ARTF2223
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9/30/2020 Marvel Link: https://marvelapp.com/f4h9bae
Adobe XD Link: https://xd.adobe.com/view/a84bb0c1-c6e1-46da-a6d6-805b41e07776-fd18/?fullscreen&hints=off

Abstract

The goal of this service is to provide the user with current CoVID-19 statistics on the campus of Northeastern University to determine the risk of leaving their resident hall. Current numbers of those who are sick, in quarantine, in isolation, or are hospitalized are to be displayed for immediate risk assessment, and further inquiry can be revealed by looking over the heat map labeled according to location movement of those currently sick 14 days prior to their isolation or hospitalization.

Interaction

On the home screen the user discovers today's date, the current data for those sick, in quarantine, in isolation, or hospitalized, a heat map indicating the location activity for those currently sick 14 days prior to their first positive test results, and residence halls which reveal further details with a hover interaction.
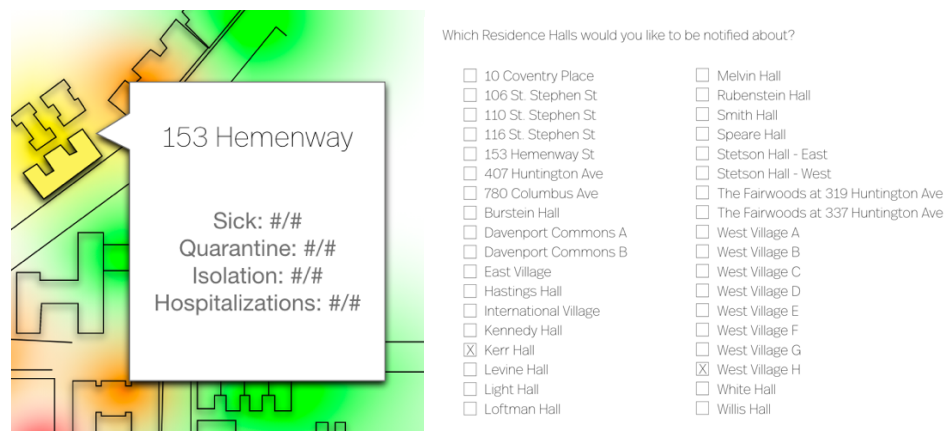

Figure 1: Screenshots of the hover interaction and check boxes.

The user also discovers a "Register for Notifications" index which brings them to a second screen. Here they discover signifiers such as check boxes which afford clicking to choose which residence halls they would like to be notified about and how they would like to receive notifications. After entering their information they can click the index to officially register. From here, a pop-up screen will appear confirming their registration and providing an index to return to the home screen.

User Path

A common user path would be discovering the current data then scrolling to the heat map. Upon arriving at the heat map they may read the description of how the data was collected then follow with the affordance of hovering over residence halls (signified by a shadowed outline) to retrieve data for the specific hall. When hovering, the residence hall changes color according to the heat map providing feedback on the hall's location for which they are viewing further details of. They then may decide to register bringing them to the second screen. Here, they discover signifiers of boxes placed next to each hall that afford clicking. An "X" then appears giving them feedback that they have selected that hall. The same box signifier and clicking affordance appear again when the user chooses to receive notifications either by e-mail or text. The longer boxes below each option afford clicking to type in their information. Finally, they can confirm their information and hall options with a pop-up window (third screen) which provides an index signifying the affordance of clicking to return back to the home page.

Navigational Strategy

The first thing on the page is the current data followed by the heat map of the Northeastern Campus. By only showing current data that could impact the user on the day of use, the website does not overwhelm the user with unnecessary data providing them with a sense of control. The only signifier to change the entire screen is in the top right corner where they can register for data change notifications (or return to the home page if they are on the second screen). This is often where "sign-in" or "create an account" indices lie which aids in the user's mental model of the website.

The first screen includes the current data and heat map because that is the most critical information for a user to gather information and be able to determine their risk for going on campus that day. Once they have determined their daily risk, they then may decide to receive notifications for which they can register on the second screen by clicking on the index in the top right corner.

One constraint provided is strictly current data for Northeastern staff and students making the website most appropriate for those on campus to determine their risk factor. A second constraint is that they may only be notified on changes within a Northeastern Residence Hall which once again makes it simple for those on campus to determine their risk. A cultural constraint lies with the heat map, which uses a color scale from green to red. A cultural understanding that red is bad and green is good is necessary to understand where those currently with CoVID-19 have been in the last 14 days.

