

Design issues of Microsoft Excel

HCI

Submitted to: Dr. Khandaker Tabin Hasan

Submitted by: Pias, Md. Abul Basar

ID: 18-38128-2

Sec: B

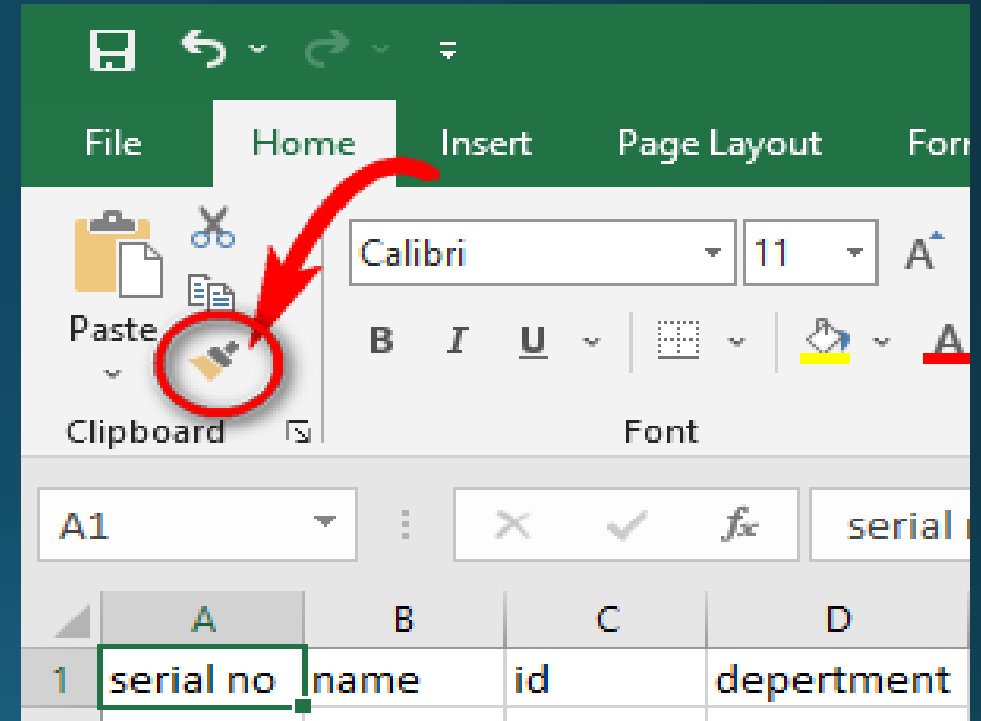
Affordance

Affordance is a self-describing property of any system or any product. Users can get ideas by seeing the system at first look. If a user can interact with the system by only seeing this, then this product affordance is good otherwise it's not a good affordance.

Affordance error of MS EXCEL

Here the icon looks like a cleaner or drawing button but it's not.

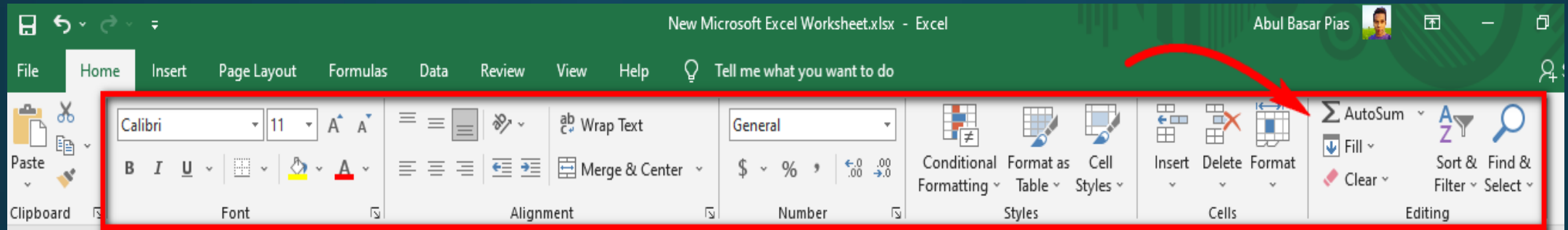
That means the button has a problem with affordance.



Visibility

Visibility is the property of an element that defines how visible and functional the element is. It has to show the available functionalities of the element. Visibility is the most important part for the user.

