Submitted by Group 36

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DIS1 WS 19/20 Assignment 2
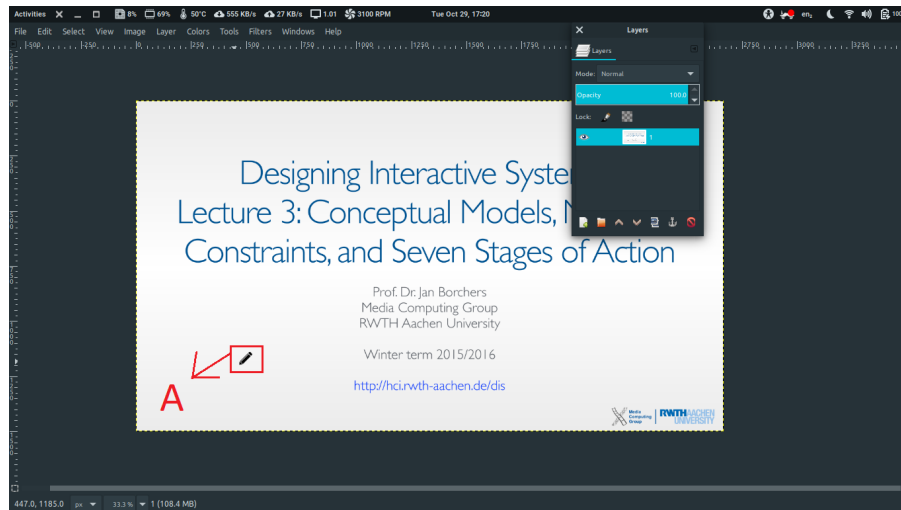Applying Design Principles to Evaluate and Redesign UIs
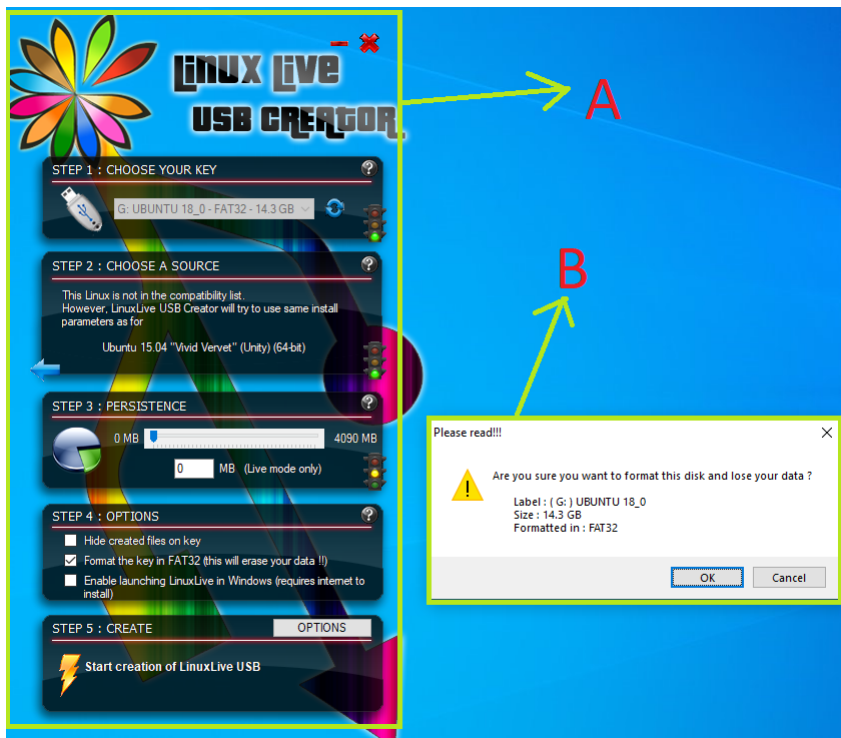
Task 1