Prototype Iterations

The first prototype was made using sketches, which were then used with the Marvel App. The following figures show screens from the prototype.
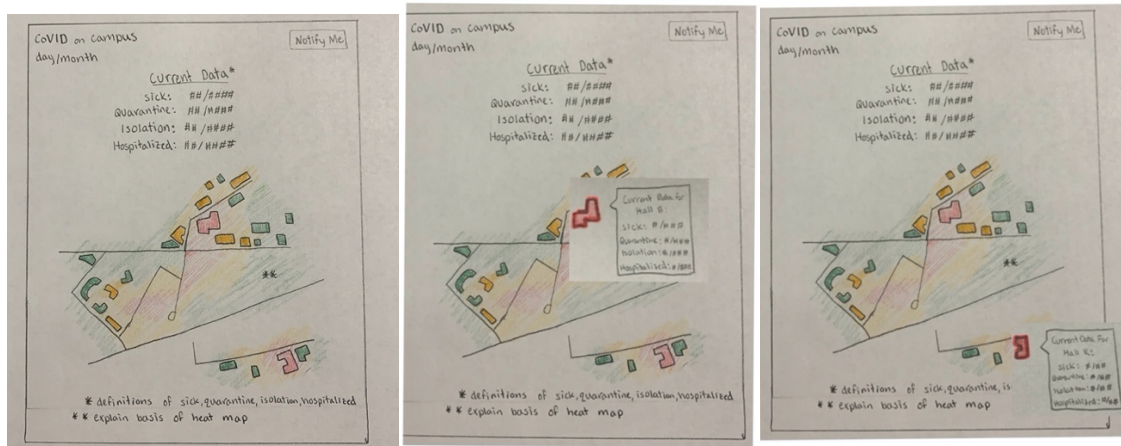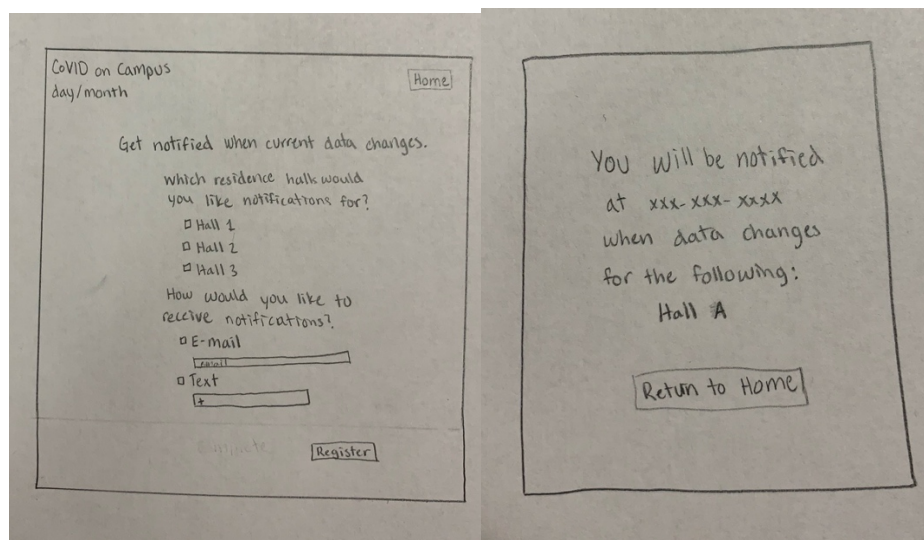
Figure 2: Home screen sketches.

Figure 3: Registration page and confirmation notice.

