



**RQF LEVEL 3**



**GENGD301**  
**SOFTWARE**  
**DEVELOPMENT**

# Basic Graphic Design

***TRAINEE'S MANUAL***

*October, 2024*



# BASIC GRAPHIC DESIGN



## AUTHOR'S NOTE PAGE (COPYRIGHT)

The competent development body of this manual is Rwanda TVET Board ©, reproduce with permission.

All rights reserved.

- This work has been produced initially with the Rwanda TVET Board with the support from KOIKA through TQUM Project
- This work has copyright, but permission is given to all the Administrative and Academic Staff of the RTB and TVET Schools to make copies by photocopying or other duplicating processes for use at their own workplaces.
- This permission does not extend to making of copies for use outside the immediate environment for which they are made, nor making copies for hire or resale to third parties.
- The views expressed in this version of the work do not necessarily represent the views of RTB. The competent body does not give warranty nor accept any liability.
- RTB owns the copyright to the trainee and trainer's manuals. Training providers may reproduce these training manuals in part or in full for training purposes only. Acknowledgment of RTB copyright must be included on any reproductions. Any other use of the manuals must be referred to the RTB.

© **Rwanda TVET Board**

*Copies available from:*

- *HQs: Rwanda TVET Board-RTB*
- *Web: [www.rtb.gov.rw](http://www.rtb.gov.rw)*
- **KIGALI-RWANDA**

Original published version: October 2024

## ACKNOWLEDGEMENTS

The publisher would like to thank the following for their assistance in the elaboration of this training manual:

Rwanda TVET Board (RTB) extends its appreciation to all parties who contributed to the development of the trainer's and trainee's manuals for the TVET Certificate III in Software Development, specifically for the module **"GENGD301 Basic Graphic Design"**.

We extend our gratitude to KOICA Rwanda for its contribution to the development of these training manuals and for its ongoing support of the TVET system in Rwanda.

We extend our gratitude to the TQUM Project for its financial and technical support in the development of these training manuals.

We would also like to acknowledge the valuable contributions of all TVET trainers and industry practitioners in the development of this training manual.

The management of Rwanda TVET Board extends its appreciation to both its staff and the staff of the TQUM Project for their efforts in coordinating these activities.

## **This training manual was developed:**

Under Rwanda TVET Board (RTB) guiding policies and directives



Under Financial and Technical support of



## **COORDINATION TEAM**

RWAMASIRABO Aimable

MARIA Bernadette M. Ramos

MUTIJIMA Asher Emmanuel

## **PRODUCTION TEAM**

### **Authoring and Review**

KAYUMBA Fiston

NSHIMIYIMANA Jean Bosco

### **Validation**

NIKUZWE Aline

UZAMUKUNDA Judith

HAKIZIMANA Bernard

### **Conception, Adaptation and Editorial works**

HATEGEKIMANA Olivier

GANZA Jean Francois Regis

HARELIMANA Wilison

NZABIRINDA Aimable

DUKUZIMANA Therese

NIYONKURU Sylvestre

NYINAWUMUNTU Gaudance

### **Formatting, Graphics, Illustrations, and infographics**

YEONWOO Choe

SUA Lim

SAEM Lee

SOYEON Kim

WONYEONG Jeong

IZERE Annaise

### **Financial and Technical support**

KOICA through TQUM Project

## TABLE OF CONTENT

AUTHOR'S NOTE PAGE (COPYRIGHT)-----	iii
ACKNOWLEDGEMENTS-----	iv
TABLE OF CONTENT -----	vii
ACRONYMS-----	ix
INTRODUCTION -----	1
MODULE CODE AND TITLE: GENG301 BASIC GRAPHIC DESIGN -----	2
Learning Outcome 1: Edit Photos with Adobe Photoshop -----	3
Key Competencies for Learning Outcome 1: Edit photos with Adobe Photoshop-----	4
Indicative content 1.1: Introduction to Photoshop -----	6
Indicative content 1.2: Remove Unwanted Elements from the Image -----	48
Indicative content 1.3: Manage Layers -----	63
Indicative content 1.4: Adjust and Retouch Photo-----	93
Indicative content 1.5: Apply Typography -----	123
Indicative content 1.6: Transform Photo-----	135
Learning outcome 1 end assessment -----	155
References-----	156
Learning Outcome 2: Manipulate Graphics with Adobe Illustrator -----	157
Key Competencies for Learning Outcome 2: Manipulate Graphics with Adobe Illustrator -----	158
Indicative content 2.1: Description of Workspace -----	160
Indicative content 2.2: Create Vector Paths -----	193
Indicative content 2.3. Design Shapes -----	207
Indicative content 2.4.: Description of Brand Identity -----	246
Indicative content 2.5. Design Infographics -----	252
Learning outcome 2 end assessment -----	268
References-----	270
Learning Outcome 3: Export File -----	271
Key Competencies for Learning Outcome 3: Export File-----	272
Indicative content 3.1: Selection of File Format -----	274
Indicative content 3.2: Set Image Quality-----	279

Indicative content 3.3. Export Artwork -----	285
Learning outcome 3 end assessment -----	290
References-----	292

## ACRONYMS

**BMP:** Bitmap Image File

**CMYK:** Cyan, Magenta, Yellow, Black

**GIF:** Graphics Interchange Format

**JPEG:** Joint Photographic Experts Group

**KOICA:** Korea International Cooperation Agency

**PDF:** Portable Document Format

**PNG:** Portable Network Graphics

**PSD:** Photoshop Document

**RGB:** Red, Green, Blue

**RTB:** Rwanda TVET Board

**TIFF:** Tagged Image File Format

**TQUM Project:** TVET Quality Management Project

**TVET:** Technical and Vocational Education and Training

## INTRODUCTION

This trainee's manual includes all the knowledge and skills required in computer system and architecture specifically for the module of **“Basic Graphic Design.”** Trainees enrolled in this module will engage in practical activities designed to develop and enhance their competencies. The development of this training manual followed the Competency-Based Training and Assessment (CBT/A) approach, offering ample practical opportunities that mirror real-life situations.

The trainee's manual is organized into Learning Outcomes, which is broken down into indicative content that includes both theoretical and practical activities. It provides detailed information on the key competencies required for each learning outcome, along with the objectives to be achieved.

As a trainee, you will start by addressing questions related to the activities, which are designed to foster critical thinking and guide you towards practical applications in the labor market. The manual also provides essential information, including learning hours, required materials, and key tasks to complete throughout the learning process.

All activities included in this training manual are designed to facilitate both individual and group work. After completing the activities, you will conduct a formative assessment, referred to as the end learning outcome assessment. Ensure that you thoroughly review the key readings and the 'Points to Remember' section.

## **MODULE CODE AND TITLE: GENG301 BASIC GRAPHIC DESIGN**

**Learning Outcome 1: Edit Photos with Adobe Photoshop.**

**Learning Outcome 2: Manipulate Graphics with adobe illustrator.**

**Learning Outcome 3: Export file.**

## Learning Outcome 1: Edit Photos with Adobe Photoshop



### Indicative contents

#### 1.1 Introduction to Photoshop

#### 1.2 Remove Unwanted elements from the image

#### 1.3 Manage Layers

#### 1.4 Adjust and Retouch photo

#### 1.5 Apply typography

#### 1.6 Transform photo

### Key Competencies for Learning Outcome 1: Edit photos with Adobe Photoshop

Knowledge	Skills	Attitudes
<ul style="list-style-type: none"><li>● Description of Adobe Photoshop.</li><li>● Identification of Adobe Photoshop layers</li><li>● Description of adobe Photoshop typography</li><li>● Description of image transformation in adobe Photoshop</li></ul>	<ul style="list-style-type: none"><li>● Creation of new Photoshop document</li><li>● Managing layers in adobe Photoshop</li><li>● Performing document pre-set in adobe Photoshop</li><li>● Using Photoshop tools</li><li>● Transformation of image in adobe Photoshop</li><li>● Exploration of interface elements in adobe Photoshop</li></ul>	<ul style="list-style-type: none"><li>● Being Creative</li><li>● Having Curiosity</li><li>● Being Patient</li><li>● Being collaborative</li><li>● Having Critical thinking</li><li>● Being Practical oriented</li></ul>



**Duration: 25 hrs**

**Learning outcome 1 objectives:**



By the end of the learning outcome, the trainees will be able to:

1. Describe properly Adobe Photoshop and its interface elements as used in graphic design
2. Describe correctly adobe Photoshop typography based on the project goals.
3. Describe properly transformation in adobe Photoshop based on the tasks.
4. Create properly document in adobe Photoshop based on the project requirements.
5. Perform correctly document pre-set in adobe Photoshop based on the tasks.
6. Manage properly layers in adobe Photoshop based on the tasks.
7. Use correctly tools in adobe Photoshop based on the tasks.
8. Transform properly image in adobe Photoshop based on the tasks.



**Resources**

Equipment	Tools	Materials
<ul style="list-style-type: none"><li>• Computer</li><li>• Projector</li></ul>	<ul style="list-style-type: none"><li>• Photoshop</li></ul>	<ul style="list-style-type: none"><li>• N/A</li></ul>



## Indicative content 1.1: Introduction to Photoshop



Duration: 4 hrs



### Theoretical Activity 1.1.1: Description of Key Concepts in Adobe Photoshop



#### Tasks:

1: You are requested to answer the following questions related to the key concepts of Adobe Photoshop:

- i. What do you understand in Adobe Photoshop?
- ii. Describe image Document in Adobe Photoshop
- iii. Describe the workspace in Adobe Photoshop
- iv. Discuss the interface elements of Adobe Photoshop
- v. Describe document pre-set in Adobe Photoshop
- vi. Describe photo Importation method in Adobe Photoshop

2: Participate in group formulation

3: Present the findings/ answers to the whole class

4: For more clarification, read the key reading 1.1.1. In addition, ask questions where necessary.



#### Key readings 1.1.1.:

##### 1. What do you understand in Adobe Photoshop?

Adobe Photoshop is a versatile software primarily used for image editing, graphic design, and digital art creation. It is widely recognized as the industry standard for professionals in fields like photography, web design, and advertising, but it's also accessible to beginners for simpler tasks like photo retouching or creating social media graphics.

Photoshop allows users to alter images in countless ways—whether it's adjusting colors, removing blemishes, adding text, or combining multiple images into a single composition.

For example, a photographer might use Photoshop to enhance a portrait by removing skin imperfections and adjusting the lighting, while a graphic designer might use it to create a logo or website layout as it is shown by the figure below:



## 2. Describe an image document in Adobe Photoshop

An image document in Adobe Photoshop is the file where all your editing work takes place. It serves as the digital canvas that can contain multiple layers, which are individual elements like images, text, or shapes that can be edited separately. For instance, if you're designing a poster, the background image might be one layer, the text another, and additional graphics like logos could each be on their own layers.

In Adobe Photoshop, image documents can be categorized based on their file format, color mode, and intended use. Here are the main types:

### ○ Photoshop Document (PSD)

**Description:** The native file format of Photoshop that supports all features, including layers, masks, and adjustments.

**Use Case:** Ideal for ongoing projects where you need to preserve all editing capabilities, like a multi-layered graphic design or photo retouching project.

**Example:** A designer working on a web banner with multiple text and image layers saves the project as a PSD to retain all layers for future edits.

### ○ JPEG (Joint Photographic Experts Group)

**Description:** A widely used compressed image format that reduces file size by discarding some image data, resulting in a loss of quality (lossy compression).

**Use Case:** Best for final output images, especially for web use, where smaller file size is important, and high resolution is not critical.

**Example:** A photographer exports a final version of a retouched photo as a JPEG for uploading to a website or social media.

### ○ PNG (Portable Network Graphics)

**Description:** A lossless image format that supports transparency and higher quality than JPEG.

**Use Case:** Suitable for images that need to maintain high quality and transparency, such as logos, icons, or web graphics.

**Example:** A web designer exports a logo with a transparent background as a PNG to be used on different web pages.

- **TIFF (Tagged Image File Format)**

**Description:** A high-quality image format that supports layers, transparency, and lossless compression.

**Use Case:** Preferred for print projects or archival purposes where maintaining the highest image quality is crucial.

**Example:** A graphic designer saves a high-resolution, print-ready brochure as a TIFF to ensure the best quality for printing.

- **GIF (Graphics Interchange Format)**

**Description:** A format limited to 256 colors, supporting simple animations and transparency.

**Use Case:** Used for creating simple web graphics and animations, like banners or small icons.

**Example:** A web developer creates a simple animated banner ad and saves it as a GIF for use on a website.

- **PDF (Portable Document Format)**

**Description:** A versatile format that preserves all visual elements of a document, including vector graphics and text.

**Use Case:** Ideal for sharing final designs that need to maintain formatting across different devices, or for print.

**Example:** A designer creates a business card layout in Photoshop and saves it as a PDF to send to a client for approval or to a printer.

- **RAW**

**Description:** A format containing unprocessed image data from a camera sensor, allowing for extensive post-processing without quality loss.

**Use Case:** Used primarily by photographers who need maximum control over the final image, especially in terms of exposure, white balance, and color correction.

**Example:** A photographer imports and edits a RAW file in Photoshop to adjust lighting and color before exporting to a more common format like JPEG.

- **BMP (Bitmap Image File)**

**Description:** An uncompressed, high-quality format that supports different color depths and is large in size.

**Use Case:** Rarely used today, but may be used for specific applications requiring high-quality, uncompressed images.

**Example:** A software developer might use a BMP file to ensure image quality for use in a program with no compression artifacts.

Photoshop documents (typically saved with the .PSD extension) can store an extensive amount of information, including not just the visible elements but also masks, effects, and other non-destructive adjustments. This means that even after saving and closing a document, you can reopen it later and continue making changes without losing any quality or previous work.

### 3. Describe the workspace in Adobe Photoshop

The workspace in Adobe Photoshop is the user environment where all tools, panels, and menus are organized to facilitate your workflow. Imagine it as your digital desk, where everything you need to create or edit images is within reach. The main components include the **Document Window**, where your image is displayed and edited; the **Toolbar**, which houses essential tools like brushes, selection tools, and text tools; and various **Panels** (like Layers, History, and Adjustments) that allow you to manage different aspects of your project. For example, the Layers panel is crucial because it lets you organize and manipulate the various elements in your document independently. Photoshop's workspace is highly customizable—if you're focusing on photo editing, you might prioritize panels like Adjustments and History, while a web designer might have panels like Color and Character more prominent. You can also save different workspace layouts to quickly switch between setups tailored to different tasks.

