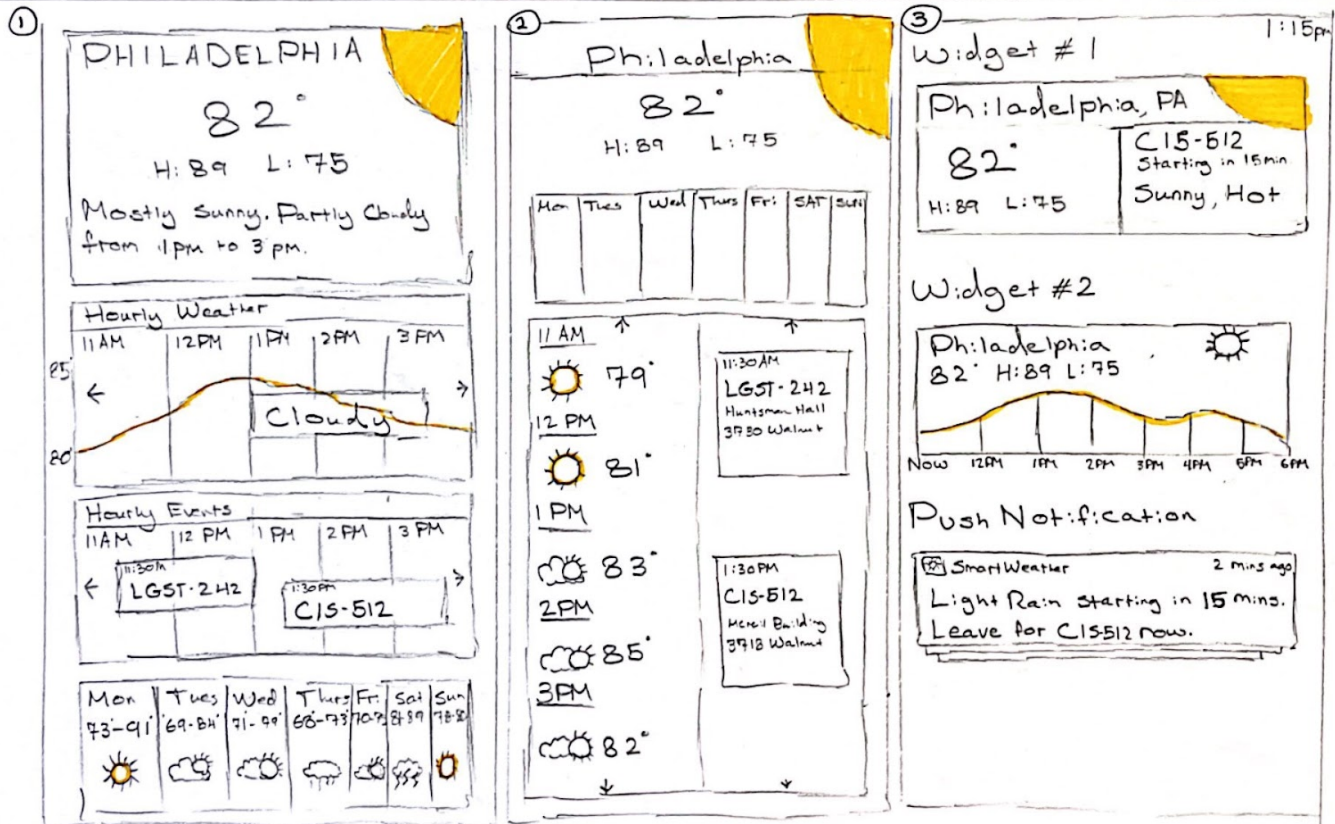
Even with the limited number of interviews, I gained significant insight into how people interact with weather apps, which I hope to incorporate into the new app. The primary use cases seem to be related either to dressing appropriately for the weather, or interacting with existing plans (e.g. when to leave to avoid rain, potentially rescheduling events in response to changing weather). Thus, I want the app to be centered around integrating with your existing calendar. "Smart" weather notifications can take into consideration what events are planned for the day, and send push notifications accordingly. In terms of high level design, the app can be split into two sides: the top half acting similar to an hourly weather timeline, and the bottom half displaying calendar events occurring in line with the weather. The top header can emulate the built-in widget, boldly displaying key information. I want to keep the elements that work from the built in iPhone app, while solving pain-points such as an added offline mode, and smart notifications. The app should feel familiar in the apple ecosystem, while adding missing features and helping people plan around the weather.

Stage 2: Low-Fidelity Prototype

Lo-Fi Sketches

Stage 2: Low Fidelity Prototype

Av: Resnick



Commentary

The sketches include two home screens, and a collection of widgets / push notification designs. The elements that I wanted to highlight based on the interviews are: accessible temperatures (current, daily, and weekly), some reference to your calendar events in time with weather, and also a simplified widget view that alerts you when weather conditions are related to events. I initially thought about integrating events as seen on the left, but after prototyping I found that the middle design works better, with side-by-side hourly weather and calendar events.

Stage 3: High-Fidelity Prototype

Figma

<https://www.figma.com/file/XW5bV9pJAmaZPsf5tJ4wib/Weather-App?type=design&node-id=0%3A1&mode=design&t=3WVvJ47rOINxDsSI-1> Credit to “Smrkv” for Figma iPhone mockup.



Stage 4: Discount Usability Testing

Studio Feedback

Through the feedback I received from my classmates, I was able to make significant improvements to my design that enhance the user experience. For example, I added the temperature of what it feels like below the actual temperature, due to feedback I received. This allows the user to know the weather without having to take into account humidity and wind when determining the effective temperature. In addition, in my calendar feature, I received feedback that it would be helpful to know what time it currently is, in order to see what event is happening in the calendar. Therefore, I added a red line showing the current time on the calendar, and I added the time in the upper lefthand corner. Furthermore, I added consistent light mode (removing the dark mode feature), due to feedback from my classmates that it would be easier to interpret the weather without the dark weather. Finally, my weather app will feature a dynamic background that simulates the current weather for that day.

Stage 5: HTML/CSS Prototype

GitHub: <https://github.com/Aviel-Resnick/cis512>

Prototype Screenshot:

