Mini Assessment, Week 5.

Task:

You must create and draw (by hand or computer is fine, but the end result should be printed) an interface for your choice of one of the following touch screen element interactions:

> ***A button you must touch and drag upwards to trigger.***

> ***A button you must long press to enable, then short press to trigger.***

> ***A button you must touch with 2 fingers at a time to trigger.***

A sequence of diagrams is required if the interface visually reacts in some way, with notes for audio or haptic events. You should be able to 'walkthrough' the interaction with someone, showing them what the element does when e.g. the user touches the button (yes, this is very similar to a paper prototype).

The catch: your interface is targeting a persona who cannot read (or cannot read any language you know) – and you must signify/give feedback on the affordance in a way that is entirely without words. The goal is to make the interaction as discoverable and learnable as possible.

Write a short report (½ page/250 words) outlining the signifiers and feedback you have included in your design and why.
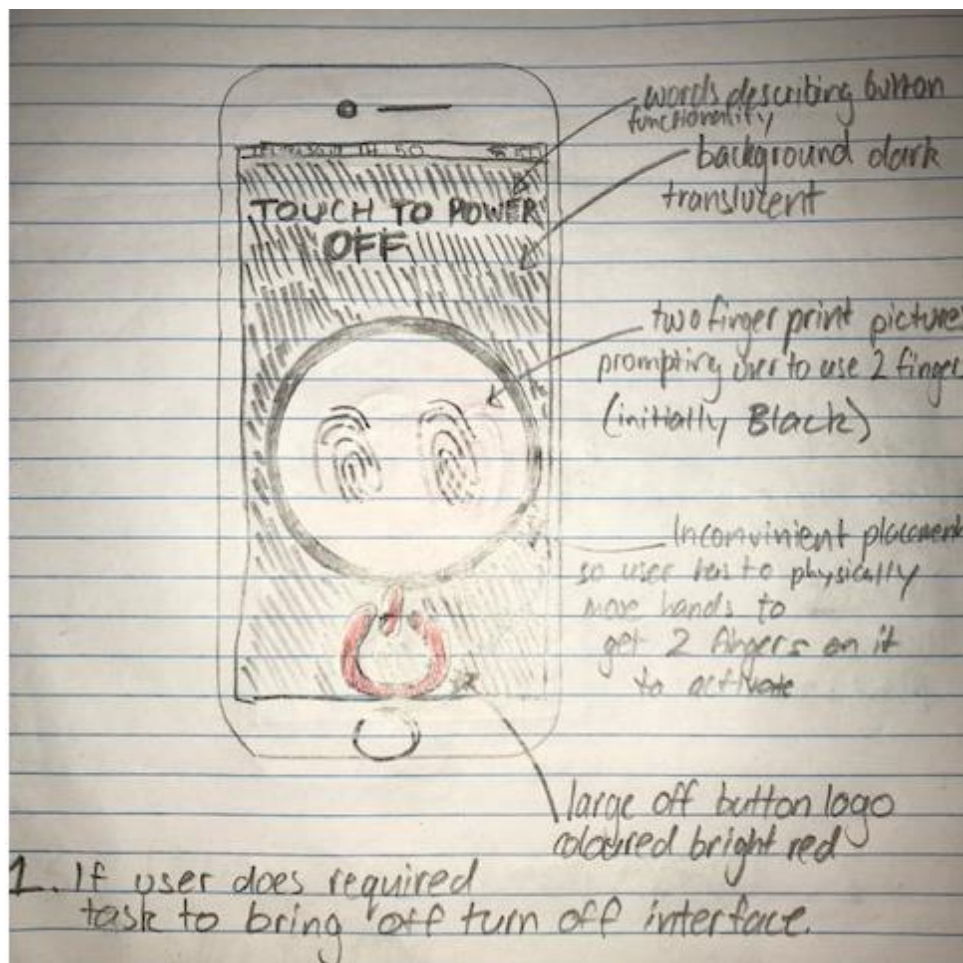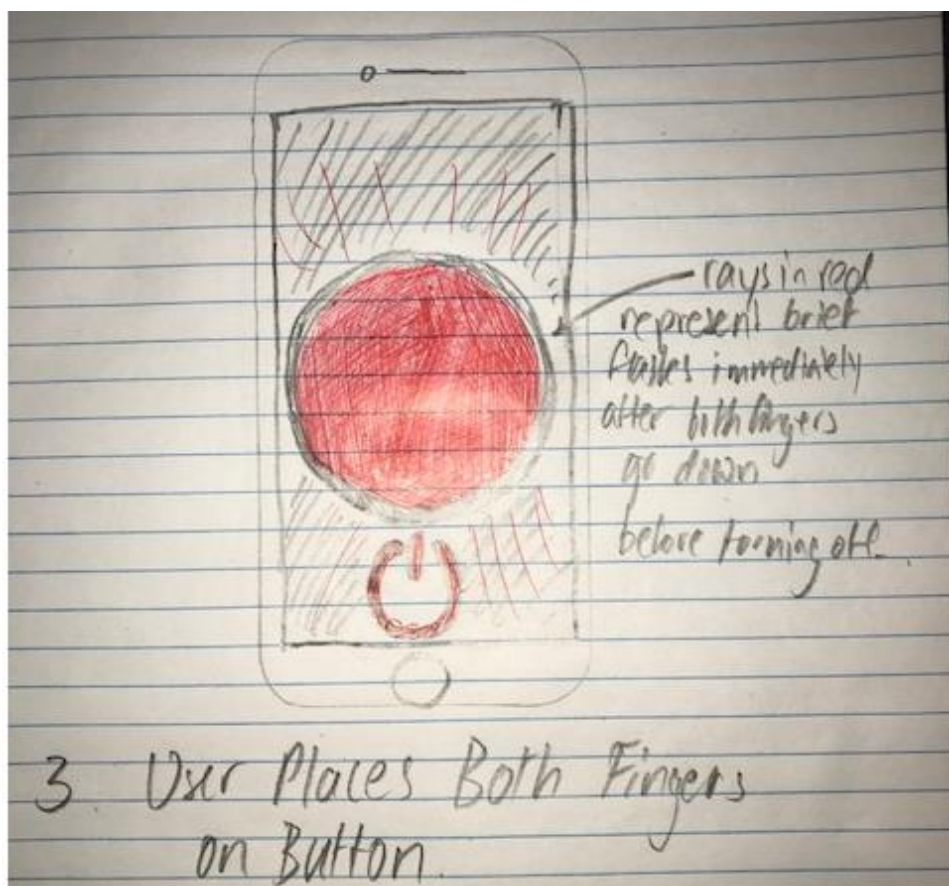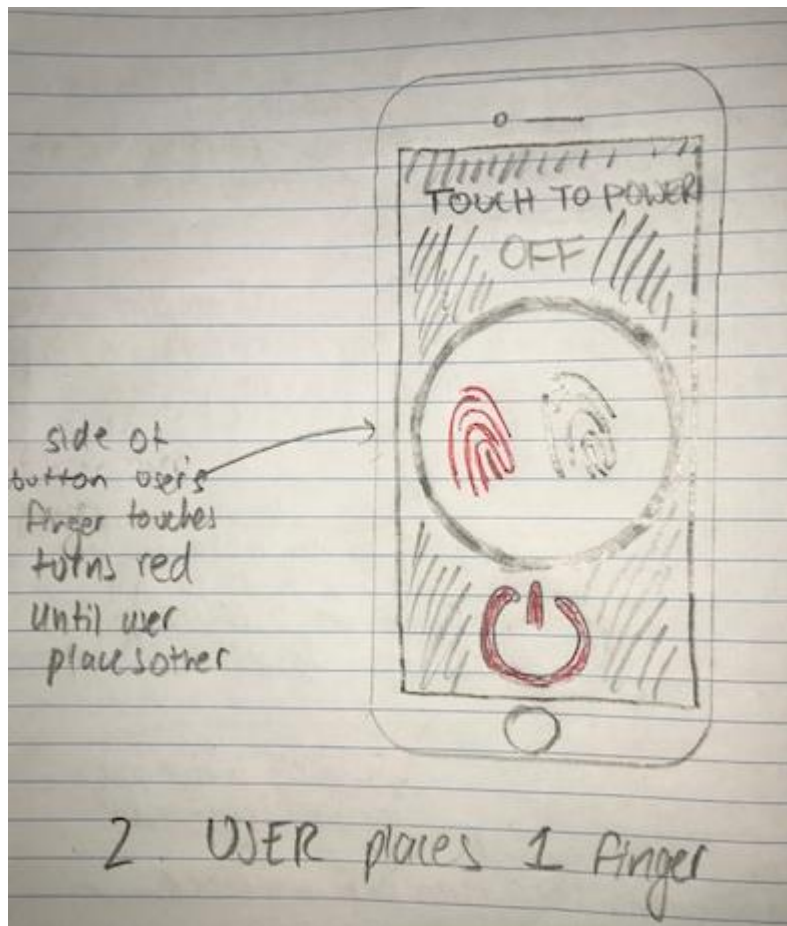
Chosen Button:

