

Lab 1: Basic Terminologies in UI/UX

- Image

An "image" refers to a visual element or graphic that is used to convey information, provide visual interest, enhance aesthetics, or improve the overall user experience.

- Types of image

1. Photographs
2. Icons
3. Illustrations
4. Logos
5. Infographics
6. Buttons and UI Elements
7. Background Images
8. Avatars and User Profiles
9. Product Images
10. Progress and Loading Indicators
11. Feedback and Notifications
12. Background Patterns and Textures
13. Placeholder Images
14. Illustrated Characters
15. Responsive Images

- Difference between raster image and vector image

Aspect	Raster Images	Vector Images
Definition	Made up of pixels	Composed of mathematical paths
Resolution	Fixed resolution	Resolution-independent
Complexity	Best for complex graphics	Suited for simpler graphics
File Size	Can be larger	Typically smaller
Editing	Works with individual pixels	Modifies shapes and paths
Scaling	Can lose quality when enlarged	Infinitely scalable without quality loss
Suitability	Photographs, textured backgrounds, complex visuals	Logos, icons, illustrations, UI elements

- Pixel

A "pixel" is the smallest discrete element of an image or display screen. The term "pixel" is short for "picture element." Pixels are the building blocks of digital images and screens, and they play a crucial role in defining the visual elements and layout of user interfaces.

- Video

A "video" refers to a multimedia element that incorporates moving images, typically accompanied by audio, to convey information, engage users, or enhance the overall user experience. Videos are an important tool in UI/UX design as they can help communicate messages, demonstrate functionality, and provide visual interest to users.

- Different format of videos

1. MP4 (H.264)
2. WebM (VP9)
3. AVI (Audio Video Interleave)
4. MKV (Matroska Video)
5. MOV (QuickTime)
6. WMV (Windows Media Video)
7. FLV (Flash Video)
8. 3GP/3G2
9. OGG (Ogg Video)
10. FLV (Flash Video)

- AR-VR-MR

AR enhances the real world with digital elements, VR immerses users entirely in a virtual world, and MR blends digital and physical elements, enabling interaction between the two. Each technology has its own unique applications and use cases in fields ranging from entertainment and gaming to education, healthcare, and industrial design.

- Dpi

"DPI" stands for "Dots Per Inch." It is a measurement used to determine the resolution, or level of detail, in printed and digital images, including those used in user interfaces.

- Color models

Color models, also known as color spaces or color systems, are mathematical representations that describe and define how colors are represented and organized in various applications and contexts.

For example: **RGB (Red, Green, Blue), CMY(K) (Cyan, Magenta, Yellow, Key/Black), HSV (Hue, Saturation, Value), HSL (Hue, Saturation, Lightness)**

- Resolution

"Resolution" refers to the number of pixels or dots that make up a digital display or image. Resolution plays a critical role in determining the quality, clarity, and detail of graphics and visual elements within a user interface.

- Html/hypertext

HTML, which stands for "HyperText Markup Language," is the standard markup language used for creating and structuring content on the World Wide Web. It serves as the foundation for building web pages and defining the structure, layout, and presentation of web documents.

- Hosting

"Hosting" typically refers to the process of making a website or web application accessible to users on the internet. It involves storing the website's files, data, and assets on a web server and configuring that server to respond to user requests.

- **Multimedia**

Multimedia refers to the use of various forms of media, such as text, graphics, audio, video, and interactive content, to convey information or communicate a message. It involves the integration of multiple types of media elements into a single presentation or application to create a richer and more engaging user experience.