Screen design describes the design of graphical user interfaces. Screen design includes a wide variety of applications where screens or displays can be used as part of human-machine interaction. Screen design should be distinguished from the functions of a graphical user interface. Technical implementation is not part of screen design.

Location of elements such as navigation, text, headings, as well as sub-headings, images, videos, icons and other content of the user interface is an important factor. Screen design is therefore concerned with the composition of the various elements and content, and their appearance on their respective interface.

## **CRT Screen Design**

Many online data entry devices are CRT screens that provide instant visual verification of input data and a means of prompting the operator. Operator can make any changes desired before the data go to the system processing. A CRT screen is actually a display station that has a buffer for storing data. A common size display is 24 rows of 80 characters each or 1,920 characters.

There are two approaches to designing data on CRT screens: Manual and software utility methods. The manual method uses a work sheet much like a print layout chart. The menu or data to be displayed are blocked in the areas reserved on the chart and then they are incorporated into system to formalize data entry.

The main objective of screen display design is simplicity for accurate and quick data capture or entry. Other guidelines are:

- 1. Use the same format throughout the project.
- 2. Allow ample 3pace for the data. Overcrowding causes eye strain and may tax the interest of the user.
  - 3.Use easy-to-Learn and consistent terms, such as "add," "delete,' and "create."
  - 4. Provide help or tutorial for technical terms or procedures.
  - 5. The screen must have multi-windows presentation
  - 6. Color the screen design

## Use of screen design

Screen design is not only used for websites, mobile websites or <u>apps</u> for smart phones, but also in many other applications or devices which have user interaction on different screen sizes as their central element. These various formats or devices are challenging for screen designers, because content will be shown on different screens. This also means that certain restrictions on layout must be taken into account and exploited.

The features and possible interaction patterns should be supported by the graphical properties of the medium or device. At the same time, the overall impression of the screen display must satisfy certain aesthetic requirements. For example, the elements on the screens should have the correct proportions, which have an aesthetic effect on the observer or user. Such aesthetics is in turn associated with the user interface and is directly related to aspects such as web design, <u>usability</u> or <u>user experience</u>.

## **Types of functions**

Screen designers usually collaborate with programmers and web designers to support the features of display applications through design. They have to comply with the requirements of screen design, and also take into consideration psychological and technical factors. After all, screens are always part of the programming or markup language used. Users are always at the beginning of a process in screen design. Screen design should be based on the target audience. Barrier-free screen designs are therefore differently conceived than screen designs for mobile devices. Displays for children contain different design elements than those for adults.

In the course of the design process, aspects such as corporate design or technical implementation with <u>HTML</u>, <u>PHP</u> and particularly <u>CSS</u> also play an important role. The latter is of course dependent on the application area and the language used. Screen designers therefore often create a style guide, which summarizes and documents the patterns of interaction and visual design. The purpose of a style guide is the consistent implementation of the different requirements for different output devices, target groups and user interface features.