



**Interação Pessoa-Máquina**

**2023/2024**

## **Assignment 1**

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October 30th, 2024

# *Bad User Design - Microwave Oven Panel*

Allows users to heat food, adjust time, temperature, and access other cooking functions.

The Death by Mega-Button-Pad Problem.



Figure 1: 31 buttons, looks like a phone dial ..., talk about overkill ...



Figure 2: Removing the “phone dial”, one knob simplifies accessibility, we’re definitely moving into the right direction.



Figure 3: A further solution, in a one button layout. Simpler, and can even integrate 2 clicks, one for mode and one for temperature, both integrated into an LCD display.

## **Bad Aspects:**

**Overloaded with Options:** Many microwaves (mostly the analogic ones) have too many buttons (Defrost, Grill, Power Levels, Timer) that can confuse the user. This can be considered a Usability Trade-Off since all these options are essential in this product, however we can improve the layout to minimize the option overload, favoring ease of use.

**Inconsistent Labels:** Buttons are often labeled in confusing ways that are not intuitive for every user. Some even contain plain images, with no text, forcing perhaps the user to read the manual or to search up the meaning of these symbols.

**Overcomplexity in Basic Tasks:** Setting simple functions like time and power levels may require multiple button presses or consulting the manual. This can be tiring, frustrating, and impractical.

## **Main reasons of why it's bad:**

Users often struggle with finding and using the correct settings. Many people end up using only a couple of functions (like setting the time manually), ignoring the others due to complexity, this perfectly shows that there is an overload of information and usability is compromised heavily due to this.

# Good User Design - Car Key Fob

The car key fob is designed to allow users to lock, unlock, and sometimes start their car remotely.

## One Key, To Rule Them All



Figure 4: Straight forward UI, 4 features, 4 buttons, images are also indicative of the function.



Figure 5: Some keys even use ambitious and unique designs, but maintain their simplicity over their functions.



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## Good Aspects:

**Simplicity:** Typically has a few buttons (lock, unlock, and sometimes trunk release), making it easy to understand and use.

**Tactile Feedback:** Buttons often have different shapes or textures, helping users distinguish them by feel.

**Convenience:** Allows for remote interaction with the car, even from a distance.

## Why It's Good:

It enhances the user experience by providing ease of access and reducing the need to physically insert a key, especially useful in bad weather. It's quick, practicable, and easy to store.

The limited number of clearly marked buttons helps prevent user error.

Sometimes (perhaps most of the time), simpler problems require simple solutions, this is a good case of that same coercion.