### 4. Discuss the interface elements of Adobe Photoshop

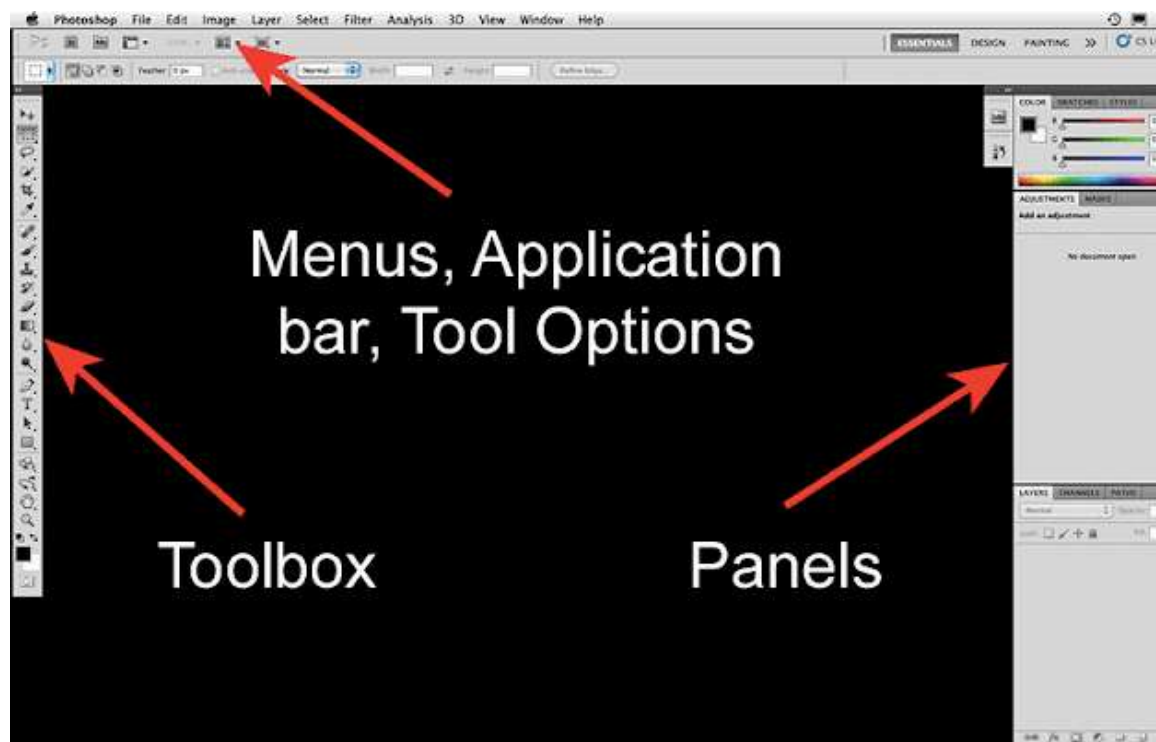
Adobe Photoshop's interface is designed to be flexible and user-friendly, offering a variety of elements that help you interact with your project efficiently. Here's a breakdown of the main interface elements:

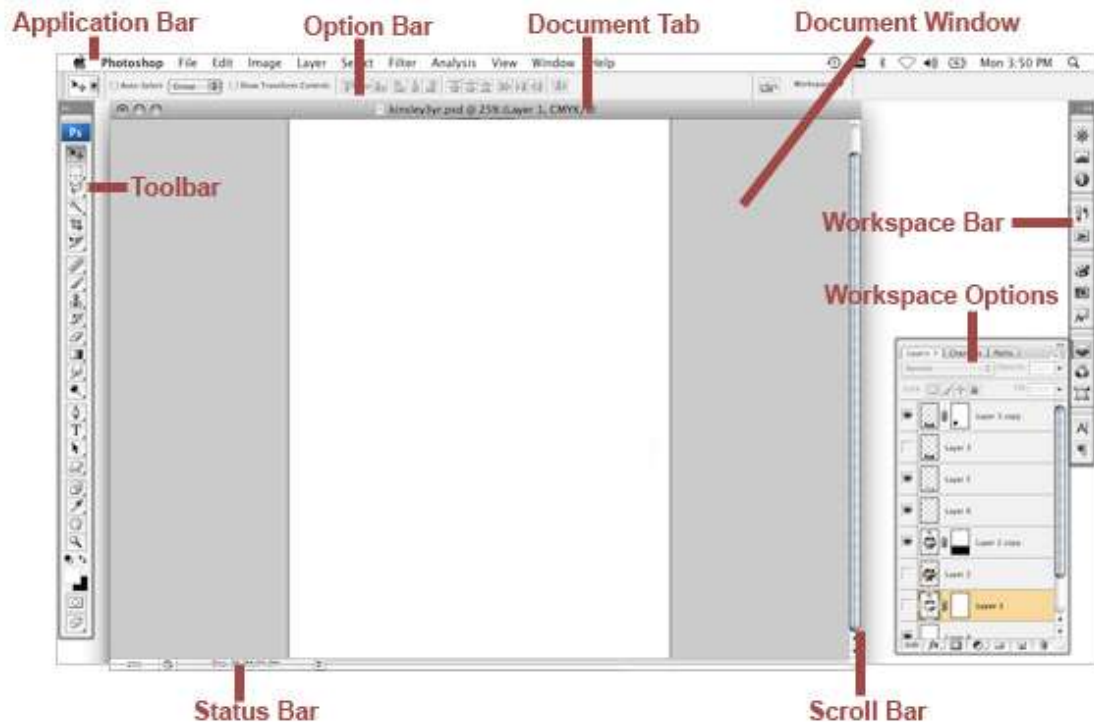
- **Menu Bar:** Located at the top of the screen, the Menu Bar provides access to all of Photoshop's functions, such as file operations (open, save, export), editing options (cut, copy, paste), and more advanced features like filters and 3D tools.
- **Options Bar:** Directly beneath the Menu Bar, this bar changes according to the tool you're currently using, providing options to customize that tool. For example, if you select the Brush Tool, the Options Bar lets you choose brush size, hardness, and opacity.
- **Toolbar:** Positioned typically on the left, the Toolbar contains tools for various tasks like selecting areas of an image, painting, erasing, or adding text. You can also customize the Toolbar to include the tools you use most frequently.
- **Panels:** On the right side, you'll find panels like Layers, which is one of the most important for managing different parts of your document. Other useful panels include Color (for choosing colors), Properties (for adjusting layer settings), and History (which lets you undo and track changes). These panels can be rearranged, docked, or minimized to suit your workflow.

- **Document Window:** This is the central area where your image or project is displayed. You can open multiple documents at once, each in its own tab within this window, allowing you to work on multiple projects simultaneously or transfer elements between documents.

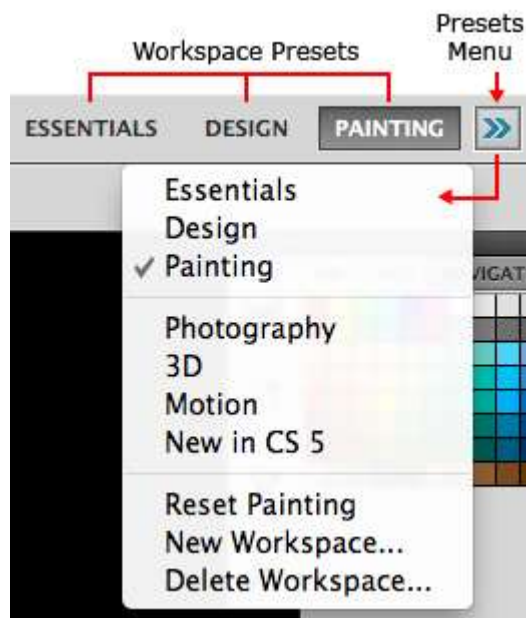
For example, a graphic designer working on a web banner might use the **Move Tool** from the Toolbar to position elements, the **Layers Panel** to organize these elements, and the **Text Tool** to add and format text. Understanding how to navigate and customize these interface elements can significantly improve your efficiency in Photoshop.

When you first open Photoshop, the workspace consists of a set of default or standard **menus, panels, and tools**. Photoshop's menus appear at the top of your screen, the Applications bar is below the menus, the Tool Options bar below that, the panels are placed on the right side of your screen (but can be moved), and the tools are in a toolbox on the left (which can also be moved).





- 1- **Application bar**: The application bar provides access to the Bridge, navigation functions, and window viewing controls. Under Windows, the application bar is located to the right of the menu bar. You can customize the layout and functionality of the Photoshop workspace by using the workspace switcher. The default workspace is called Essentials.



There are pre-sets designed for more specialized work called Design, Painting, Photography, 3D, and Motion. You can modify these presets and save them, reset a preset that you've customized, or even create your own custom presets. The

Essentials, Design, and Painting presets are always visible on the Application bar. To access the other presets, click on the button at the top right to display the menu.

**2- Menu bar:** Click a name in the menu bar to display a list of commands. Click a command in order to choose it. A command followed by three dots (such as New...) displays a window of options called a dialog box. Otherwise, the command works right away.



### **File**

The **File** menu contains options to create new images, load existing images, save images, acquire images from scanners, print images, automate functions, set colour settings and exit the program.

### **Edit**

The **Edit** menu contains options to copy, cut, and paste entire images or parts of images, fill areas of an image, create strokes or outlines around image elements, transform or modify images and set preferences.

### **Image**

The **Image** menu contains options to modify colour depth or mode, manipulate or adjust colour and other image properties, modify image size, canvas size and orientation, examine colour information and extract areas of an image from backgrounds.

### **Layer**

This menu contains options to modify and manipulate layers. (Layers are covered in depth later.) To summarize, a Photoshop image can contain a number of separate levels, or layers, that contain image information.

### **Select**

The **Select** menu contains options to create, modify and manipulate Photoshop's selections. Selections are areas of an image that you choose to isolate from the rest of the image. For example, you might want to isolate a person's eyes to change the colour without affecting the rest of the image.

### **Filter**

Filters, or special effects, are contained in this menu. Applying a filter to an image will modify the image based on the filter's predefined instructions. Examples of some

filter effects: blurring, sharpening, distorting, and applying brush strokes or textures to an image.

### **Analysis**

This menu provides options for measuring, counting objects, and placing markers in your image document.

### **3D (Photoshop Extended version only)**

This menu contains tools for creating and manipulating 3D objects but won't be covered in this course.

### **View**

The **View** menu contains options to change your view of an image; e.g., zooming in and out or displaying how the image might look when printed or viewed on another computer. This menu also houses the ability to show/hide rulers and guides, which will aid in editing your images.

### **Window**

**Window** contains options to show/hide the Toolbox and panels, as well as options to organize images within Photoshop's workspace.

### **Help**

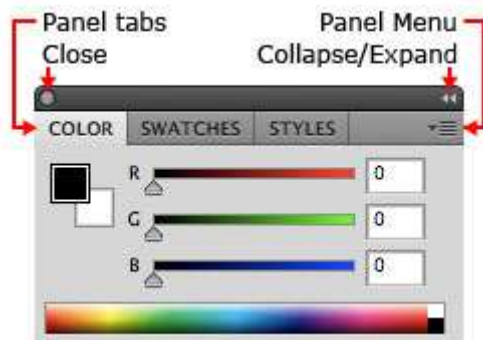
Online help, information about plug-ins and information about the version of Photoshop you're using are located in this menu. Use Help Topics for reference or to find out how to accomplish objectives you might be having problems with.

**3- Options bar:** The settings here modify the behavior of the active tool. The options bar is context sensitive, so you see a different set of options each time you switch to a different tool. If the options bar somehow disappears, you can restore it by pressing the Enter or Return key.

**4- Cursor:** The cursor (sometimes called the pointer) is your mouse's on-screen representative. It moves as your mouse moves and changes to reflect the active tool or operation. Keep an eye on it and you'll have a better sense of where you are and what you're doing.

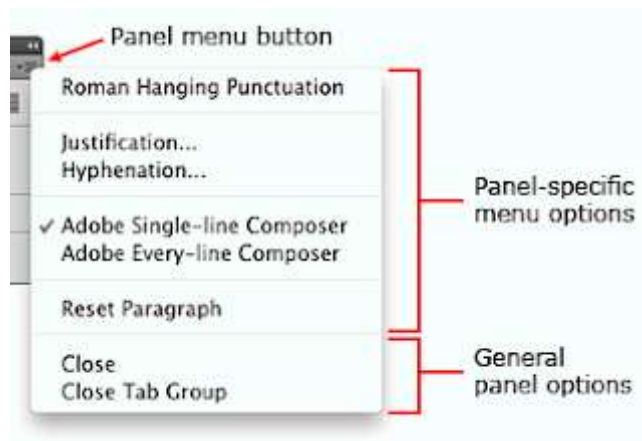
**5- Panels:** A panel (formerly called a palette) is a window of options that remains visible regardless of what you're doing. To switch between panels in a side-by-side

group, click a named tab. You can move a panel out of a group by dragging its tab.

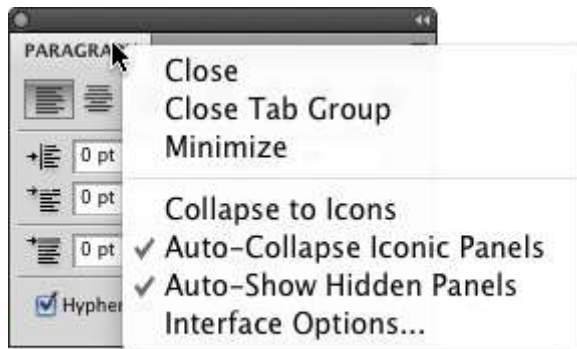


Many of the panels are grouped together in **panel groups** because their functions are related. When this is the case, the titles of the individual panels will appear as **tabs** under the title bar, as shown in this example. The Color panel is currently active. The tabs of the Swatches and Styles panels are a darker grey. To bring a panel to the front of a group so you can access its options, click on its tab.

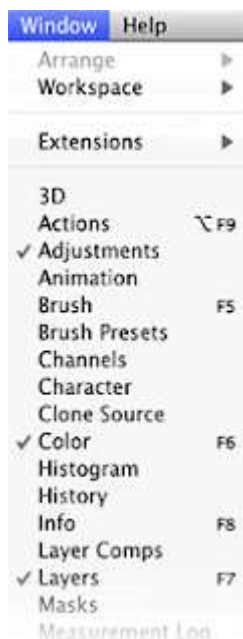
**Note:** If you've noticed that the panel shown here looks a bit different from what you're seeing in Photoshop, here's why. This is an example of a floating panel (not joined to a dock) which has a title bar. (That's actually a misnomer because there's no title in it but that's what Adobe calls it.) When a panel is part of a dock, the title bar disappears, along with the panel's **Close** button and the Collapse/Expand control. We'll delve into terms like 'floating' and 'docks' in the next lecture.



**Panel Menus:** Each panel or panel group has a panel menu button. In a panel group, the menu options apply to the active panel. The example shown here is the Paragraph panel menu. The top portion lists commands that are specific to paragraphs. The two commands at the bottom are displayed for all panels and panel groups.



Each panel has generic menu you can access by **right-clicking (Ctrl clicking)** on its tab. The **Close** and **Close Tab Group** commands also appear in the panel menu above. The remaining options will be explained in the next lecture.



**Open and Close Panels:** All the panels are listed in the Window menu. The panels preceded by a check mark are currently displayed and active in the workspace. Some unchecked panels may be displayed but are inactive; i.e., the panels with darker tabs in panel groups. The Window menu shown here is telling us that the Adjustments, Colour, and Layers panels are currently active in the workspace.

When you select an unchecked panel name from the menu one of two things will happen:

- The panel will open if it wasn't already visible in the workspace.
- If the panel was behind an active panel in a panel group, it will become the active panel.

The Window menu can also be used to close panels. Selecting a checked panel name will close that panel and, if it was part of a panel group, will close the entire panel group.

The three other options for closing panels:

- Click on the panel's Close button. (Only floating panels have them.)
- Open the panel menu and choose Close or Close Tab Group for a panel group.
- Right-click (Ctrl-click) on the panel tab and choose Close or Close Tab Group from the pop-up menu.

### Show or Hide All Panels

To toggle between hiding and showing all open panels, including the Toolbox and Tool Options bar, press the **Tab** key. If you have enabled *Auto-Show Hidden Panels* in the Interface preferences, when you hover over a hidden panel's location on the screen, it will temporarily appear. On a Mac, you can only unhide the dock and the Toolbox. Do this by moving your cursor to the left edge of the screen (for the Toolbox) or the right edge (for the dock). The panels will come into view, letting you access them. Once you move the cursor away from the panels, they will hide again.

