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CS-639 Building User Interfaces, Fall 2019, Professor Mutlu

Assignments — Week 10 | Design | Mobile Microinteractions

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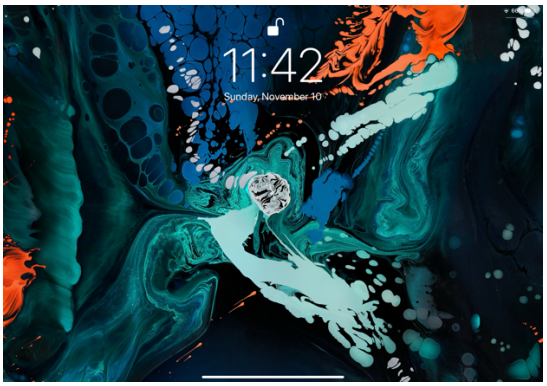
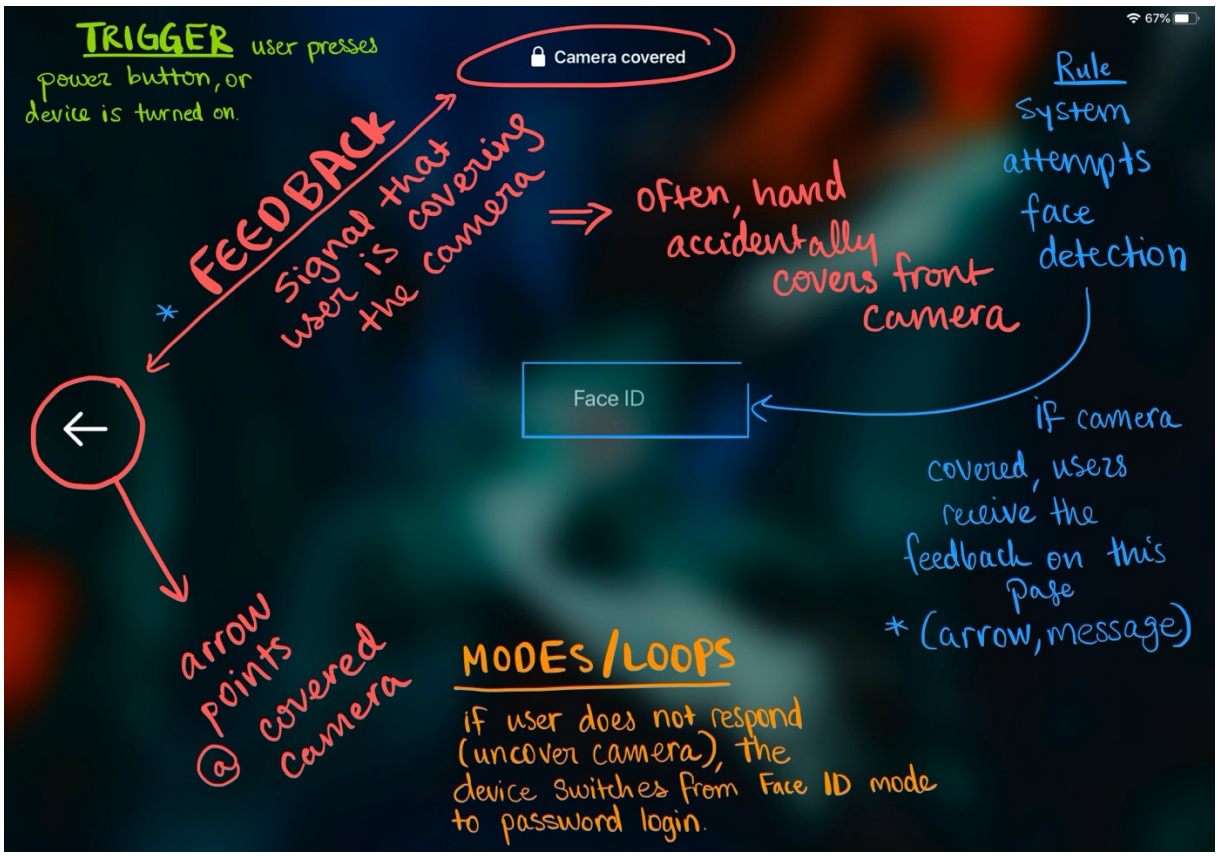
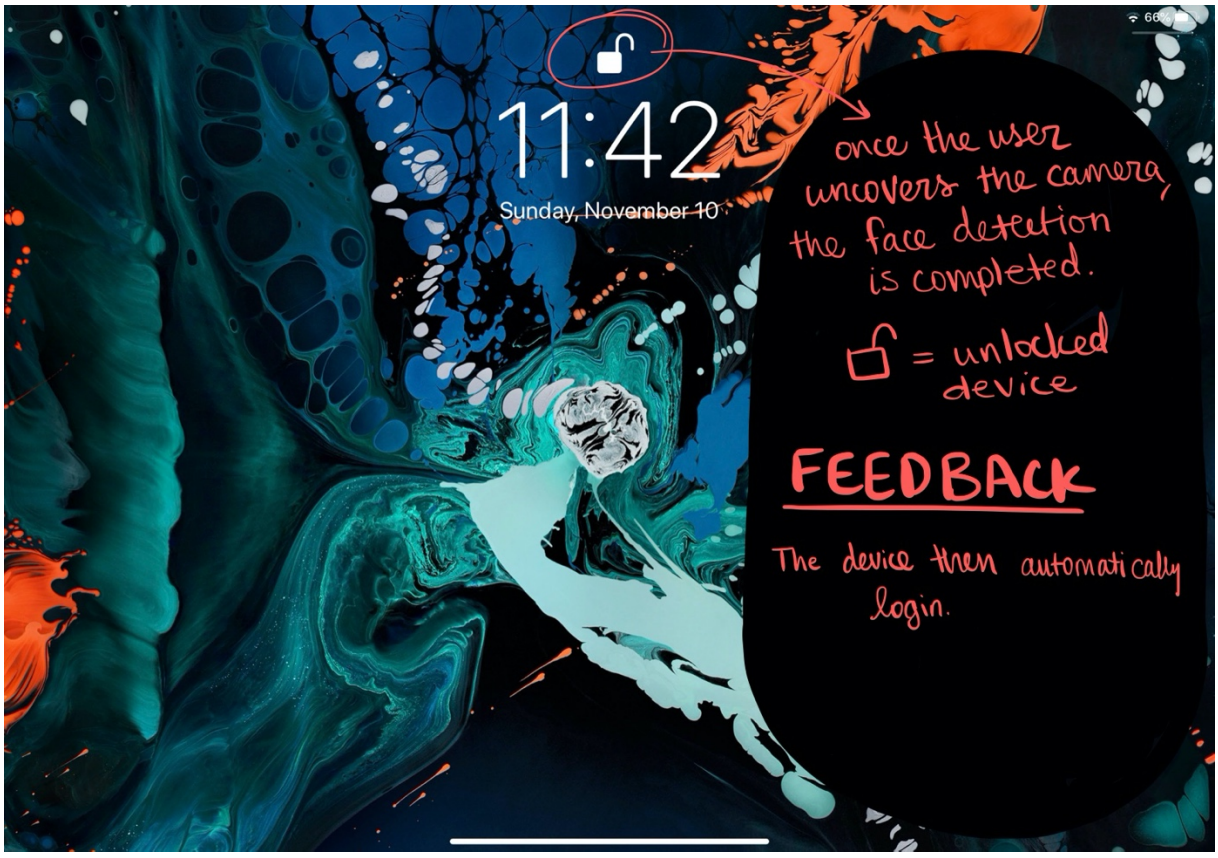
Step 1. Analyze a microinteraction. In this step, you will find an existing microinteraction used in a mobile app or a wearable device app from any domain (not just calorie tracking). Capture screenshots of the microinteraction and annotate the screenshots to identify and describe triggers, rules, forms of feedback, loops, and modes *(find at least one of each)*. If the microinteraction occurs very briefly and taking screenshots is challenging, you may have to capture a video recording of the microinteraction, from which you can gather still images. (See guides for screen recording on iOS and Android.) Be sure to investigate whether application or global modes change the behavior of the microinteraction. For example, "do not disturb" can affect the behavior of many microinteractions. After your analysis and annotation, discuss the design choices for the microinteraction in a brief paragraph or two. For example, is this an appropriate or effective form of feedback for this microinteraction? If not, what would be more appropriate or more effective? Could the microinteraction fail under different modes? If so, how would you address that?