Visibility error of MS Excel



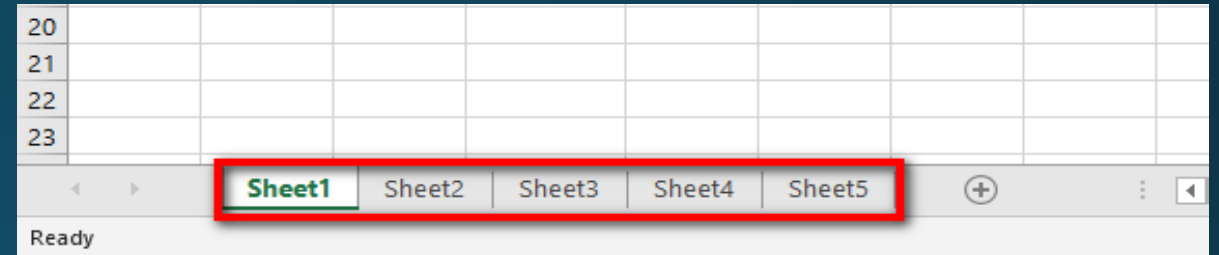
The home screen bar is too big to find a specific option. It has many types of editing option in one place that is not focusable when doing a task.

Mapping

Mappings are like the relationship between control and their effects. Mapping should be natural that users can guess what it is and what performance it can be done. Mapping element design should be simple and easy. Like vehicle steering, stove burner, simple on-off switch.

Mapping error of MS excel

In the below part of excel sheet user can create multiple tabs by clicking '+' icon. But there is no visible option to cancel the tab. If a small cross 'X' icon is added beside the tab name then it would be a good mapping example.

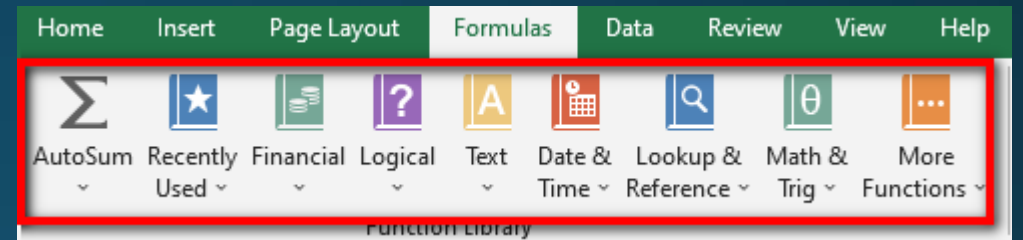


System Image

The system image is the visible part of a device or element. The designer only communicates to the user through the system image. If the system image is not good then user creates their own interaction model to communicate with the system or device.

System image error of MS Excel

The formula tab is very complex to understand. Each section contains lots of functions that the user can't do understand by seeing it the first time. If the design looks simple then it would be more interactable with an equation.



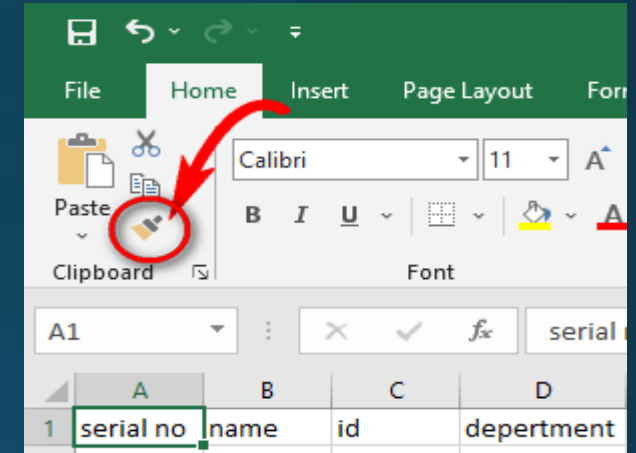
Gulf of Execution and evaluation

The difference between what user see on a device or element and what the element actually do that's called the gulf of execution. If the gulf of execution is very low then the device design is more useful.

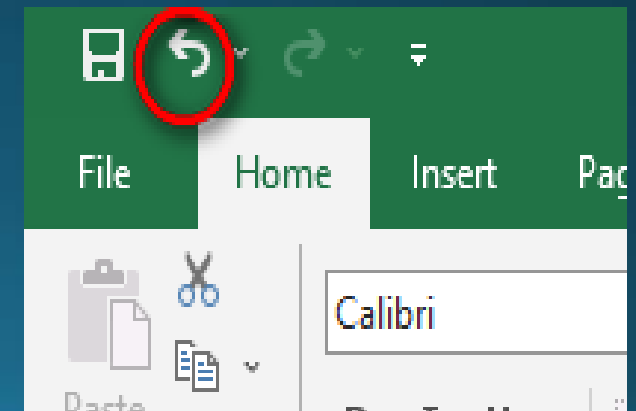
When a user performs any task on a device and gets the idea easily after performing how the system will return the action then it is called Gulf of evaluation.

Gulf of execution and evaluation error of MS Excel

The upper picture shows a brush icon and it looks like it can draw anything but it didn't do this. That means It has more Gulf of execution.



The lower picture shows that it's a backward option that means the user can undo any text. It's a simple thing to understand undo a text that means its Gulf of evaluation is great.



Thank You 😊