

What is a User Interface?

User Interface (UI) defines the way humans interact with the information systems. In Layman's terms, User Interface (UI) is a series of pages, screens, buttons, forms, and other visual elements that are used to interact with the device. Every app and every [website](#) has a user interface. User Interface (UI) Design is the creation of graphics, illustrations, and the use of photographic artwork and typography to enhance the display and layout of a digital product within its various device views. Interface elements consist of input controls (buttons, drop-down menus, data fields), navigational components (search fields, slider, icons, tags), and informational components (progress bars, notifications, message boxes).
History of UI

The only user interface on early computers was a few buttons at the operator's console. Many of these early computers relied heavily on punched cards that were created using keypunch machines to input data and programs. Some voting machines still employ a punched card technology even though they are virtually obsolete in computers as of 2012 (punched cards).

With the advent of the command line interface, which at first took the form of a largely blank display screen with a line for user input, the user interface underwent an evolution. Users navigated information exchanges with the computer using a keyboard and a series of commands. This command line interface gave way to one where menus (lists of options with text descriptions) became the norm. Finally, Xerox's Palo Alto Research Center (PARC) created [GUI](#), adopted and enhanced by Apple and standardized by Microsoft in [Windows operating systems](#).

Types of User Interface

GUI (Graphical User Interface): Visual user interface output (keyboard and monitor) with a tactile user interface input.

Menu Driven Interface: An UI that uses a menu of options to navigate a program or website is known as a menu-driven UI. For instance, [ATMs](#) have user interfaces that are menu-driven and simple to use.

Form Based Interface: Form-based user interfaces provide a small number of options for users to choose from when entering data into a program or application. For instance, a device's settings menu is form-based.

Touch user interface: Haptic or tactile user interface. Haptic input is used by most [smartphones](#), tablets, and other devices with [touch screens](#).

Voice user interface: Auditory commands are used to communicate between humans and machines. [GPS](#), talk-to-text gadgets, and virtual assistants are a few examples.

Significance of User Interface

A good user interface (UI) focuses on making user's interactions simple and efficient. User would appreciate a website with intuitive user interface that leads them towards their task in most engaging way. User Interface (UI) design focuses on thinking of a user, what they might need to do when they visit website and ensure that the interface has elements that are easy to access and understand. Being a UI designer, one need to understand the goals, skills, preferences and tendencies of the user to make a better interface.

Importance of User Interface

How you present your product matters the most. The presentation (the interface) of a badly designed [application or website](#) can drive away the incoming users and leave a bad impression on them. [Navigation](#) through a site can be made efficient and simple by effective UI design.

Great design is great business The color scheme, layout, graphics, tab and button placement, typography usage and other design elements determine how well the site/app communicates visually with the user.

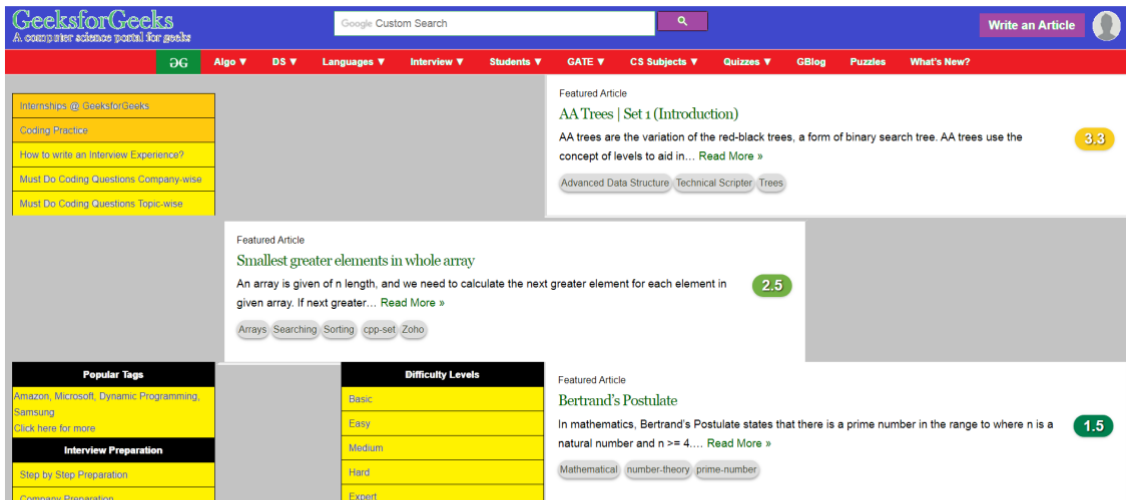
At a given time, finding right thing at right place is essential Consistent navigation that is equally easy to locate and browse through is basic need of any app/website. If navigation is complex for a user to work, there is no way he would want to work on that site/app.