After user testing in class on 9/30/2020 the main pieces of feedback I received was that the target audience was unclear and that the hover/clicking affordances for the residence halls on the map could be more obvious. Instead of editing the Marvel App version, I transferred the prototype to adobe XD. Some changes I made were that I added Northeastern red bars on the sides, a Northeastern word mark in the top left corner, and used a Northeastern font according to their branding guidelines all to appeal to the target audience. I also gave shadows to the residence halls to better signify that there is an affordance there, added hover states for the check boxes on the registration screen which was not possible using the Marvel App, and added a "Home" index to the top right menu to eliminate confusion of the "Register" index switching to "Home" on the second screen.
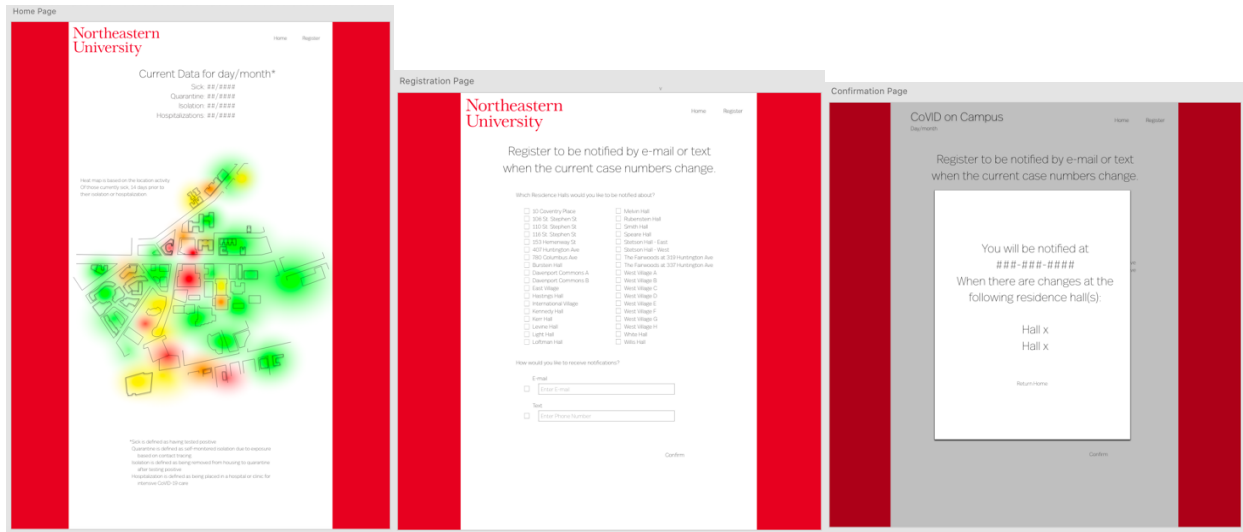
Figure 4: Adobe XD prototype screens as of 10/7/2020.

Based on the feedback during class on 10/7/2020, the "Register" index was changed to "Register for Notifications" to provide clarification on what the user is registering for. Also, the top menu's position was set to be fixed when scrolling. This provides the user access to the "Home" and "Register for Notifications" indices no matter where they are on the screen and provides easy access instead of having to scroll back to the top. Additionally, the generic phone number and hall names were changed to specific examples for clarity within prototyping and user testing. Finally, context menus were added for the definitions of "Sick", "Quarantine", "Isolation", and "Hospitalization" next to the data at the top of the home screen. These context menus provide immediate answers if the user is not sure what each means instead of having to scroll to the bottom of the page to understand the data.
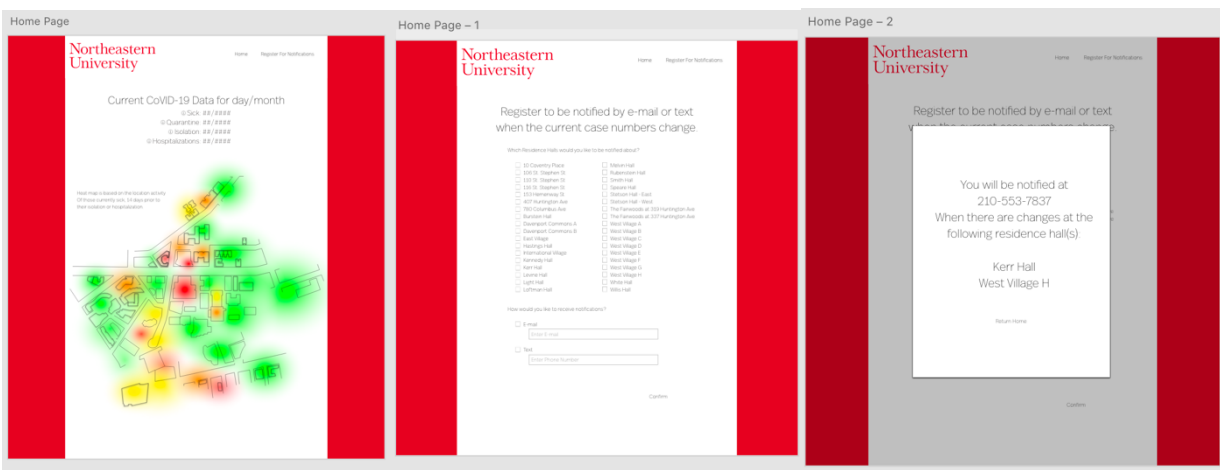

Figure 5: Adobe XD prototype screens as of 10/12/2020.