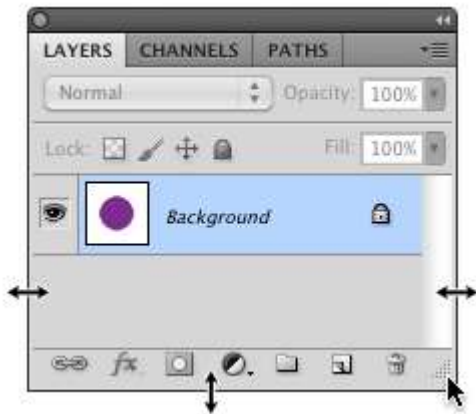
### Collapse and Expand Panels



Panels and panel groups can be collapsed so that only their panel names and icons are displayed, as shown here. Do this by clicking on the **collapse/expand control** (double arrows circled in red) on the title bar. To restore the panel to its full size, click the same control again. Alternately, you can double-click on the title bar to accomplish the same thing.

### Resize a Panel

To resize a panel:



- **Windows:** Click and drag on any side or the bottom right corner when the resize arrow appears.
- **Mac:** Click and drag on any side when the resize arrow appears or drag the resize corner (shown at bottom right).

Not all panels can be resized, however. The Toolbox is an example of this, although it can be made into a single or double column by clicking the collapse/expand control. The Colour panel is another example.

Minimize or Maximize a Panel



Panel group maximized

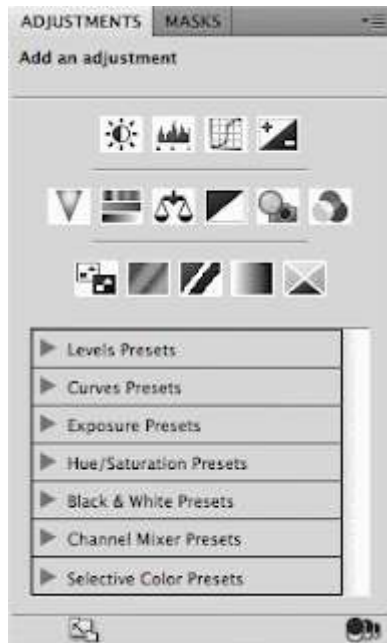
Panels and panel groups can be **minimized** so just the title bar and tabs are showing. There are three ways to do this:

- Double-click on the panel's tab.
- Double-click in the space between the tabs and the panel menu.
- **Right-click (Ctrl-click)** on the panel's tab and choose **Minimize** from the pop-up menu.



Panel group minimized

The panel minimized. Single-clicking on a tab or double-clicking to the right of the tabs will **maximize** the panels. You can also **right-click (Ctrl-click)** on the panel's tab and choose **Expand Panel** from the pop-up menu.



### The Adjustments Panel

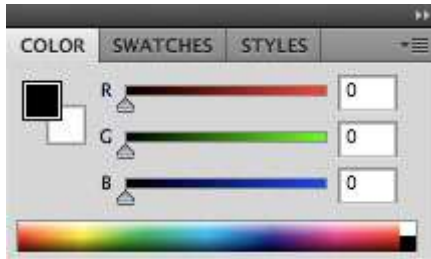
Options for applying **colour and tonal adjustments** to images are found in the Adjustments panel, displayed as icons in the top half of the panel. These adjustments are placed on a separate adjustment layer so that the image you are working on isn't altered. The bottom of the panel contains preset adjustment settings. You can even create your own preset adjustments and store them.

### The Channels Panel



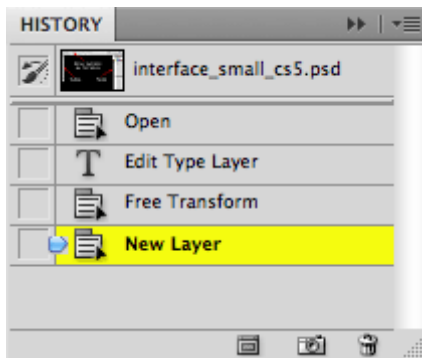
The built-in colour channels are displayed in the Channels panel. It is also used to **save and modify selections** made in a Photoshop document as well as to **define areas of transparency** in an image that will be opened in other applications, such as those used for digital video or 3D.

### The Colour Panel



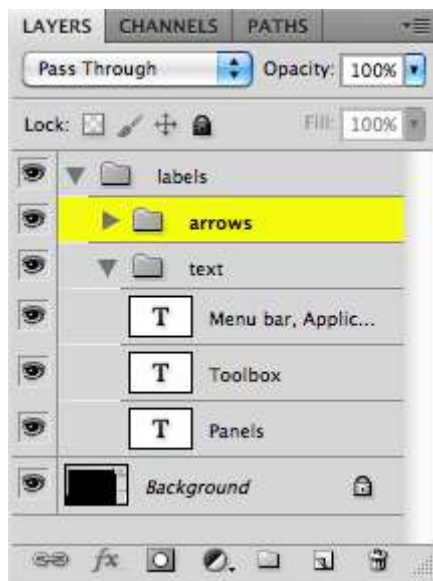
The Colour panel is used to **create colours**. The swatch at the top left (black) is the current foreground colour and the swatch beneath it (white) is the current background colour (just like in the Toolbox).

### The History Panel

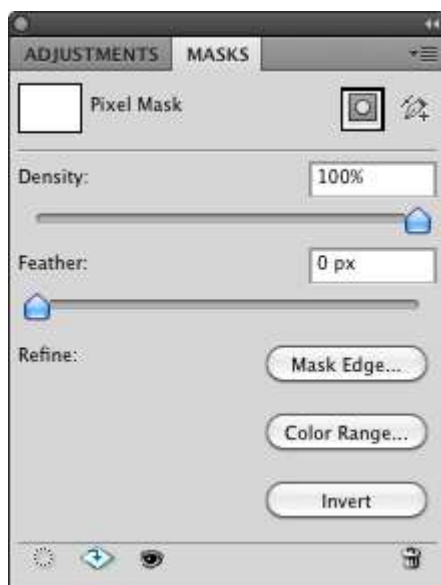


The History panel keeps a record of all the changes you make to your image as you're editing. If you're not satisfied with a change or a series of changes, you can use the History panel to **restore your image** as it was before the changes. You can always undo your last action with **Ctrl-Z (Cmd-Z)**, as with other programs, but the History panel gives you far more versatility and control.

### The Layers Panel



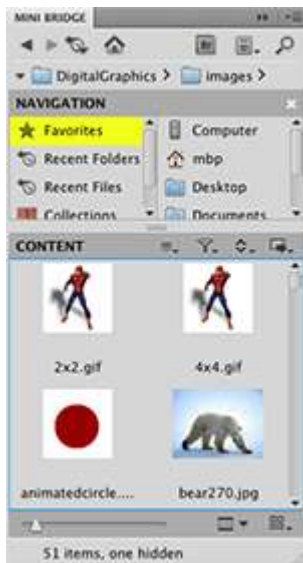
The Layers panel is used to **create, manipulate and modify layers**. Layers can be anything that Photoshop can create or import, separated from other elements (or layers) in an image.



The Masks Panel

The Masks panel lets you **add vector or pixel masks** to your image and to adjust the masks.

The Mini Bridge Panel



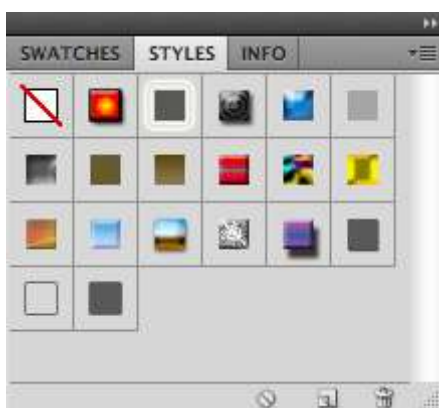
This is a scaled-down version of the Adobe Bridge application that is used to **locate, open, and organize images**.

#### The Paths Panel

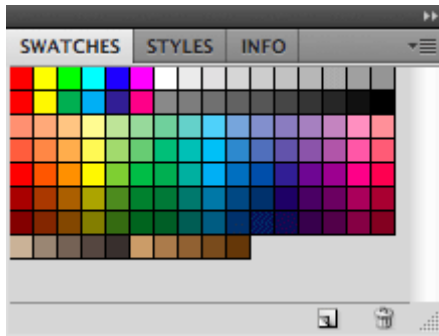


The Paths panel is used to **create, manipulate, and modify paths** which are covered in detail in later sections.

#### The Styles Panel



The Styles panel maintains a library of **effects or textures** that can be applied to a layer or shape simply by clicking on a style.



### The Swatches Panel

The Swatches panel contains a number of **pre-selected colours** to choose from. You can create your own swatches as well as load other colour sets. Photoshop includes a colour set of Web-safe swatches, which is a collection of colours that are supported across browsers.

### Panel Basics Summary























- Panels are a collection of commonly used options and functions.
- Most panels are arranged in groups.
- Panels can be open or closed, hidden or displayed, collapsed or expanded, minimized or maximized, and some can be resized.
- The Tool Options bar is context-sensitive, meaning that the options it displays will depend on the tool you have selected. It is used to set tool options.
- Scrubby sliders allow you to quickly change values for many options without moving a slider bar or typing a number.
- The Adjustments panel lets you apply colour and tonal adjustments to an image.
- Channels are used to save and modify selections made in a Photoshop document as well as to determine areas of transparency.
- The Colour panel is used to create new colours.
- The History panel records all the changes you make to your image as you're editing.
- The Layers panel is used to create, manipulate and modify image layers.
- The Masks panel lets you add and adjust masks.
- The Mini Bridge panel is used to locate, open and organize files.
- The Paths panel lets you create, manipulate, and modify paths.
- The Styles panel maintains a library of effects or textures that can be applied to layers or shapes.
- The Swatches panel contains a number of pre-selected colours to choose from.

### Panel Basics Keyboard Shortcuts:

- Undo: **Ctrl-Z (Cmd-Z)**

- Show/hide all open panels, the Toolbox and Tool Options bar: **Tab**

**6- Toolbox:** The Toolbox (or Tools panel) contains a wide range of tools used to create and manipulate images. Photoshop provides an integrated set of tools with which you can produce sophisticated graphics for print, web, and mobile viewing. Some tools are arranged in groups, with only one tool shown for each group and the other tools in the group hidden behind that tool. A small triangle in the lower right corner of a tool icon is your clue to look for hidden tools. Select a hidden tool by clicking and holding down the small triangle

	Move Tool (V): Is used to select and move images or objects on any active layer within the Document Window.
	Rectangular Marquee Tool (M): It is used for making selection on the images or objects on any active layer within the Document Window.
	Magic Wand Tool (W): Used for selecting like colors within images or objects on any active layer within the Document Window.
	Polygonal Lasso Tool (L): Used for making free selection.
	Slice Select Tool (K): Used for selecting slices.
	Crop Tool (C): Used for cropping images.
	Patch Tool (J): Used for correcting images by using different parts of the images or objects on any active layer within the Document Window.
	Brush Tool (B): Used for drawing freehand.
	History Brush Tool (Y): Used for restoring specified history state.
	Clone Stamp Tool (S): Used for selecting a source and 'stamping' it in another place for images or objects on any active layer within the Document Window.
	Gradient Tool (G): Used for making gradient effect.
	Eraser Tool (E): Um...Erases whatever you click on from the active layer.
	Dodge Tool (O): Used for making images lighter
	Horizontal Type Tool (T): Used for inserting text to image
	Path Selection Tool (A): Selects paths. Paths are a little more than what we are getting in to, but it is there.
	Shape Tool (U): Used to insert shapes, lines, or default shapes.
	Pen Tool (P): Used for creating vector shapes.
	Eyedropper Tool (I): Used for selecting color.
	Notes Tool (N): Used for inserting notes on the image.
	Zoom Tool (Z): Insert witty comment to make you laugh here. This zooms.
	Hand Tool (H): Used for dragging image when you are in the zoom in state. Even better than that, hold the SPACE BAR down, click and drag. Fun tricks.
	Foreground and background color swatches. In this instance, the red is the foreground color and the black is the background color. To change the colors double click the swatches.

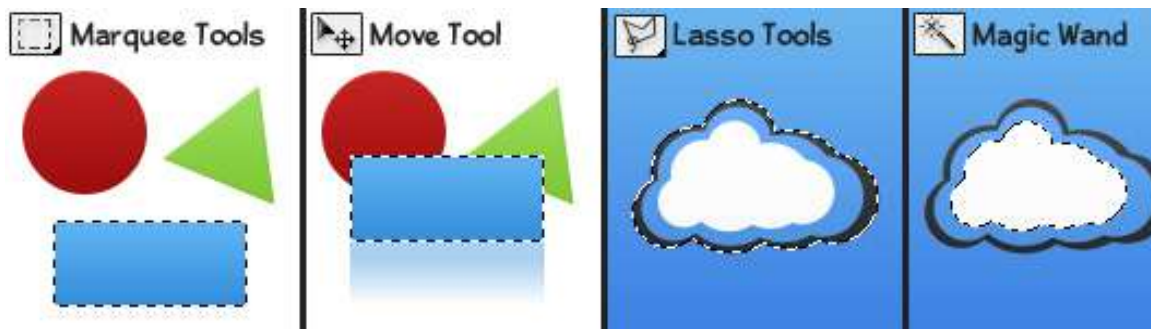
The toolbox in Photoshop is split up into 4 unique categories so that finding the right tool is never a hassle. Those categories are:

1. Selection, Crop & Slice Tools

2. Retouch & Paint Tools
3. Drawing & Type Tools (Vector Tools)
4. Annotations & Measurement Tools

In addition to these 4 sections a few other components make up the toolbox, most notably, the **Foreground** and **Background** colors.

### Selection Tools



The **Marquee Tools** are used for selecting objects such as rectangles, squares, and ellipses.

The **Move Tool** is used to move selections, objects, and layers.

There are several **Lasso Tools** which are used to make irregular selections. There is a *polygonal lasso tool* for polygon selections, and a *magnetic lasso tool* which automatically follows edges of objects.

The **Magic Wand Tool** selects an area of similar colors in a single click (*such as the white in the cloud logo*).



The **Crop Tool** allows users to redefine their active image area but not resize the ENTIRE image. It's sort of like cutting out a smaller picture from a larger photo with a pair of scissors.

## Retouch Tools



There are several **healing tools** in Photoshop which are used to repair imperfections in images, or handle blemishes and red-eye.

With the **Clone Stamp Tool**, a user may select a source starting point somewhere on an image, and then paint elsewhere using that starting point as a reference, effectively cloning the source.



The **Eraser Tool** can be used to erase parts of an image, selection, or layer.

The **Sharpen Tool** is used to sharpen edges in an image, while the **Blur Tool** blurs edges. The **Smudge Tool** smudges an image, similar to using fingerpaint.

The **Dodge Tool** lightens parts of an image while the **Burn Tool** darkens.

The **Sponge Tool** is used to saturate, or desaturate parts of an image.



### Painting Tools



The **Brush** and **Pencil** tools are used to paint strokes in graphics. These tools can be highly customized for very effective painting. The **Fill Tools** are used to fill entire layers, selections and areas with a solid color, or gradient.

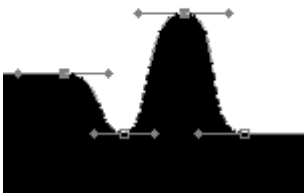
### Vector Drawing & Type Tools

The **Type Tools** are used for creating and setting type in an image. Both vertical and horizontal type can be created. The **Pen Tools** are used to create clear shapes and paths which can be used as vector objects that can be scaled to any size. **Custom Shapes** are vector objects that can be created on the fly from a list of presets (including user created shapes).