Example of User Interface

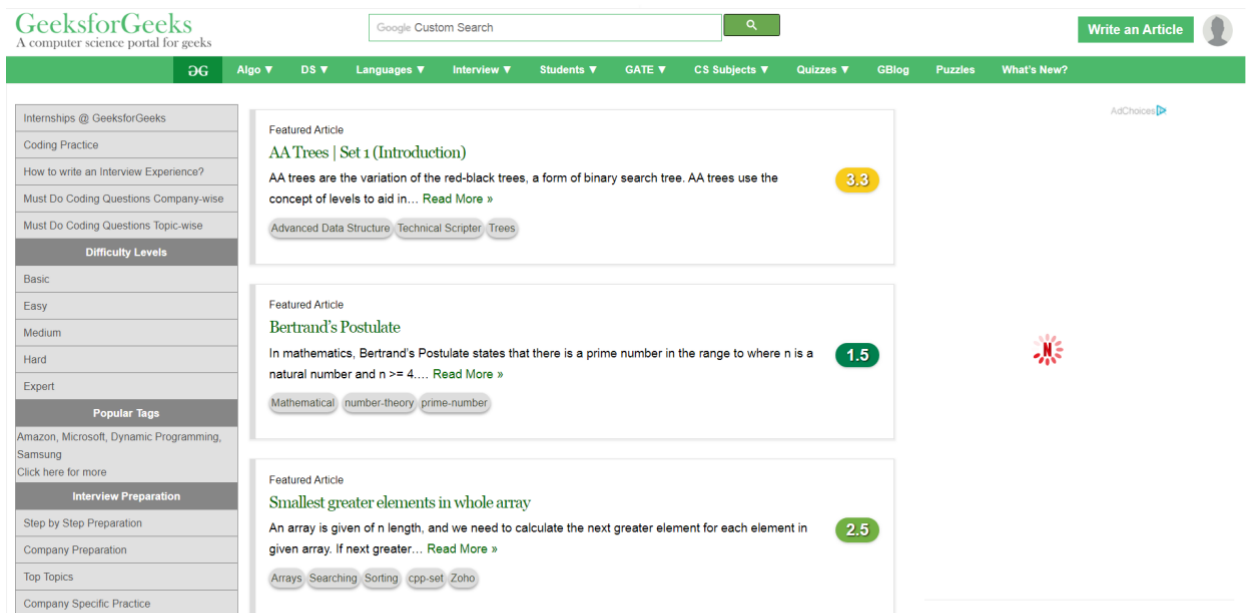
It shows a [Bad UI design and a Good UI design](#). See the differences and try to understand how important it is to have a good UI design.

Example of User Interface

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BAD UI



GOOD UI



As the User Interface can make or break the incoming users,

it's important to take care of below points when designing a UI:

Keep the interface simple: Clear and simple interface are best. Avoid unnecessary elements. Best interfaces are invisible to user.

Be consistent and use common UI elements: Using common elements, users feel more comfortable and are able to get things done more quickly. Create pattern to facilitate efficiency.

Placement of items: To draw attention to most important pieces of information careful placement of items is necessary. This can improve users readability and engage them.

Use of right color: To direct attention towards something take advantage of color, light, shade, contrast and texture. It's important to make use of good color combination as a bad color combination can easily distract or irritate a user.

Anticipate: Make the user to work less by having pre-chosen fields, reduce the burden on the user, anticipate the goals of the users who come to your site. The things which can be mostly searched by the users are presented so that the users need not to work to search for it.

Advantages of User Interface

Some advantages of User Interface are mentioned below:

No need to learn complex commands/languages for working with UI.

Easiness for non-technical people. A beginner can navigate through a site with ease if its simple and well informative.

Usage of blocks and [typography](#) makes user experience better.

Easy setup and ready to start working are awesome. Hiding the complexity of actions from the user and display only the required information is key to good interface.

Disadvantages of User Interface

Some disadvantages of User Interface are listed below:

When not properly built, it can be very difficult to work with.

Takes time to built a Perfect UI.

Difference Between User Interface and User Experience

User Interface(UI)	User Experience(UX)
UI focuses on the quality of the user's contact with the product	UX centers around the intent and functionality of the product.
UI comprises more creative design elements linked to the look and feel of the user's experience	UX involves components like market research and understanding consumer needs.
UI is more particularly focused on the design of the end product	UX are concerned with managing the overall project from ideation through development and delivery