[1] Image source


TRIGGER user presses power button, or device is turned on.
Camera covered
FEEDBACK signal that user is covering the camera
* arrow points @ covered camera
⇒ often, hand accidentally covers front camera
Rule
System attempts face detection
Face ID
IF camera covered, users receive the feedback on this page
* (arrow, message)
MODES/LOOPS
if user does not respond (uncover camera), the device switches from Face ID mode to password login.


11:42
Sunday, November 10
once the user uncovers the camera, the face detection is completed.
= unlocked device
FEEDBACK
The device then automatically login.

The microinteraction that I chose occurs on my iPad: When I attempt to login and my hand is covering the front facing camera, the device displays feedback about the issue. The **trigger** for this microinteraction is the user attempting to login, by pressing the power button, by swiping up to login, or by raising the device. The exercised **rule** for this microinteraction is the device activating the "Face ID" functionality, as indicated by the first screenshot. As a part of this process, the device checks whether the camera is covered. If the view is obscured, the user receives the **feedback** shown: "Camera covered" is printed at the top of the screen, and an arrow is displayed pointed at front camera. This response displayed for several seconds, and then the device switches to a different login **mode**.

I believe that this is a very well designed microinteraction. When users see the displayed feedback (the arrow) their attention is drawn to the front camera, which is most probably covered by their hand. The signal is simple enough to convey what the issue is, and often leads to a quick response by the user. However, one criticism I have for this microinteraction is that the allotted time for the user to respond and uncover the camera is too short.

Step 2. Design a microinteraction. In this step, you will design a new microinteraction in the calorie tracking domain. You may or may not be able to implement your design in this part of the assignment in your React Native 3 deliverable, so you do not have to limit your design to what you can implement. You can choose a tablet computer, a phone, or a watch (or all) as the target platform for your microinteraction, and you are encouraged to fully utilize specific platform capabilities (e.g., Apple Watch crown, multitouch on a mobile/tablet screen). Describe the functioning of your design in a storyboard, using 3-6 scenes. (You can use the NN/g storyboard template.) The storyboard can be pasted below or attached to the final PDF. You will next create hand-drawn or digitally created wireframe(s) of the screen(s) that the user will see while interacting with the microinteraction and annotate them to highlight the trigger, rule, and feedback and to describe loops and modes *(identify at least one of each)*.

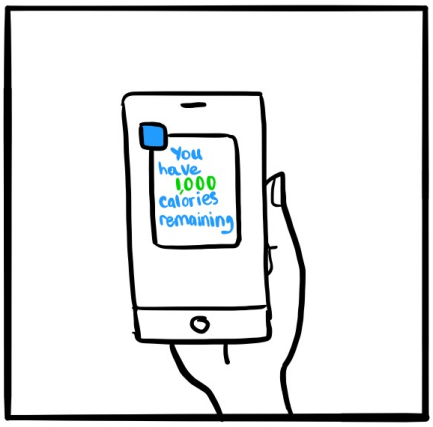
STORYBOARD

PERSONA User of mobile fitness app - Jen

Scenario checking how many calories left for the day.

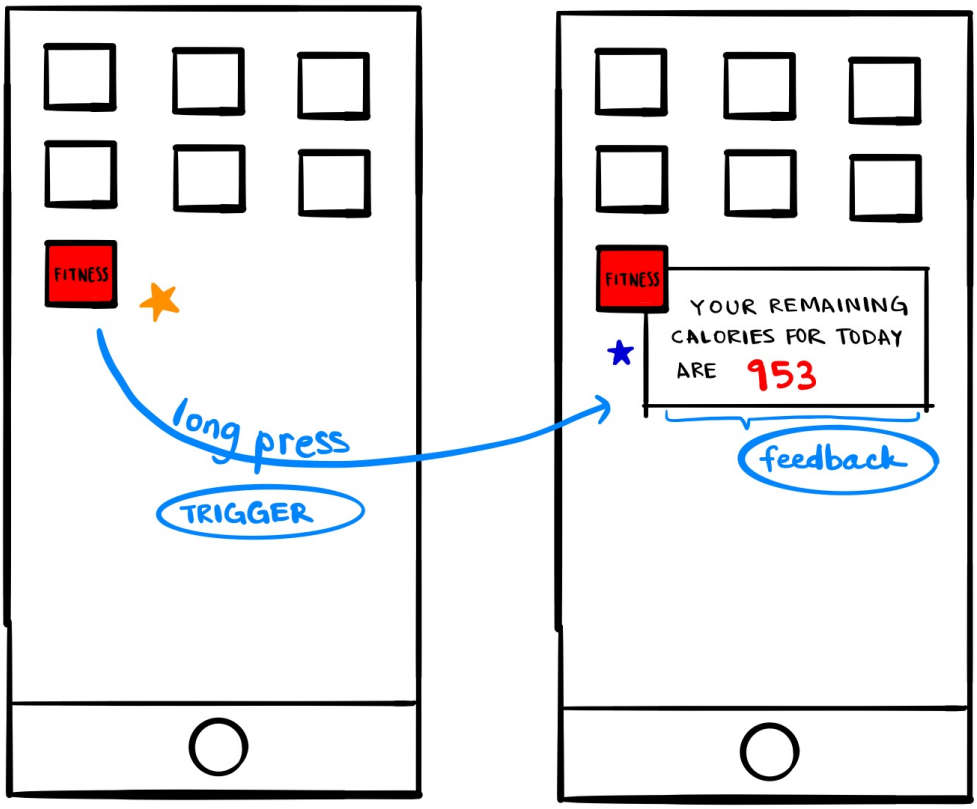
- Jen is wondering if she can get a burrito, and still meet her Max calorie goal for the day.

- Jen finds the app icon on her device, and does a LONG PRESS



- The app expands into a small window, and displays the REMAINING CALORIES

- Jen realizes she can get a burrito.



★ TRIGGER The user long presses on the icon of the fitness application.

★ RULE The application creates a short preview of user status (remaining calories)

★ FEEDBACK The user sees his/her status summary (small window expanded from the icon)

MODE The microinteraction is only triggered when a long press is done.