### Type Tools



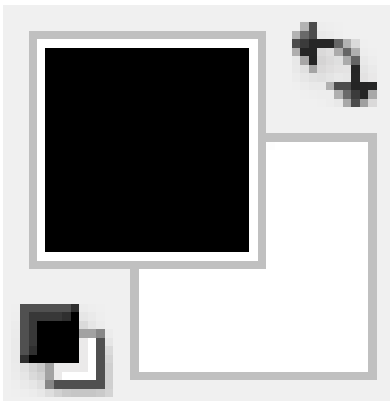
### Pen Tools



### Custom Shapes Tools



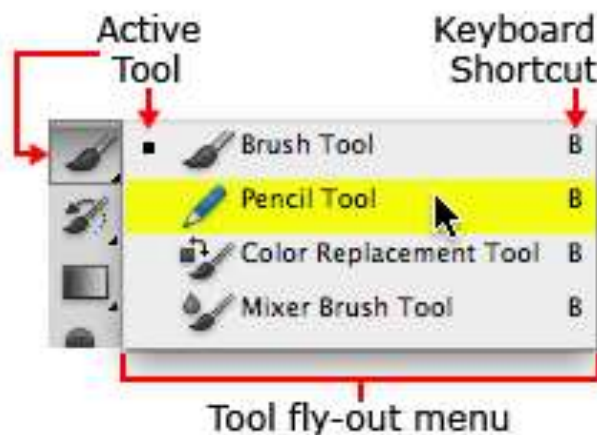
### Foreground / Background Color



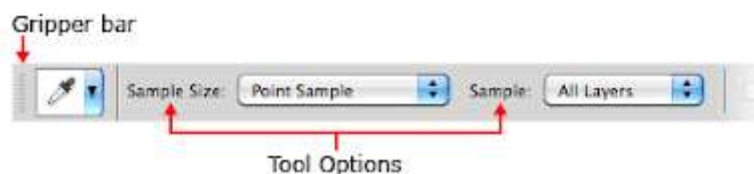
A **foreground color** and **background color** can be set to be used to paint with, color text, and fill objects among other things. This view provides an easy way to see what colors are currently selected and allows for easy switching between two different colors.

**Select a tool** by clicking on its button or by pressing its shortcut key on the keyboard. Some tools have a **small black triangle** in the bottom right corner of the button. Click

and hold on a tool button displaying a triangle to see other **variations of the tool** that appear in a fly-out menu. To do this using the keyboard, hold down the **Shift** key while repeating the tool's shortcut letter to cycle through the tool variations. In the example shown here, the Brush tool is currently selected, and the user's cursor is hovering over the Pencil tool so that's why it's highlighted in yellow.



Each tool has a set of properties or options that you can modify. These properties are contained in the **Tool Options bar**. For example, when you select the Brush tool, the Tool Options will change to display all the settings available for the Brush. You can set the brush size, the hardness or softness of the brush and various settings that determine how it operates. An example of the Tool Options bar for the Eyedropper tool is shown below.



### The Toolbox Keyboard Shortcuts:

- Move tool: **V**
- Marquee tool: **M**
- Lasso tool: **L**
- Quick Selection tool: **W**
- Crop tool: **C**
- Eyedropper tool: **I**
- Healing Brush tool: **J**
- Brush tool: **B**
- Clone Stamp tool: **S**
- History Brush tool: **Y**

- Eraser tool: **E**
- Gradient tool: **G**
- Blur tool: (no shortcut key)
- Dodge tool: **O**
- Pen tool: **P**
- Type tool: **T**
- Path Component Selection tool: **A**
- Shape tool: **U**
- Hand tool: **H**
- Zoom tool: **Z**
- Toggle Colours: **X**
- Set Default Colours: **D**
- Cycle through tool variations: **Shift-**

#### 5. **Describe document presets in Adobe Photoshop**

Document presets in Adobe Photoshop are predefined templates that help you start new projects quickly with settings that match specific needs. When creating a new document, you can select from a range of presets tailored for different types of projects, such as print, web, mobile, or video. For example, if you're designing a flyer for print, you might choose an A4 preset with 300 PPI (pixels per inch) resolution and a CMYK color mode, which is ideal for high-quality printing. On the other hand, if you're creating a graphic for social media, you might select a preset designed for screen display, like 1080x1080 pixels with RGB color mode, which is optimized for viewing on digital devices. These presets ensure that your document is set up correctly right from the start, but you can also customize these settings if your project has specific requirements that aren't covered by the presets. For instance, a photographer might create a custom preset with a specific resolution and color profile that they frequently use for their work.

#### 6. **Describe the photo importation method in Adobe Photoshop**

Importing photos into Adobe Photoshop is a fundamental step in starting any project, and it can be done in several ways depending on your needs. The most common method is using **File > Open** to browse your computer and select an image file to open in Photoshop. This method is straightforward and is typically used when you want to edit or enhance an existing photo. Another method is **drag and drop**—you can simply drag a file from your desktop or file explorer directly into the Photoshop workspace, where it will open as a new document or be added as a new layer to an existing document.

If you're working on a project with multiple images, you might use **File > Place Embedded** or **Place Linked**. The **Place Embedded** option imports the image as a smart

object, which means you can resize and transform the image without losing quality. **Place Linked** is useful when you want to keep the file size of your Photoshop document small and maintain a connection to the original file—if the original image is updated, the linked image in Photoshop will update automatically.

Additionally, Photoshop allows you to import images directly from cameras and scanners using **File > Import > Images from Device**. This feature is especially useful for photographers or designers who want to quickly bring in new photos for editing. For example, a photographer might import RAW files from their camera for detailed post-processing in Photoshop



### Practical Activity 1.1.2: Using interface elements in Adobe Photoshop



#### Task:

- 1: Referring to the previous theoretical (1.1.1) you are requested to use adobe Photoshop as a graphic designer, you are asked to go to the computer lab and use adobe Photoshop interface elements (select menus, arrange panels, select and customize the toolbar, use undo command and history panel, use ruler and set guides) as designer drag image with the size (Width=8.47cm, height=8.47cm, resolution=300px automatic) the background= blue, color mode= CMYK in Adobe Photoshop.
- 2: Apply safety precautions.
- 3: Present out the steps to use adobe Photoshop interface elements.
- 4: Referring to the steps provided on task 3, use adobe Photoshop interface elements.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 1.1.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 1.1.



### Key readings 1.1.2: Using interface elements in Adobe Photoshop

- **Selecting menus**

To select a menu in Photoshop, simply click on the menu name in the menu bar. The menu items will then be displayed in a drop-down list.

**We select menus in Photoshop by:**

1. **Menu Bar:** is located at the top of the Photoshop interface and contains different menus such as File, Edit, Image, Layer, Type, Select, Filter, View, Window, and Help.
2. **Dropdown Menus:** Click on any menu title in the Menu Bar to open a dropdown menu that displays a list of commands and options related to that menu category.
3. **Selecting commands:** To select a specific command from a menu, click on the command in the dropdown menu. Some commands may open submenus with additional options.
4. **Keyboard Shortcut:** Many commands in Photoshop have keyboard shortcuts for quick access. You can see the keyboard shortcuts next to the commands in the dropdown menus.

- **Arranging panel**

To arrange panels in Photoshop, simply drag and drop them to the desired location. You can also dock and undocked panels. To dock a panel, drag it to the edge of the document window and release it. To undock a panel, drag it away from the edge of the document window and release it.

#### **Arranging panel in Photoshop**

- Docking panels
- Grouping panels
- Collapsing panels
- Floating panels
- Panel Options
- Customer workspace

- **Selecting and Customizing The toolbar**

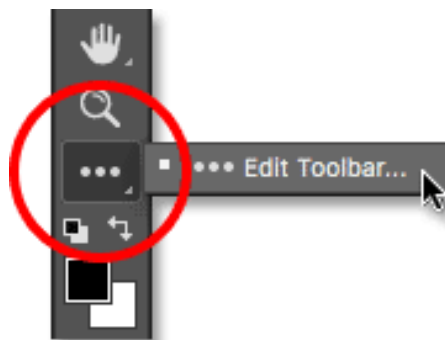
To select a tool in the toolbar, simply click on the tool icon. To customise the toolbar, right-click on an empty space in the toolbar and select "Customise Toolbar".

You can then add or remove tools from the toolbar, and you can also rearrange the tools.

- **Selecting Tools:** The toolbar in Photoshop contains various tools for editing and creating images.
- **Customizing the Toolbar:** To customize the toolbar, right-click (or Control-click on Mac) on any empty space in the toolbar. This will open a context menu with options for customizing the toolbar.

- **Add or Remove Tools:** In the context menu, you can choose to add or remove tools from the toolbar. Simply click on the tool you want to add or remove to toggle its visibility in the toolbar.
- **Arrange Tools:** You can rearrange the order of tools in the toolbar by clicking and dragging a tool to a new position. This allows you to organize the toolbar based on your workflow and tool usage.
- **Tool Presets:** Some tools in Photoshop have presets that can be accessed from the tool options bar. You can customize and save your own tool presets for quick access to specific settings.
- **Edit Toolbar:** To access more advanced customization options for the toolbar, go to Edit > Toolbar. This opens a dialog box where you can drag and drop tools to add or remove them from the toolbar, as well as create custom tool sets.
- **Save Custom Tool Presets:** If you have customized tool settings that you frequently use, you can save them as custom tool presets for easy access in the future.
- **Reset Toolbar:** If you want to revert the toolbar to its default configuration, you can do so by going to Edit > Toolbar and clicking the "Restore Defaults" button.

And you can click on three points on the bottom of the toolbar then click on **Edit toolbar**



#### • Using undo command and history panel

To undo the last action in Photoshop, simply press **Ctrl + Z** on Windows or **Command + Z** on Mac.

You can also undo multiple actions by pressing **Ctrl + Alt + Z** on Windows or **Command + Option + Z** on Mac. or Click on Edit>Select Redo/Undo

**The History panel** allows you to view a list of all of the actions that you have performed in a Photoshop document. To open the History panel, go to Window > History. To undo an action, simply click on it in the History panel.

The use of Undo command and History panel effectively:

### 1. Undo Command:

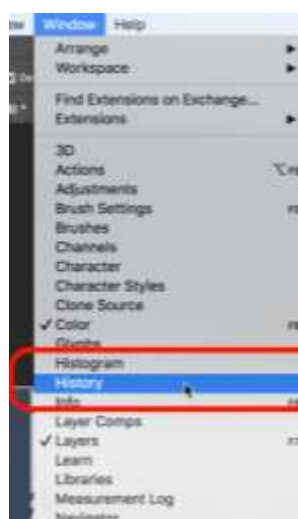
- **Keyboard Shortcut:** The Undo command in Photoshop can be accessed using the keyboard shortcut Ctrl + Z (Command + Z on Mac). Pressing this shortcut will undo the last action you performed.
- **Multiple Undos:** You can press Ctrl + Z multiple times to step back through a series of recent actions and undo them sequentially.
- **Redo Command:** To redo an action that you have undone, you can use the Redo command by pressing Ctrl + Shift + Z (Command + Shift + Z on Mac).

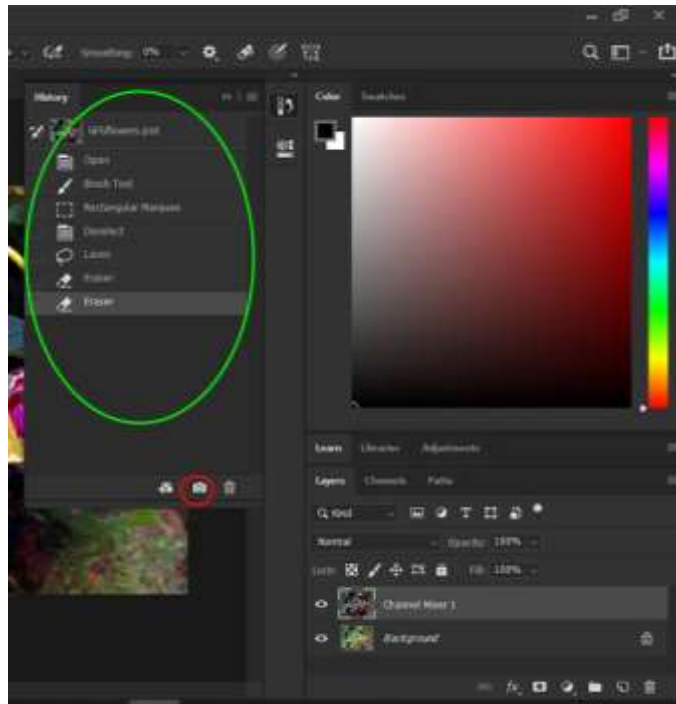
### 2. History Panel:

- **Accessing the History Panel:** The History panel in Photoshop displays a list of all the actions you have performed during your editing session. You can access the History panel by going to Window > History.
- **Navigating History States:** In the History panel, you can click on any previous state to revert your document to that specific point in your editing history.
- **Creating Snapshots:** You can create snapshots in the History panel to save a particular state of your document as a reference point. This allows you to experiment with edits and easily revert to the snapshot if needed.
- **Clearing History:** If you want to free up memory or start fresh, you can clear the History panel by clicking on the trash can icon at the bottom of the panel.

### 3. Using Undo and History Together:

- **Combining Undo and History:** You can use the Undo command in combination with the History panel to navigate through your editing history more efficiently. If you want to undo multiple steps.





- **Using ruler and setting guides**

**How can use rulers and set guides effectively:**

**1. Displaying Rulers:**

- To display rulers in Photoshop, go to the top menu and click on "View" and then select "Rulers." Alternatively, use the keyboard shortcut Ctrl + R (Command + R on Mac) to toggle the rulers on and off.
- Rulers will appear along the top and left edges of your document, showing measurements in pixels or other units based on your preferences.

**2. Setting Guides:**

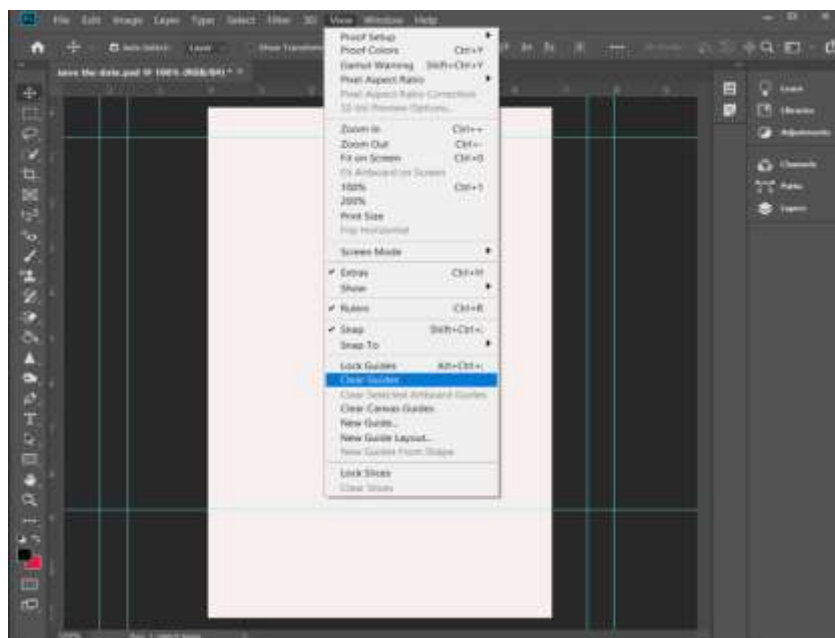
- To create a guide, click on the ruler at the top or left side of the document window and drag the guide into the document. A guide will appear as a non-printing line that helps you align and position elements accurately.
- You can place guides horizontally and vertically by dragging from the top ruler for horizontal guides and from the left ruler for vertical guides.

- To create guides at specific positions, you can go to "View" > "New Guide" and enter the position (in pixels or other units) for the guide. You can create both horizontal and vertical guides this way.

### 3. Moving and Deleting Guides:

- To move a guide, click and drag the guide to a new position. You can also use the Move Tool (V) to select and move guides.
- To delete a guide, simply click and drag the guide off the document window. You can also clear all guides by going to "View" > "Clear Guides."

clear all guides by going to "View" > "Clear Guides."



