**Ans1.** A user interface (UI) is a visual element or a group of visual elements organized so a user can operate and/or interact with a machine or a system whether it is mechanical, electronic or computerized.

A very simple interface example would be a light switch indicating how a light should be turned on or off.

Although, in the case of a light switch, an interface is not absolutely essential (user can see if the light is on or off), more complex systems would be difficult if not impossible to operate without indications. Imagine a big machine covered with many similar buttons and no indications. A more complex although still simple interface, would be one of a basic radio. It tells the user how to power it on and off, how to choose a band (am/fm) and a channel, and how to adjust the volume.

The computerized system's interface (application or web site) has the same purpose : allow user to do various tasks. As you will soon discover, it is not enough for an interface to be beautiful. Before anything else, it must be efficient.

**Ans2. Designing user interfaces**

In order to produce efficient user interfaces, the minimal requirement is to understand the basic concepts of computer-human or human-software interaction processes. The communication between a user and a system is generally based on request-answer model. The interface must then allow user to make requests so the computer can perform actions to supply an answer that will then be evaluated by the user. It is important for an interface to be produced with its user in mind (for instance, using the same language) so the user may understand how to complete its tasks. But, the user also has to adapt to the interface, to learn how to use it. On some systems, it can be quite difficult. The user interface designer will have to find ways for the interface to be as easy as possible to be understood and used.

Steps of designing interface

User intention

User request

Computer action

Computer answer

Evaluation of the answer

**Ans3 .** The first computers has been built in (1945)

The first computer used what is called a batch interface. The user interacted with the computer feeding it with punch cards or paper tape. There was no real-time answers and it could take sometimes many days before getting an answer. There were no screens to see or evaluate the computer answers and changing function (changing the computer's logic) needed to rewire the computer for the new type of requests using a plug-board. It is only in 1957, after the invention of the television, that screens would finally be used, making it possible to the user to find errors earlier in the process and insure this way a better quality end data.

**Ans4. Common component of the user interface**

**Functional and communicational aspects** A web site interface serves many functions and targets many objectives.

First of all, it identifies the company, the product or the service the web site has been developed for. That is why the logo is usually the first element to be presented on a web page.

Following the logo, a navigation is usually presented so the user can choose from different information segments available throughout the web site.

The content of the web site and of the different section is often presented so users know where to find what they are looking for. More and more web site will also present functionalities such as online shopping or reservations.

**Design aspect** The logo identifies the company or brand, but the web site design by itself should also represent it. The web site is usually designed based on the corporate image, using the same style and colors used in the enterprise marketing activities. The design should be created with the user in mind in order for the visitors to feel concerned about the nature of content, of the offer. The style and the quality of the design should equal or overpass those of the competition and importance should be given to efficiency using cognitive ergonomics principles.

**Ans5. User Interface is important in the sense that it makes it easier for your target audience to clearly see what your products are. It is designed in a way to display the services that you offer without ambiguity, in order to draw your visitors’ attention and keep them on your site.**

**Simply put, a good User Interface is important because it can turn potential visitors to buyers as it facilitates interactions between the user and your website or web application.**

**When you scratch beneath the surface you realize that UI is quite an intricate field that involves anticipating the user preferences and then creating an interface that understands and fulfils those preferences. The  UI not only focuses on the aesthetics but also maximizes responsiveness, efficiency, and accessibility of a website. In other words UI design will help**[improve conversion rate](https://f5-studio.com/articles/how-to-increase-conversion-rate-75-examples-to-improve-your-sites-usability/) on your website.