The chosen button was the third option, a button that requires being touched with two fingers on a touch screen to be activated.

Designs:

The designs sketched on paper and included below contain arrows and descriptions alongside them to validate the decisions made in terms of style, functionality etc. The button shown below was given the additional task of being an off button on a touch screen phone, requiring two fingers to be turned off. The idea behind the button is that once the user performs a certain action this interfacw will come up. The button located in the centre of the phone, in order to force the user to move their hands to confirm this action. Once the user has placed both fingers the phone will flash red quickly before turning off.

Pictures:

- words describing button functionality
- background dark translucent
- two finger print pictures prompting user to use 2 fingers (initially Black)
- Inconvinient placement so user has to physically move hands to get 2 fingers on it to activate
- large off button logo coloured bright red

TOUCH TO POWER OFF

1. If user does required task to bring off turn off interface.

TOUCH TO POWER OFF

side of button user's finger touches turns red until user places other

2. USER places 1 finger

rays in red represent brief flashes immediately after both fingers go down before turning off.

3 User Places Both Fingers on Button.

Explanations:

Because the button is to be used by someone who doesn't speak the designer's language, the text shown above the button cannot be relied upon. Instead the interface needs to have sufficient learnability and discoverability. The main signifies used to enhance this aspect of the design include the colour scheme, the icons used and the reactions of the interface.

The colour scheme used in the design are red and black, colours that are commonly used with a power on/off button or functionality, the colours also have the effect of urgency or importance as they are commonly used to show errors or put on signs that demand attention (I.e. stop signs). This benefits the added functionality of powering off because it acts something like a confirmation, the user will know something important is happening within the phone/system when they see the colour scheme, this is commonly universal so the colour scheme is a signifier for the user.

The icons used in the design including two finger prints and the off icon also help the discoverability of the interface as the user will commonly have seen these two icons before if they have used touch screen, or finger print technology prior to this button as it is part of their mental model. The off logo shows what the button aims to be doing, and the finger prints will become bright red when a finger is placed on top of the icon, with the entire button becoming bright red once both fingers are placed on it. The screen will then flash red for 0.25 seconds before powering off.

The reactions of the interface such as the finger prints turning red and the button going red and screen flashing help the user realise that they have done something correct. This is colour changing concept is often part of the user's mental model already so they will know that they have done something right. It has the added benefit of if the user is not familiar with similar interfaces and they experiment by placing one finger and see one finger print go red, they will hopefully gather that two fingers are required to complete the buttons function.