### • Accessing the Ruler:

The ruler can be accessed by either navigating to the '**View**' menu or by using the keyboard shortcuts **Ctrl+R** on Windows or **Command+R** on Mac. Once summoned, the Ruler materialises along the top and left edges of the document window.

### • Customising the Unit of Measurement

Customization is key in design, and the Ruler in Photoshop offers flexibility in this aspect. **By right-clicking on the Ruler**, you can seamlessly switch between various units of measurement. The available options include Pixels, Inches, Centimetres, Millimeters, Points, Picas, and Percent. You can also alter the unit in the

'Preferences' dialog box by venturing into **'Edit' > 'Preferences' > 'Units & Rulers'** and selecting your desired unit from the dropdown menu.

- **Creating Guides**

You can generate horizontal Guides by dragging from the top Ruler and vertical Guides by pulling from the left Ruler. Alternatively, you can employ the 'New Guide' or 'New Guide Layout' options within the 'View' menu for more control.

- **New Guide:** This option lets you create a single Guide by entering its precise position and orientation in a dialog box.
- **New Guide Layout:** This advanced option empowers you to establish multiple Guides by specifying the number of columns and rows, spacing, margins, and additional preferences in a dialog box.
- **Managing Guides:** Once Guides are in place, managing them efficiently is crucial. You have various options at your disposal:
- **Moving Guides:** To relocate a Guide, select the Move tool (V) or hold Ctrl (Windows) or Command (Mac) to activate the Move tool, then drag the Guide to its new location.
- **Locking Guides:** To prevent accidental movements of your Guides, go to 'View' > 'Guides' > 'Lock Guides' or use the keyboard shortcuts Ctrl+Alt+; (Windows) or Command+Option+; (Mac).
- **Hiding Guides:** If you prefer a cleaner canvas, you can choose 'View' > 'Guides' > 'Hide Guides' or use Ctrl+; (Windows) or Command+; (Mac) to make the Guides temporarily invisible.
- **Revealing Guides:** To bring back your Guides, select 'View' > 'Guides' > 'Show Guides' or use the same keyboard shortcut you used to hide them.
- **Deleting Guides:** Removing Guides is as simple as dragging them back to the Ruler or using **'View' > 'Guides' > 'Clear Guides'**.

- **Using keyboard shortcuts**

There are a number of keyboard shortcuts that can be used to perform various tasks in Photoshop. For example, you can press **Ctrl + S** on Windows or Command + S on Mac to save a document.

**step-by-step guide to customize keyboard shortcuts:**

- **Select a Category:** In the 'Shortcuts For' drop-down menu, you can choose the category you wish to customize, such as 'Application Menus,' 'Tools,' or 'Panel Menus.'
- **Expand Subcategories:** To narrow down your focus, click on the triangles next to the category names, like 'File,' 'Edit,' or 'Image,' to access the specific commands within.
- **Choose a Command:** Locate the command you want to modify, whether it's 'Save,' 'Undo,' or 'Crop.' Click on it to begin the customization process.
- **Edit Shortcut:** Now, it's time to modify the shortcut itself. Click on the current keyboard shortcut in the 'Shortcut' column if there is one. If it's blank, click in the space next to the command name.
- **Enter Your New Shortcut:** Press the new combination of keys that you want to assign to the command. For example, you might choose 'Ctrl+S,' 'Ctrl+Z,' or 'C.' If the chosen keyboard shortcut is already in use by another command, a warning message will appear beneath the 'Shortcut' column.
- **Accept or Resolve Conflicts:** After entering your new shortcut, click the 'Accept' button to confirm the change. If there is a conflict with another command, you'll see a prompt indicating the conflict. You can choose to resolve the conflict by clicking

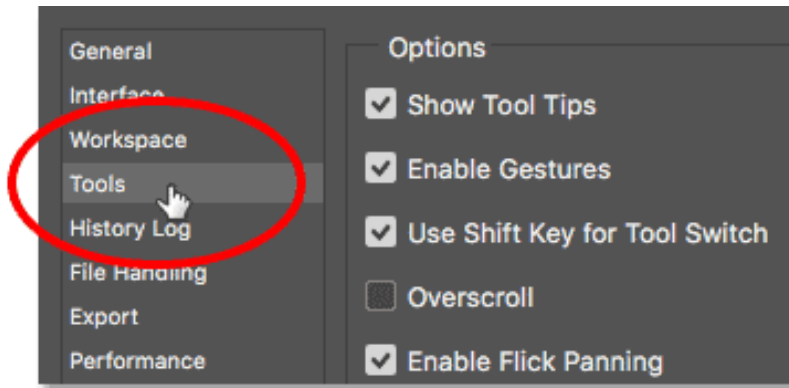
- **Set adobe Photoshop preferences**

The preferences in Adobe Photoshop are used to customize the program to your own personal preferences. You can set preferences for things like the workspace, tools, keyboard shortcuts, and performance.

**To open the Preferences dialog box, do the following:**

- Click on the Edit menu at the top of the screen.
- Choose Preferences.
- Select General.

If you accidentally change a preference that you don't like, you can always reset it to the default value. To do this, click on the Reset Preferences button at the bottom of the Preferences dialog box.



- **Switch adobe photoshop workspaces**

Adobe Photoshop offers various workspaces to suit different tasks and workflows. Switching between workspaces in Photoshop is simple and can be done using the Window menu or the Workspace icon.

**Method 1: Using the Window Menu**

- Click on the Window menu at the top of the screen.
- Scroll down to the Workspace section.
- Select the desired workspace from the list.

**Method 2: Using the Workspace Icon**

- Locate the Workspace icon in the top right corner of the Photoshop window. It resembles a grid of panels.
- Click on the Workspace icon to reveal a drop-down menu.
- Select the desired workspace from the list.

**Saving a Custom Workspace**

If you've customized the layout of a workspace to your liking, you can save it as a custom workspace for easy access in the future.

- Click on the Workspace icon.
- Select Save Workspace.

- Enter a name for your custom workspace.
- Click Save.

- **Managing Workspaces**

To manage your workspaces, including deleting or renaming them, follow these steps:

- Click on the Workspace icon.
- Select Manage Workspaces.
- Select the workspace you want to manage.
- Choose the desired action (Delete, Rename, and Reset).
- Click OK.

By switching between workspaces, you can optimize your Photoshop experience for different tasks and workflows, making your work more efficient and productive.

- **Create an image document in adobe photoshop**

To create an image document in Adobe Photoshop, follow these steps:

**Step 1:** Open Adobe Photoshop.

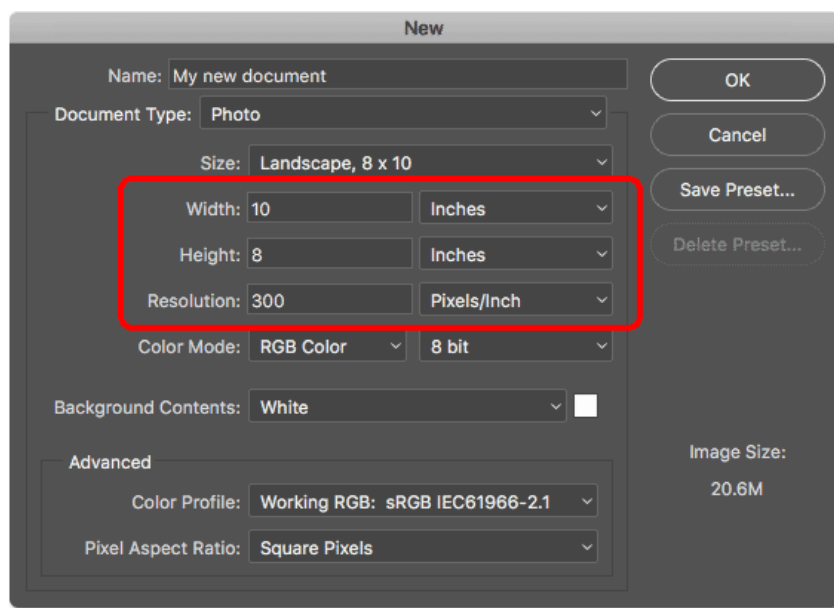
**Step 2:** Click on File > New.

**Step 3:** In the New Document dialog box, enter the desired dimensions of your document in pixels, inches, or centimetres. You can also choose a preset document size from the list of options.

**Step 4:** Select the desired color mode for your document. RGB is the most common color mode for digital images, while CMYK is the most common color mode for printed materials.

**Step 5:** Select the desired background color for your document.

**Step 6:** Click OK to create the new document.



### Practical Activity 1.1.3: Perform document presets in adobe Photoshop

#### Task:

- 1: Referring to the previous theoretical activity (1.1.1) you are requested to go to the computer lab, used the computer which is installed the Adobe Photoshop to Adjust size and resolution, change colour mode and colour profile Change pixel aspect ratio used in documents pre-set, this task should be done individually.
- 2: Apply safety precautions
- 3: Present out the steps to perform documents pre-set
- 4: Referring to the steps provided on task 3, perform documents pre-set.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 1.1.3 and ask clarification where necessary
- 7: Perform the task provided in application of learning 1.1.



### Key readings 1.1.3: Perform document presets in adobe Photoshop

- **Adjusting size and resolution**

How to set image resolution in Adobe Photoshop?

- Open your image in Photoshop.
- Go to Image > Image Size.
- In the Image Size dialog box, you can change the image's resolution by entering a new value in the Resolution field.
- You can also change the image's dimensions by entering new values in the Width and Height fields.
- If you want to maintain the image's aspect ratio, select the Constrain Proportions checkbox.
- If you want to resample the image, select the Resample Image checkbox and choose an interpolation method from the Resample Method drop-down menu.
- Click OK to apply the changes.

Example of how to set the resolution of an image to 300 PPI:

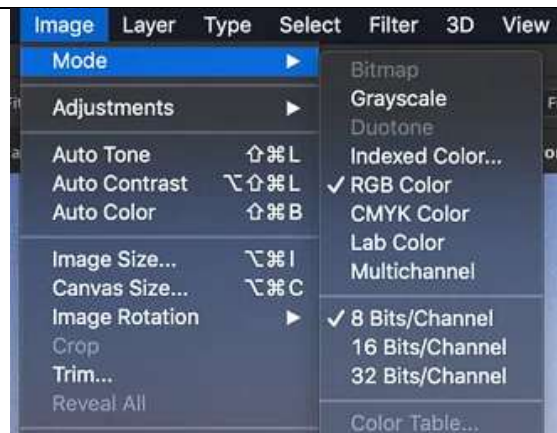
- Open the image in Photoshop.
- Go to Image > Image Size.
- In the Image Size dialog box, enter 300 in the Resolution field.
- Select the Constrain Proportions checkbox.
- Click OK to apply the changes.

The image will now be 300 ppi, which is a common resolution for printing images.

- **Changing colour mode**

To change the color mode of an image in Photoshop, follow these steps:

- Open the image in Photoshop.
- Go to Image > Mode.
- Select the desired color mode from the dropdown menu.
  - **RGB (Red, Green, Blue):** Used for digital images displayed on screens. It is the standard color mode for web graphics and digital photography.
  - **CMYK (Cyan, Magenta, Yellow, Black):** Used for print design. CMYK color mode is necessary for projects intended for commercial printing.
  - **Grayscale:** Uses black, white, and shades of gray. Suitable for black-and-white images or projects that do not require color



- **Changing the color profile**

To change the color profile of an image in Photoshop, follow these steps:

- Open the image in Photoshop.
- Go to Edit > Assign Profile.
- In the Assign Profile dialog box, select the desired color profile from the Destination dropdown menu.

When you choose "Assign Profile," you can assign a specific color profile to your document without changing the actual color values. This is useful for ensuring that the colors are displayed correctly on different devices.

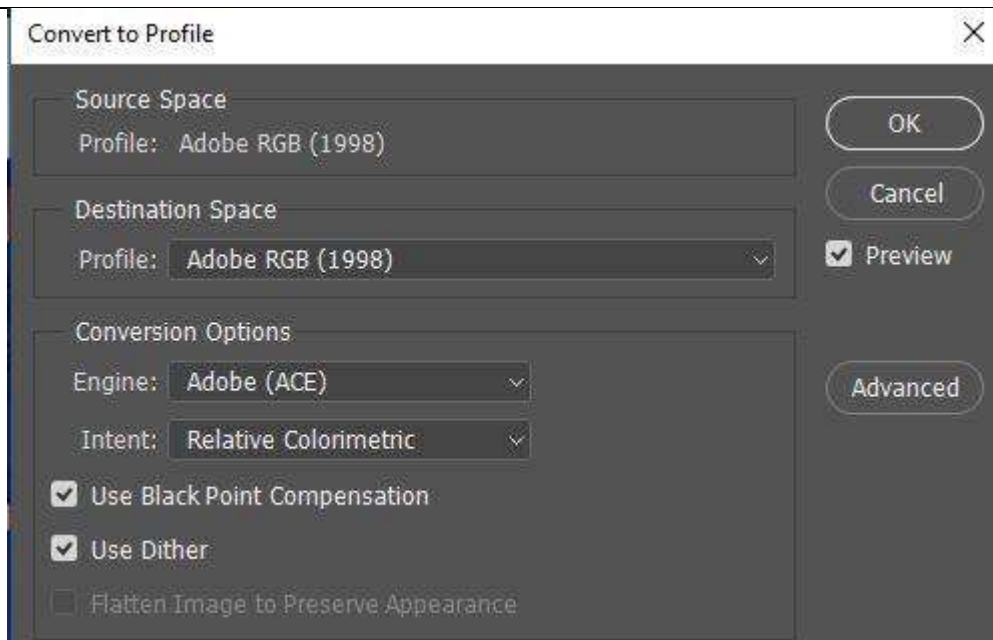
Select the desired color profile from the list provided in the dialog box and click "OK" to assign it to your document.

- 1. Converting to a Color Profile:**

If you select "Convert to Profile," Photoshop will convert the color values in your document to match the selected color profile. This is helpful when you need to ensure color consistency across different images or projects.

Choose the destination color profile from the list and configure the conversion options as needed. Click "OK" to convert the document to the new color profile.

- 2. Click OK to apply the changes.**



- **Changing pixel aspect ratio**

**There are two ways to change the pixel aspect ratio in Adobe Photoshop:**

Using the Image Size dialog box

1. Open the image you want to change in Photoshop.
2. Go to Image > Image Size.
3. In the Image Size dialog box, make sure the Constrain Proportions checkbox is selected.
4. Enter the desired pixel aspect ratio in the Width and Height fields.
  - In the Image Size dialog box, you can adjust the width and height of the image to change the pixel aspect ratio.
  - To change the pixel aspect ratio for video formats, you may need to adjust the dimensions to match the required aspect ratio, such as 4:3 or 16:9
5. Click OK to apply the changes.



#### **Points to Remember**

- **To adjust image size, resolution, and pixel aspect ratio:** Go to Image > Image Size, modify resolution, width, or height, maintain aspect ratio with Constrain Proportions, choose resampling options if needed, and click OK to apply the changes.
- **To change colour mode:** Click on Image menu>Modes>Choose the color mode you want.

- **To change colour profile:** Click on Edit>Assign color profile>Choose the colour profile you want from the list.



#### **Practical Activity 1.1.4: Perform photo importation**



##### **Task:**

- 1: Referring to the previous theoretical activity (1.1.1) you are requested to go to the computer lab to import photo/image by using placing and dragging methods used in adobe Photoshop, this task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the step to perform photo/image importation.
- 4: referring to the steps provided on task 3, perform photo/image importation by using both methods.
- 5: presenting your work to the trainer and whole class
- 6: read key reading 1.1.4 and ask clarification where necessary
- 7: perform the task provided in application of leaning 1.1.