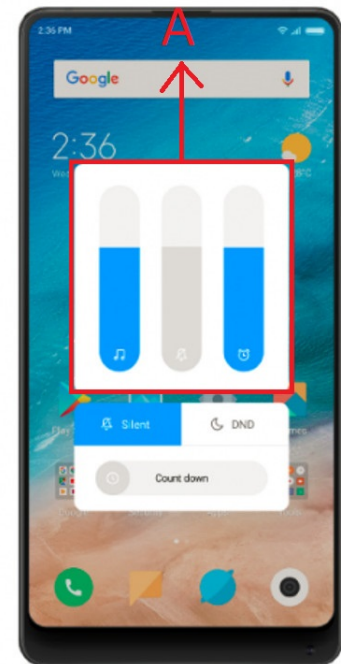Figure 0.1: GIMP

Figure 0.2: LiLi USB Creator

Figure 0.3: MiUI:
UI of Xiaomi brand phones

| **Natural Mappings and Forcing Functions: Examples** |
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| **Natural mapping with spatial analogy:** telephone voice control buttons
 MiUI:A has volume-up on the up, and has the volume-down just below it. This layout of volume adjustment with a slider, in a sense, makes increasing the volume with pulling the slider above and makes decreasing the with pulling the slider below, similar to the real-world version arrangement. |
| **Natural mapping with perceptual analogy:** image editing application's pencil symbol
 GIMP:A has the pencil symbol as the imitation of the device itself. Although we are not actually controlling a real pen, the pen shaped indicator in place of the cursor definitely helps. |
| **Natural mapping with cultural analogy:** Linux bootable USB creator tool's layout
 LiLi:A has an order from top to bottom, which is a natural analogy. It courts you step by step downward through its graphical interface, with each step requiring you to complete the previous step. We people tend to naturally follow this pattern. |
| **Forcing functions:** confirmation of target in Linux bootable USB creator tool
 LiLi:B warns user about the future deletion of the data that currently resides in a USB. User has to confirm that they are sure to use that USB, and willing to continue doing so. |

Task 2
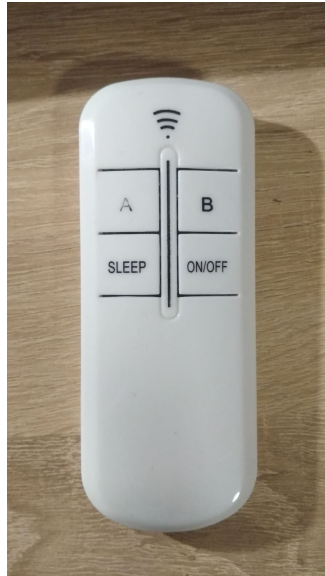
Figure 0.3: Home Appliance Picture for Task 2

Task Description:

User is sleepy and he/she want to make a nap. User can use remote control to switch to sleep mode in the room. Sleep mode in smart home should cause also reducing temperature in the room, covering blinds etc. (it is not just turning off the light). If user want just to turn off the light he/she of course can use light switch on the wall.

Potential Gulf	Stage	Formulation of Stage
	1. Goal	User is sleepy and he/she want to make a nap.
	2. Plan	Change currently turned on light in the room to some kind of sleep mode or just turn off the light.
	3. Specify	User is determining how to get this plan done. User has two ways to achieve the goal: use light switch on the wall or use a pilot. User decided to use a remote controll. He/she also decided to click SLEEP buton in order to switch to sleep mode in the room.
	4. Perform	User is clicking SLEEP button.
	WORLD	
	5.Perceive	Light signifire is turn on on the remote control. In the user`s room was immediately flash of light.
The gulf was when the user was trying to figure out what happened. The idea was to prepare room to user`s nap. But the expectations failed after clicking SLEEP button.	6. Interpret	User is trying to make sense and interpreting what happend in the room.
	7. Compare	User was wanted to turn on the sleep mode in the room. Or even turn off the light. But regarding to his/her action, gets unknown feedback, definitely unexpected.

Task 3

Example of a home appliance more closely associated with level: Visceral

https://amzn.to/2C6OhJk
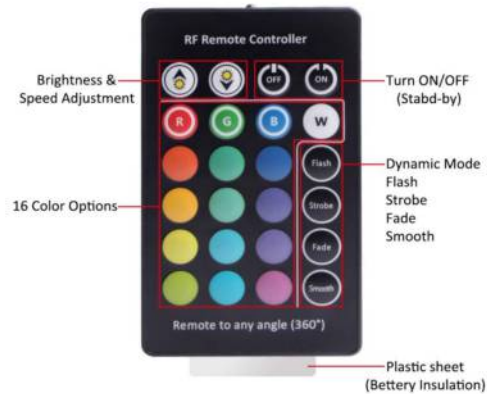
Justification: The first impression that a user of this remote control gets is that it is very nice looking, easy to figure out and super light (8.2 ounces = 28 g). The designer of this pilot removed more advanced functions that could be programmed to this pilot easily and left only the basics in order to avoid having too many buttons (that would make the remote control too complicated for a user at first glance). Also colors and shapes of buttons are very modern looking which emphasize the attractive look of the pilot.

Example of a home appliance more closely associated with level: Behavioral

https://amzn.to/2PlEdP1

Justification: The designer of this remote control inserted there more buttons and allowed user to do more functions. However, that didn't make the pilot too complicated. Using this pilot is very easy for user and allows him to do quite advanced things with many options that he has. The usability of every single button is very easy to figure out because of colors, text and symbols used on them. This design makes user to feel that he can master the remote control and all functions very easily.

Example of a home appliance more closely associated with level: Reflective

https://www.savant.com/product/remote

Justification: This remote control is designed by luxurious smart home company - Savant. Their products are designed for the super rich (allegedly Steve Jobs used it). For this reason this remote control invokes reflective response because everybody would want to have a product of brand that was used by the richest people in the world.

Moreover, the design (screen, modern shape, color) and variability of options makes user want to present this pilot to every guest that would come to his house. Even if the pilot would have some disadvantages and would create some problems when user want to figure it out, the user would most likely ignore them due to the prestige that comes with owning such home applience