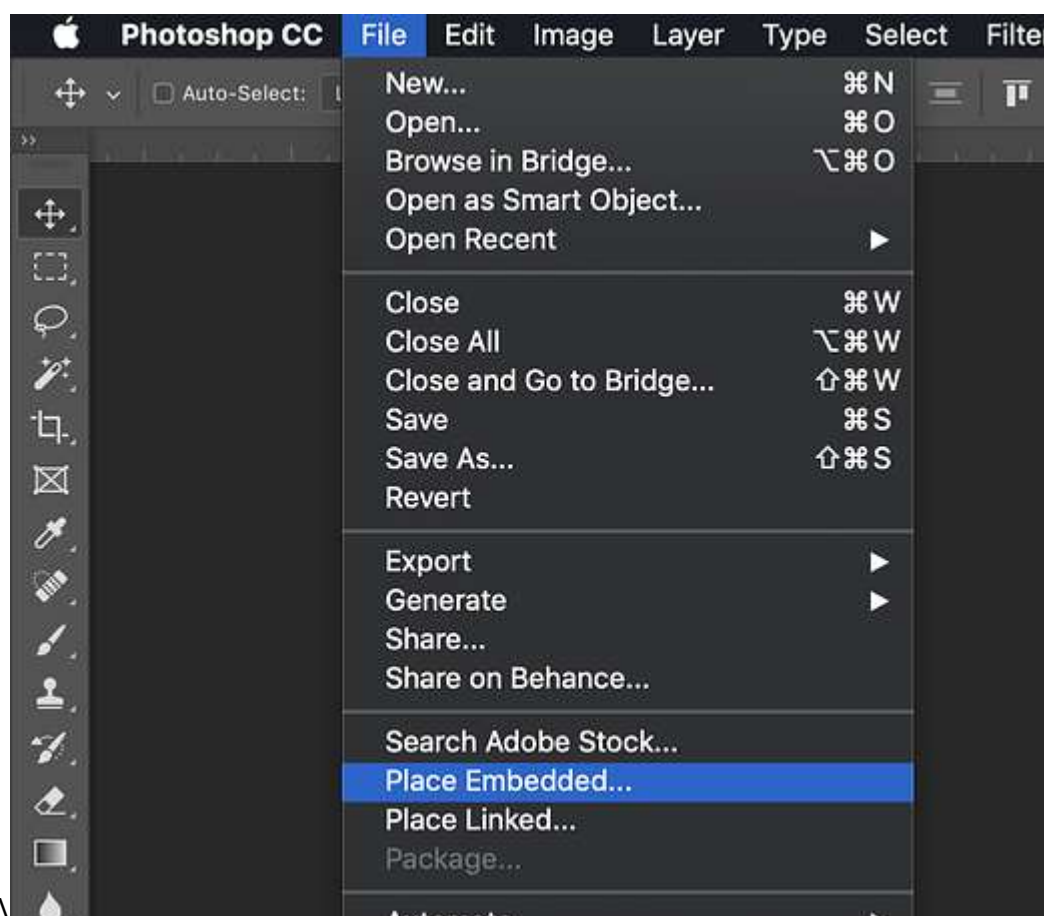


### Key readings 1.1.4.: Perform photo importation

#### Method 1: Using place

The phases on how to import a photo in Adobe Photoshop using Place:

1. Open Adobe Photoshop.
2. Create a new document or open an existing one.
3. Go to File > Place embedded



4. Select the photo you want to import and click Open.
5. The photo will be placed on a new layer in your document.
6. You can resize and move the photo as needed.
7. To place the photo as a Smart Object, select the Place Embedded option in the Place dialog box. This will allow you to edit the photo non-destructively, and any changes you make will be reflected in the original photo file.

8. Once you are happy with the placement of the photo, click Enter to apply the changes.

### **Method 2: Dragging**

Importing photos into Adobe Photoshop using drag-and-drop is a straightforward process that involves selecting the desired photo and dragging it onto the Photoshop workspace. **step-by-step guide:**

1. **Open Adobe Photoshop:** Launch the Adobe Photoshop application on your computer.
2. **Locate the Photo:** Navigate to the folder containing the photo you want to import. Ensure the photo file is easily accessible on your computer's file system.
3. **Select the Photo:** Click and hold the left mouse button on the photo file you want to import.
4. **Drag and Drop:** While holding the left mouse button, drag the selected photo file towards the Adobe Photoshop window.
5. **Release the Mouse Button:** Once the photo file is positioned over the Photoshop workspace, release the left mouse button. The photo will be imported as a new layer in the current Photoshop document.
6. **Position and Resize (Optional):** If necessary, use the Move tool (V) to reposition the photo layer within the document. You can also resize the photo layer by dragging its corner handles or using the Transform tool (T).
7. **Adjust Opacity (Optional):** To adjust the opacity of the imported photo layer, drag the opacity slider in the Layers panel.
8. **Save the Document:** Once you're satisfied with the imported photo and any adjustments, save the Photoshop document to preserve your work.



### Points to Remember

- They are two available methods you can use to import a photo in adobe Photoshop:
- **Method 1:** Click on File menu>Place embedded>Choose a photo you want to import>Click on open
- **Method 2:** Locate the photos you want to import>Select them all>Drag and drop them into Photoshop interface
- **To select menu:** Click on menu>Then select the menu item by clicking on it
- **To arrange panels:** Drag and drop them to your desired location where you want them to appear.
- **To Customise the toolbar:** Click on the three points on the bottom of the toolbar>Click on edit toolbar>Add or remove a tool
- **To use Undo command and history panel:** Press Ctrl + Z Click on Edit>Select Redo/Undo.



### Application of learning 1.1.

As a Graphic Designer at IBYIZA STUDIO, the client asked to make the image with the size of (Width=8.47cm, height=8.47cm, resolution=300px automatic) the background= blue, color mode= CMYK and Use B&W= Low contrast use the following Image:





## Indicative content 1.2: Remove Unwanted Elements from the Image



Duration: 4 hrs



### Theoretical Activity 1.2.1: Description of crop and selection tools



#### Tasks:

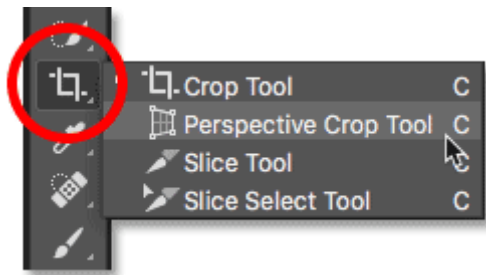
- 1: You are requested to answer the following questions related to the crop and selection tools:
  - I. Provide an overview of the tools available in Adobe Photoshop for removing unwanted elements from images such as:
    - a) Crop tools
    - b) Selection tools
    - c) Marquee and lasso tools
    - d) Quick selection tools
    - e) The magic wand tools
    - f) The eraser tools
- 2: Provide the answer for the asked questions and write them on papers.
- 3: Present the findings/answers to the whole class
- 4: For more clarification, read the key readings 1.2.1. In addition, ask questions where necessary.



#### Key readings 1.2.1.: Description of crop and selection tools

##### 1. Crop tool

**The Crop tool** is a versatile tool in Adobe Photoshop that allows you to selectively remove unwanted areas of an image while maintaining the overall composition. It's a non-destructive editing tool, meaning that it doesn't permanently alter the original image file. Instead, it creates a new layer that masks out the cropped area, leaving the original image intact.



### Advanced Crop tool features

The Crop tool offers several advanced features for more precise cropping:

- **Content-Aware Fill:** This feature intelligently analyses the surrounding pixels and fills in the cropped area with a pattern that matches the background.
  - **Fade:** This option allows you to create a feathered edge around the cropped area, blending it seamlessly with the surrounding pixels.
  - **Protect:** This option prevents the Crop tool from extending beyond the boundaries of the image layer.
- The Crop tool is a valuable tool for various editing tasks, including:
    - **Removing unwanted elements:** It can be used to eliminate distracting objects, blemishes, or empty spaces from an image.
    - **Improving composition:** It can help to enhance the composition of an image by focusing on the main subject and eliminating unnecessary background elements.
    - **Resizing images:** It can be used to resize images to specific dimensions or aspect ratios.
    - **Straightening images:** It can be used to straighten tilted or crooked images.

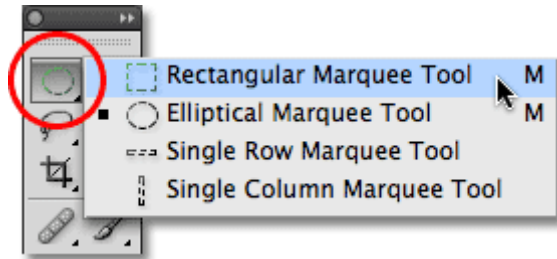
## 2. Selection tools

**Selection tools** are a fundamental aspect of Adobe Photoshop, enabling users to isolate and modify specific areas of an image while leaving the rest untouched. These tools play a crucial role in various editing tasks, from removing unwanted elements to enhancing specific details.

## 3. Marquee Tools

**Marquee Tools:** These tools create selections with straight or curved edges. They include:

- b. **Rectangular Marquee Tool:** Creates rectangular selections.
- c. **Elliptical Marquee Tool:** Creates elliptical selections.
- d. **Single Row Marquee Tool:** Creates selections one row at a time.
- e. **Single Column Marquee Tool:** Creates selections one column at a time.



**Lasso Tools:** The Lasso Tool in Adobe Photoshop is a selection tool that allows users to make freehand selections in various shapes and sizes. It is commonly used to create custom selections by drawing around objects or areas within an image.

These tools create freehand selections. They include:

**Lasso Tool:** Creates freehand selections with a single click-and-drag motion.

**Polygonal Lasso Tool:** Creates selections by clicking and dragging to define straight-edged segments.

#### • Quick Selection Tool

**Quick Selection Tool:** The Quick Selection Tool in Adobe Photoshop is a versatile selection tool that allows users to make fast and accurate selections in their images. It works by automatically detecting and selecting pixels based on tone and color when you click and drag over an area.

This tool automatically selects areas of an image based on similarity in color and texture.

#### • Magnetic Lasso Tool

**Magnetic Lasso Tool** Creates selections that automatically snap to edges in the image.



**Magic wand tool:** The Magic Wand tool is used to select contiguous areas of an image based on color and brightness. It is one of the oldest and most popular selection tools in Photoshop, and it can be very useful for quickly selecting large areas of an image with a solid color.



#### • Selection Techniques

In addition to the various selection tools, Photoshop offers several techniques for refining and modifying selections:

- **Add to Selection:** This option allows you to expand a selection by adding additional areas.
- **Subtract from Selection:** This option allows you to remove areas from a selection.
- **Intersect Selection:** This option creates a selection that is the intersection of two or more existing selections.
- **Feather Selection:** This option creates a soft transition between the selected area and the surrounding pixels.
- **Smooth Selection:** This option smooths out the edges of a selection, making it appear more natural.

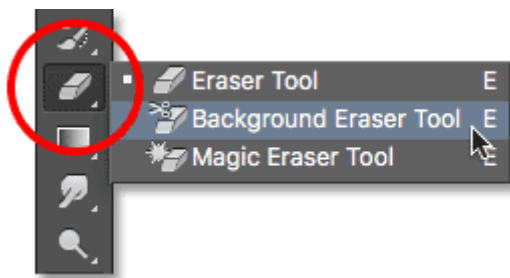
#### Applications of Selection Tools

Selection tools are essential for a wide range of editing tasks, including:

- **Removing unwanted elements:** Isolating and removing unwanted objects, such as blemishes, distracting elements, or background elements.
- **Isolating specific areas:** Focusing on specific areas of an image for editing, such as enhancing details, adjusting brightness or contrast, or applying filters.
- **Creating masks:** Creating masks to selectively apply effects or adjustments to specific areas of an image without affecting the rest.
- **Compositing images:** Combining elements from different images by selectively extracting and combining portions of each image.
- **Preparing images for printing or online display:** Ensuring that the desired area of an image is properly framed and sized for the intended output.

#### • Eraser tool

**Eraser tool:** The eraser tool is used to erase pixels from an image. It can be used to remove unwanted objects, fix mistakes, or create special effects.



The Eraser tool has a number of options that you can use to customize the erasing process. For example, you can use the Mode option to specify whether the eraser will erase to the background color, to the transparency layer, or to the selected layer. You can also use the Tolerance option to control how similar the pixels must be in order to be erased.

#### • Combining selection tools

**Combining selection tools:** is the process of using multiple selection tools together to create more complex and precise selections. This can be useful for a variety of tasks, such as selecting a subject from a complex background, removing an unwanted object from an image, or creating a mask for a special effect.

There are a number of different ways to combine selection tools in Photoshop. One common way is to use the **Add to Selection**, **Subtract from Selection**, and **Intersect with Selection** options.

## 9. Converting a selection into layer mask

**Converting a selection into a layer mask** is the process of creating a mask from a selection. A mask is a grayscale image that is used to control the visibility of a layer. Black areas of the mask hide the layer, white areas of the mask show the layer, and gray areas of the mask show the layer partially.

**Converting a selection into layer mask can be useful for a variety of tasks, such as:**

- **Protecting areas of an image from being edited:** By converting a selection into a layer mask, you can protect the areas of the image that are selected from being edited. This can be useful for tasks such as removing unwanted objects from an image or creating a vignette effect.
- **Making selections more precise:** By using a mask, you can make more precise selections than you can with a selection tool alone. This is because masks can be feathered and adjusted to create smooth transitions.
- **Combining multiple selections:** By using masks, you can combine multiple selections into one layer mask. This can be useful for tasks such as creating a complex silhouette or removing multiple unwanted objects from an image.

## 10. Filling selection with color

**Filling a selection with color:** Filling a selection with color in Adobe Photoshop involves applying a solid color, gradient, pattern, or texture to the area within a selected region of an image. This process allows users to change the appearance of the selected area by filling it with the chosen color or design. The process of replacing the pixels in a selection with a solid color.

**This can be useful for a variety of tasks, such as:**

- Filling in a blank area of an image with a solid color

- Changing the color of an object in an image
- Adding a highlight or shadow to an image
- Creating a special effect

## **11. Resizing images and adjusting resolution**

**Resizing images and adjusting resolution** are two important processes that can be used to improve the quality and appearance of your images.

Resizing images changes the dimensions of an image, while adjusting resolution changes the number of pixels per inch in an image.

Resizing images and adjusting resolution in Adobe Photoshop involves changing the dimensions and the number of pixels in an image to alter its size and quality.

### **breakdown of what resizing and adjusting resolution entail:**

#### **1. Resizing Images:**

- **Changing Dimensions:** Resizing an image involves altering its width and height dimensions. You can make an image larger (upscale) or smaller (downscale) to fit specific requirements.
- **Maintaining Aspect Ratio:** It's important to maintain the aspect ratio when resizing to avoid distorting the image. This ensures that the proportions of the image remain intact.
- **Interpolation:** When resizing, Photoshop uses interpolation algorithms to calculate new pixel values. Common interpolation methods include Bicubic, Bilinear, Nearest Neighbor, and more, each affecting image quality differently.

#### **2. Adjusting Resolution:**

**Resolution:** Resolution refers to the number of pixels per inch (PPI) in an image. Higher resolution means more pixels per inch, resulting in finer detail and higher quality.

▪ **Changing PPI:** Adjusting resolution involves changing the pixel density of an image. Increasing PPI enhances image quality for print, while decreasing PPI reduces file size for web use.

▪ **Image Quality:** Higher resolution images are suitable for print projects, while lower resolution is sufficient for digital use to optimize file size and loading speed.

**Resizing an image can be useful for a variety of reasons, such as:**

- To make an image smaller for sharing online or emailing
- To make an image larger for printing
- To fit an image into a specific frame or layout

When resizing an image, it is important to choose an interpolation method.

**Interpolation** is the process of adding or removing pixels from an image to create a new image of a different size.

**Adjusting resolution can be useful for a variety of reasons, such as:**

- To reduce the file size of an image without sacrificing too much quality
- To increase the resolution of an image for printing
- To match the resolution of an image to other images in a project



### **Practical Activity 1.2.2: Use crop and selection tools**



#### **Task:**

1: Referring to the previous theoretical activity (1.2.1) you are requested to perform the following task:

As a graphic designer, you are instructed to visit the computer lab and utilize the crop tool, marquee and lasso tools, quick selection tool, magic wand tool, eraser tool, and combine various selection tools effectively.

2: Apply safety precautions (Wear the PPE)

3: Present out the steps to use crop and selection tools.

4: Referring to the steps provided on task 3, use crop and selection tools.

- 5: Present your work to the trainer and whole class
- 6: Read key reading 1.2.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 1.2.



### **Key readings 1.2.2: Use crop and selection tools**

#### **1. Use crop tool**

##### **To use the Crop Tool in Adobe Photoshop:**

##### **Step1: Select the Crop Tool:**

In the toolbar on the left side of the Photoshop window, select the Crop Tool. It looks like a square with diagonal lines inside it. You can also press the 'C' key on your keyboard to select the Crop Tool.

##### **Step 2: Adjust Crop Boundaries:**

Click and drag on your image to create a crop boundary. This boundary represents the area that will remain after cropping. You can adjust the size and aspect ratio of the crop by clicking and dragging the corner handles.

##### **Step 3: Position the Crop:**

Move the crop boundary to the desired position. You can click inside the boundary and drag it to reposition the crop area.

##### **Step 4: Rotate the Crop:**

If you want to rotate the crop area, move your cursor outside the crop boundary. When the cursor changes to a curved, double-headed arrow, click and drag to rotate the crop.

##### **Step 5: Refine the Crop:**

To fine-tune the crop, you can use the options bar at the top of the Photoshop window. Here you can enter specific width, height, resolution, and orientation values. You can also choose different presets from the Preset menu.

##### **Step 6: Apply the Crop:**

Once you are satisfied with the crop area, press Enter (Return on Mac) or click the checkmark icon in the options bar to apply the crop. The area outside the crop boundary will be removed, and your image will be cropped accordingly.

### **Cancel the Crop (Optional):**

If you want to cancel the crop and start over, press the **Esc key** on your keyboard, or click the "Cancel" icon (a circle with a diagonal line) in the options bar.

## **2. Use selection tools**

**Step 1:** In the Photoshop toolbar, you'll find various selection tools, including the Rectangular Marquee Tool, Elliptical Marquee Tool, Lasso Tool, and more.

**Step 2:** Select the appropriate selection tool for the shape you want to create (e.g., Rectangular Marquee Tool for rectangles and squares, Elliptical Marquee Tool for circles and ellipses).

**Step 3:** Click and drag on the canvas to create your selection. For rectangular or elliptical selections, drag while holding the Shift key to maintain a proportional shape.

**Step 4:** To add to an existing selection, hold the Shift key and make an additional selection.

**Step 5:** To subtract from an existing selection, hold the Alt key (Option key on Mac) and make a new selection.

**Step 6:** To move the selected content, select the Move Tool and click and drag within the selection.

**Step 7:** To copy the selected content, press Ctrl + J (Command + J on Mac) to create a new layer with the copied content.

**Step 8:** To transform the selection, go to Edit > Free Transform or press Ctrl + T (Command + T on Mac). This allows you to scale, rotate, or skew the selected content.

## **3. Combining selection tools**

In Adobe Photoshop, you can combine selection tools to create complex selections and refine your editing tasks. Here's how you can combine selection tools:

### **Using Multiple Selection Tools:**

#### **Step 1: Make an Initial Selection:**

Use any selection tool like the Marquee (Rectangular or Elliptical), Lasso, Quick Selection, or Magic Wand tool to make your initial selection.

#### **Step 2: Add to the Selection:**

To add to your existing selection, hold down the Shift key on your keyboard. Then, select the area you want to add. The new selection will be added to the existing one.

#### **Step 3: Subtract from the Selection:**

To subtract from your existing selection, hold down the Alt (Option on Mac) key on your keyboard. Then, select the area you want to remove from the selection. The new selection will be subtracted from the existing one.

#### **Step 4: Intersect with the Selection:**

To create an intersection between your existing selection and a new selection, hold down the Shift + Alt (Shift + Option on Mac) keys on your keyboard. Then, select the area you want to intersect with the existing selection. The result will be the overlapping area of the two selections.

#### **Step 5: Using Quick Mask Mode:**

Another way to refine selections is by using Quick Mask mode. Press the Q key on your keyboard to enter Quick Mask mode. Use painting tools like the Brush tool to paint areas you want to include (paint with white) or exclude (paint with black) from the selection. Exit Quick Mask mode by pressing the Q key again, and your selection will be refined based on the painted areas.

#### **Step 6: Save and Load Selections:**

After you have combined selection tools to create a complex selection, you can save the selection for future use. **Go to Select > Save Selection.** You can also load a saved selection from the same menu.

### **4. Filling selection with color**

In Adobe Photoshop, filling a selection with a specific color is a common task.

How you can Filling the selection with color:

**Step 1: Make a Selection:** Use any selection tool (such as Marquee, Lasso, Quick Selection, or Magic Wand) to make the selection you want to fill with color.

**Step 2: Choose the Foreground Color:** Set your foreground color to the color you want to fill the selection with. You can do this by clicking on the foreground color swatch in the toolbar to open the Color Picker. Select the desired color and click "OK."

**Step 3: Fill the Selection:** With your selection active and the foreground color set, you can fill the selection in several ways:

**Step 4: Using the Edit Menu:** Go to Edit > Fill. In the Fill dialog box, make sure "Use" is set to "Foreground Color" and click "OK."

Using the Keyboard Shortcut:

Press Alt + Backspace (Option + Delete on Mac) to fill the selection with the foreground color.

**Step 5: Using the Paint Bucket Tool:** Select the Paint Bucket tool from the toolbar or press G on your keyboard. Make sure the "Foreground" option is selected in the tool options bar at the top. Click inside the selection to fill it with the foreground color.

**Deselect the Selection:** After filling the selection, you might want to deselect it to see the final result. You can do this by pressing Ctrl + D (Command + D on Mac) or going to Select > Deselect.

## 5. Converting a selection into layer mask

Converting a selection into a layer mask in Adobe Photoshop allows you to create a mask based on the selected area.

Making the selection into layer mask

**Step 1: Make a Selection:** Use any selection tool (like Marquee, Lasso, Quick Selection, or Magic Wand) to make the selection you want to convert into a layer mask.

**Step 2: Create a New Layer:** Before creating the layer mask, it's often a good practice to create a new layer. You can do this by clicking the "New Layer" button at the bottom of the Layers panel. Alternatively, you can go to Layer > New >

Layer... and click "OK" to create a new layer.

**Step 3: Add a Layer Mask:** With the selection active and the new layer selected, click the "Add Layer Mask" button at the bottom of the Layers panel. It looks like a square with a circle inside.

Alternatively, you can go to Layer > Layer Mask > Reveal Selection. This option will create a layer mask based on your selection.

Now, the selected area is converted into a layer mask attached to the new layer. The layer mask uses white to reveal the area and black to hide it.

**Step 4: Painting on the Layer Mask:** Select the layer mask thumbnail in the Layers panel.

Use the Brush tool (B) with black color to hide parts of the layer or white color to reveal parts of the layer. Shades of gray will create partial transparency.

**Step 5: Adjusting Layer Mask Properties:** You can right-click on the layer mask thumbnail and choose options like "Refine Mask" or "Apply Mask" to further refine your mask.

#### ➤ **Resizing images and adjusting resolution**

##### ● **Resizing images:**

Resizing images in Adobe Photoshop has several methods to do it. Here are a few ways to resize images:

##### **Method 1: Using the Image Size Dialog Box**

**Step 1: Open Your Image:** Launch Adobe Photoshop and open the image you want to resize.

**Step 2: Access the Image Size Dialog Box:** Go to Image > Image Size... in the menu bar. This opens the Image Size dialog box.

**Step 3: Set the New Dimensions:** In the Image Size dialog box, you'll see the current dimensions of your image in pixels. You can change the width, height, or resolution. Ensure that the "Constrain Proportions" option is checked to maintain the aspect ratio of the image. When this option is enabled, changing the width will automatically adjust the height and vice versa.

**Step 4: Choose Resampling Options:** Photoshop offers different resampling

methods:

**Nearest Neighbor:** This method is fastest but can result in a loss of quality.

**Bilinear:** Better quality than Nearest Neighbor but can be slightly blurry.

**Bicubic:** A good balance between speed and quality, suitable for most resizing tasks.

**Bicubic Smoother:** Best for enlarging images.

**Bicubic Sharper:** Best for reducing the size of images with strong lines and edges.

Choose an appropriate resampling method based on your specific needs.

**Step 5: Click OK** After setting the new dimensions and resampling options, click "OK" to resize your image.

## **Method 2: Using the Crop Tool (with Content-Aware)**

**Step 1: Open Your Image:** Open the image you want to resize.

**Step 2: Select the Crop Tool:** Select the Crop Tool (press 'C' on your keyboard) from the toolbar.

**Step 3: Enter Desired Dimensions:** In the Options bar, enter the desired width and height for your image. You can also choose different units like pixels, inches, or percentages.

**Step 4: Drag to Crop:** Click and drag to define the crop area. Photoshop will automatically crop the image to the specified dimensions.

**Step 5: Commit the Crop:** Press Enter (Return on Mac) or click the checkmark icon in the Options bar to apply the crop.

- **Adjusting resolution**

**Step 1:** Open the image in Photoshop.

**Step 2:** Go to Image > Image Size.

**Step 3:** In the Image Size dialog box, under Resolution, enter the desired resolution in pixels per inch (PPI).

If you want to keep the image size the same, select the Resample Image checkbox.

**Step 4:** Click OK to accept the changes



#### Points to Remember

- **To use crop tool:** Select the Crop Tool> Adjust Crop Boundaries>Position the Crop>Rotate the Crop>Refine the Crop>Apply the Crop
- **To use selection tools:** Select the selection tool you want>Click and drag on the canvas to create selection>Add, subtract, intersect with/from selection>Move or delete the selected part depend on your desired results>Move or delete your selection.
- **To fill selection with color:** Make a selection>Choose the foreground color>Fill the selection.
- **To convert a selection into layer mask:** Make a selection>Create a new layer>Add a layer mask>Paint and adjust layer mask properties
- **To resize and adjust the images resolution:** Open the image in photoshop>Go to Image>Image size>Set the height and width> Adjust your desired resolution and sampling options.



#### Application of learning 1.2.

You're employed as a photo editor at PIXELS STUDIOS. A client has provided photos from their birthday celebration and asked for the removal of unwanted elements using crop and selection tools. This is to ensure the photos are suitable for sharing on social media platforms.



### Indicative content 1.3: Manage Layers



Duration: 4 hrs



#### Theoretical Activity 1.3.1: Description of a layer in Adobe Photoshop



#### Tasks:

1: You requested to answer the following question related to the layer in Photoshop:

I. Provide an overview of the following layers available in Adobe Photoshop?

- a) Background layer
- b) Creating a new layer
- c) Duplicating layers
- d) Using Layer groups
- e) Scale and Rotate Layers
- f) Working with Opacity
- g) Aligning layers
- h) Using layer masks
- i) Merging, Rasterizing and flattening layers
- j) Blending modes/layer styles

II. What are the primary differences between fills and strokes?

2: Provide the answer for the asked question and write them on papers.

3: present the finding/answers to the whole class

4: For more clarification, reading 1.3.1. In addition, ask questions where necessary.

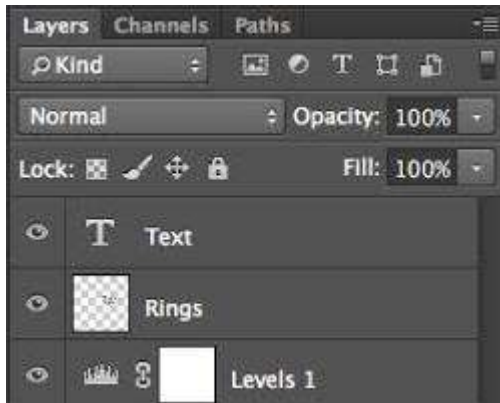


#### Key readings 1.3.1.: Description of a layer in Adobe Photoshop

##### Manage Layers

##### A layer

In Adobe Photoshop, a **layer** is a transparent sheet that contains graphic elements, such as images, shapes, and text. Layers can be stacked on top of each other to create complex images. You can work on each layer independently, without affecting the other layers.



There are several types of layers used in Photoshop, and they fall into two main categories:

- ❖ **Content layers:** These layers contain different types of content, like photographs, text, and shapes.

**Examples of different types of content layers:**

- **Background layer:** This is the layer that is created when you first create a new document. It is the bottom layer in the Layers panel.
- **Image layers:** These layers contain images that you have imported or placed into your document.
- **Shape layers:** These layers contain shapes that you have created using the Shape tools.
- **Text layers:** These layers contain text that you have added to your document.

- ❖ **Adjustment layers:** These layers allow you to apply adjustments to the layers below them, like saturation or brightness. Adjustment layers are a type of non-destructive editing because they don't actually change anything about the original image.

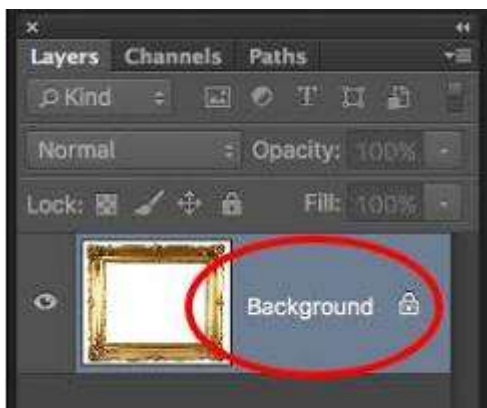
**Examples of different types of adjustment layers:**

- **Brightness/Contrast layer:** This layer allows you to adjust the brightness and contrast of your image.
- **Levels layer:** This layer allows you to adjust the black point, white point, and midtones of your image.
- **Curves layer:** This layer allows you to make precise adjustments to the tonal curve of your image.
- **Hue/Saturation layer:** This layer allows you to adjust the hue, saturation, and lightness of your image.
- **Selective Color layer:** This layer allows you to adjust the hue, saturation, and lightness of specific colours in your image.

### Benefits of using layers in Photoshop:

- **Non-destructive editing:** Layers allow you to make changes to your image without destroying the original data. This is because each layer is a separate file that can be edited independently.
- **Flexibility:** Layers can be moved, resized, and rotated to create a variety of effects. You can also use blending modes to create different interactions between layers.
- **Organization:** Layers can be grouped together and named to make them easier to manage. This is especially helpful when you have a large number of layers in your image.

**The Background layer** is the first and lowest layer in an Adobe Photoshop document. It typically contains the original image data that was opened or created in the document. The Background layer is locked by default, which means that you cannot directly edit it or change its properties. This is to protect the original image data from accidental changes.



However, you can still work with the Background layer by converting it into a regular layer. To do this, you can either double-click on the Background layer in the Layers panel and select "Convert to Regular Layer" in the dialog box, or you can go to the Layer menu and select "New" > "Layer From Background". Once the Background layer is converted into a regular layer, you can edit it and change its properties just like any other layer.

Reasons why you might want to convert the Background layer into a regular layer:

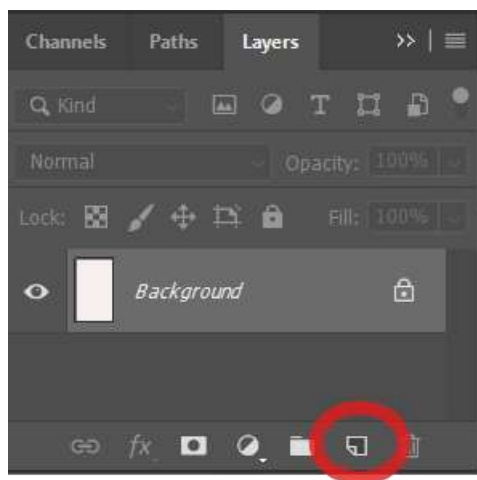
- **To apply filters and effects to the image data:** Some filters and effects are not available for Background layers, so you will need to convert it into a regular layer before you can use them.
- **To change the blending mode of the layer:** The blending mode of a layer determines how it interacts with the layers below it. You can only change the blending mode of a regular layer.

- **To adjust the opacity of the layer:** The opacity of a layer determines how transparent it is.

If you want to protect the original image data, you can always convert the regular layer back into a Background layer by clicking on the lock icon next to the layer name in the Layers panel.

### 3. Creating a new layer

**A new layer** is a blank canvas that you can use to add images, shapes, text, and other elements to your project. It is a fundamental concept in Photoshop and is essential for creating complex and detailed images.



When you create a new layer, it is placed above the currently selected layer in the Layers panel. This means that any changes you make to the new layer will not affect the layers below it.

#### Reasons why we need to create new layers:

**Non-destructive editing:** When you create a new layer, you are essentially creating a new canvas on which you can paint or draw. This means that you can make changes to the new layer without affecting the original image data. This is important because it allows you to experiment with different effects and designs without worrying about ruining the original image.

**Flexibility:** Layers can be moved, resized, and rotated to create a variety of effects. You can also use blending modes to create different interactions between layers. For example, you could use a layer mask to create a soft edge around an image, or you could use a blending mode to create a double exposure effect.

**Organization:** Layers can be grouped together and named to make them easier to manage. This is especially helpful when you have a large number of layers in

your image. For example, you could group all of the layers that contain text together, or you could group all of the layers that contain a specific colour.

**Collaboration:** If you are working on a project with multiple people, you can use layers to share your work with others. Each person can work on their own layer, and then you can combine the layers together to create a final image.

**Other additional benefits of using layers in Photoshop:**

- **You can easily revert to previous versions of your image:** If you make a change that you don't like, you can simply delete the layer or go back to a previous version of the layer.
- **You can easily share your work with others:** You can export each layer as a separate image file, or you can save the entire project as a PSD file that can be opened by other Photoshop users.
- **You can use layers to create animations:** You can animate layers by changing their properties over time. For example, you could create an animation of a flower blooming by animating the opacity and size of a layer that contains an image of a flower.

#### 4. Duplicating layers

**Duplicating layers** is the process of creating an exact copy of an existing layer. This is a useful technique for a variety of purposes, such as experimenting with different effects, creating backups of important layers, and sharing layers with others.

**There are two main ways to duplicate layers in Photoshop:**

**Drag and drop:** Select the layer you want to duplicate and drag it to the Create a New Layer icon in the Layers panel.

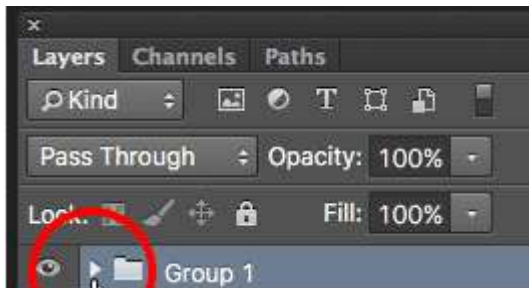
**Using the Layer menu:** Select the layer you want to duplicate and go to the Layer menu at the top of the screen. Then, select Duplicate Layer.

**Benefits of duplicating layers in Photoshop:**

- **Experiment with different effects:** You can duplicate a layer and then apply different effects to it to see how they look. This is a great way to experiment with different designs without affecting the original layer.
- **Create backups of important layers:** You can duplicate important layers to create backups in case you make a mistake. This is especially important for layers that contain complex effects or important image data.
- **Share layers with others:** You can duplicate a layer and then send it to someone else so that they can work on it. This is a great way to collaborate on a project with others.

## 5. Using Layer groups

A **layer group** is a collection of two or more layers that are grouped together. This allows you to organize and manage your layers more easily, and it can also make it easier to apply effects to multiple layers at once.



### Applications of layer groups in Photoshop:

- **Organization:** Layer groups make it easier to organize your layers, especially when you have a large number of layers in your project.
- **Apply effects to multiple layers at once:** You can apply effects, such as layer styles and filters, to multiple layers at once by applying them to the layer group. This can save you time and effort, especially when you want to apply the same effect to multiple similar layers.
- **Move and transform multiple layers at once:** You can move and transform multiple layers at once by moving and transforming the layer group. This can be useful for positioning and resizing multiple layers at the same time.
- **Create clipping masks:** You can use layer groups to create clipping masks. This allows you to mask one layer with another layer, so that the first layer is only visible where the second layer is visible. This can be used for a variety of effects, such as creating text masks and image masks.
- **Hide and lock layers:** You can hide and lock multiple layers at once by hiding and locking the layer group. This can be useful for keeping certain layers from being accidentally edited or deleted.
- **Create a composite image:** You can use layer groups to create a composite image from multiple images. For example, you could create a layer group for each image in the composite, and then use layer styles and filters to blend the images together.
- **Create a text effect:** You can use layer groups to create text effects, such as drop shadows and outlines. For example, you could create a layer group for the text layer and then add a layer style with a drop shadow effect.
- **Create a non-destructive image edit:** You can use layer groups to create non-destructive image edits. For example, you could create a layer group for the image layer and then add adjustment layers to adjust the brightness, contrast,

and color of the image. This allows you to experiment with different adjustments without permanently altering the original image.

## 6. Scale and Rotate Layers

**Layer scaling** is the process of changing the size of a layer without affecting the underlying layers. This can be useful for a variety of reasons, such as:

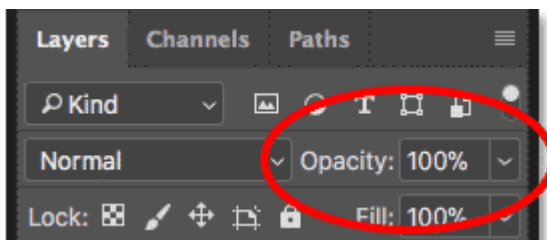
- To make a layer larger or smaller to fit the overall composition of the image.
- To adjust the size of a layer to match the size of another layer.
- To create a vignette effect by darkening the edges of an image.
- To create a drop shadow effect by offsetting a layer slightly from the layer below it.

**Layer rotating** is the process of changing the angle of a layer without affecting the underlying layers. This can be useful for a variety of reasons, such as:

- To rotate a layer to match the orientation of another layer or object in the image.
- To rotate a layer to create a sense of movement or dynamism in the image.
- To rotate a layer to correct for camera shake or other alignment issues.
- To create a distorted or surreal effect.

### Working with opacity

In Adobe Photoshop, **opacity** refers to the degree to which a layer is transparent. A layer with 0% opacity is completely transparent, while a layer with 100% opacity is completely opaque. You can adjust the opacity of a layer to achieve a variety of effects, such as creating soft edges, blending layers together, and adding a watermark to an image.



**There are two main ways to adjust the opacity of a layer in Photoshop:**

- **Using the Opacity slider:** The Opacity slider is located in the Layers panel. To adjust the opacity of a layer
- **Entering a value in the Opacity field:** You can also enter a value in the Opacity field in the Layers panel. The value can be a number between 0 and 100, where 0 is completely transparent and 100 is completely opaque.
- **Using the Layer Mask:** Another way to adjust the opacity of a layer is to use a layer mask. A layer mask is a grayscale image that controls the opacity of the layer. Black areas of the mask make the layer completely transparent, while

white areas of the mask make the layer completely opaque. Gray areas of the mask make the layer partially transparent.

**Opacity** is a powerful tool that can be used to achieve a variety of effects in Adobe Photoshop. By understanding how to adjust the opacity of a layer, you can create more complex and interesting images.

## 7. Aligning layers

**Aligning layers** refers to the process of positioning multiple layers so that they are perfectly aligned with each other. This can be useful for creating precise layouts and ensuring that elements are evenly spaced. There are several methods for aligning layers in Photoshop, each with its own advantages and applications.

- **Using the Move Tool:** This is the most common and straightforward method for aligning layers.
- **Using the Align Tool:** The Align tool provides more control over aligning layers, including options to align edges, centers, or specific points.
- **Using the Distribute Tool:** The Distribute tool is used to evenly distribute the spacing between selected layers.
- **Using Reference Points:** Reference points are specific locations on a layer that can be used as alignment guides. To set a reference point, hold down the Alt key (Windows) or Option key (Mac) and click on the desired location on the layer. The reference point will be marked with a small crosshair icon. To align a layer to a reference point, select the layer and drag it to the reference point.
- **Using Layer Guides:** Layer guides are temporary lines that can be used to align layers.
- **Using Smart Guides:** Smart Guides are intelligent guides that automatically appear when you move layers or objects. They can help you align layers to edges, centers, or other reference points. Smart Guides can be toggled on and off in the Preferences dialog box.

**Aligning layers** is an essential skill for any Photoshop user, and it can be used to create professional-looking layouts and designs. By understanding the various methods and tools available, you can easily align layers with precision and efficiency.

## 8. Using Layer masks

**A layer mask** is a grayscale image that is used to control the opacity of a layer. Black areas of the mask make the layer completely transparent, while white areas of the mask make the layer completely opaque. Gray areas of the mask make the layer partially transparent.

Layer masks are a powerful tool that can be used to create a variety of effects, such as:

- **Creating soft edges:** By gradually fading the opacity of a layer mask, you can create a soft edge that blends seamlessly with the layers below it.
- **Adding transparency:** You can use a layer mask to selectively make parts of a layer transparent. This is useful for creating effects like cut-outs and overlays.
- **Revealing or hiding content:** You can use a layer mask to reveal or hide content on a layer. This is useful for creating animations and for making changes to a layer without affecting the underlying layers.

**There are two main types of layer masks:**

- **Vector masks:** Vector masks are based on mathematical formulas, which means that they can be resized without losing quality.
- **Raster masks:** Raster masks are based on pixels, which means that they can lose quality when resized.

## 9. Adding layer mask

**A layer mask** is a grayscale image that is used to control the opacity of a layer. By adjusting the opacity of the mask, you can selectively reveal or hide parts of the layer. Layer masks are a non-destructive way to edit layers, which means that you can make changes to the mask without affecting the original image data.

Benefits of using layer masks in Photoshop:

- **Non-destructive editing:** Layer masks allow you to make changes to your image without destroying the original data. This is because each layer mask is a separate file that can be edited independently.
- **Flexibility:** Layer masks can be used to create a variety of effects, such as creating soft edges, adding transparency, and revealing or hiding content.
- **Organization:** Layer masks can be grouped together and named to make them easier to manage.
- **Collaboration:** If you are working on a project with multiple people, you can use layer masks to share your work with others. Each person can work on their own mask, and then you can combine the masks together to create a final image.
- **Create masks to hide or reveal parts of a layer:** This can be used to create a variety of effects, such as creating a soft edge around an object, isolating a subject from its background, or removing unwanted elements from an image.
- **Use masks to create non-destructive edits:** This means that you can make changes to the mask without affecting the underlying layer. This is useful for experimenting with different effects and adjustments.

- **Use masks to create clipping masks:** Clipping masks allow you to restrict the contents of one layer to the shape of another layer. This can be used to create a variety of effects, such as clipping text to a shape or creating a hole in an image.
- **Use masks to create layer effects:** Layer effects, such as drop shadows, bevels, and inner shadows, can be applied to layer masks. This can be used to create a variety of effects, such as adding depth to an object or creating a vignette around an image.
- **Use masks to blend layers together:** Layer masks can be used to blend two or more layers together. This can be used to create a variety of effects, such as creating a double exposure effect or adding a texture to an image.

Once you have created a layer mask, you can edit it using the following tools:

- **Paint Bucket tool:** The Paint Bucket tool is used to fill an area of the mask with a specific color.
- **Eraser tool:** The Eraser tool is used to erase parts of the mask.
- **Brush tool:** The Brush tool is used to paint on the mask with a specific brush tip.
- **Gradient tool:** The Gradient tool is used to create a gradient effect on the mask.

## 10. Adding vector mask

A **vector mask** is a type of layer mask that uses mathematical formulas to define the visible area of a layer. This means that vector masks can be resized without losing quality, and they can be used to create sharp and precise edges. Vector masks are ideal for creating masks with complex shapes, such as cut-outs and outlines.

### Benefits of using vector masks in Photoshop:

- **Non-destructive editing:** Vector masks allow you to make changes to your image without destroying the original data. This is because vector masks are based on mathematical formulas, rather than pixels.
- **Flexibility:** Vector masks can be resized and reshaped without losing quality. This makes them ideal for creating masks with complex shapes.
- **Sharp and precise edges:** Vector masks can create sharp and precise edges, which is ideal for creating cut-outs and outlines.
- **Scalability:** Vector masks can be scaled to any size without losing quality. This makes them ideal for creating masks for images that will be used at different sizes.

## 11. Clipping masks

A **clipping mask** is a special type of layer mask that uses the contents of one layer to determine the visibility of another layer. The layer that is used to create the

clipping mask is called the "**base**" layer, and the layer that is clipped to the base layer is called the "**clipped**" layer.

## 12. Merging, Rasterizing and flattening layers

**Merging layers** means combining two or more layers into a single layer. This can be useful for a variety of reasons, such as:

- **Reducing file size:** When you merge layers, you are essentially flattening them into a single layer. This can reduce the file size of your image, which can be helpful if you are working with a large or complex image.
- **Improving performance:** Merging layers can also improve the performance of your image, especially if you are working with a large number of layers. This is because Photoshop doesn't have to render each layer separately when the layers are merged.
- **Making edits permanent:** When you merge layers, you are making the edits that you have made to the layers permanent. This means that you cannot undo the edits later.

### **Rasterizing**

**Rasterizing** means converting a vector layer into a raster layer. This means that the vector layer will be converted into a grid of pixels, which can then be edited using Photoshop's raster editing tools.

Rasterizing a vector layer is a permanent change, so it is important to make sure that you are happy with the results before you rasterize the layer. Once a vector layer has been rasterized, it cannot be converted back into a vector layer.

### **Reasons why you might want to rasterize a vector layer:**

- **To apply raster editing tools:** Vector layers can only be edited using vector editing tools. If you want to use Photoshop's raster editing tools, such as the Brush tool or the Eraser tool, you will need to rasterize the vector layer first.
- **To reduce file size:** Vector layers are typically smaller than raster layers, but they can still be quite large. If you need to reduce the file size of an image, you can rasterize the vector layers.
- **To improve performance:** Rasterized layers can sometimes be rendered more quickly than vector layers. This can be helpful if you are working with a large or complex image.

## 13. Flattening layers

**Flattening layers** means combining all of the visible layers in an image into a single layer. This can be useful for a variety of reasons, such as:

- **Reducing file size:** Flattening layers can reduce the file size of an image, especially if the image contains many layers.
- **Improving performance:** Flattening layers can also improve the performance of an image, especially if the image is going to be used for web or print.
- **Making edits permanent:** Flattening layers makes the edits that you have made to the layers permanent. This means that you cannot undo the edits later.

#### 14. Blending modes/layer styles

**Blending modes** are a set of options that control how layers interact with each other. By changing the blending mode of a layer, you can create a variety of interesting effects, such as blending layers together, adding transparency, and creating soft edges.

There are 23 blending modes in Photoshop, each with its own unique effect.

##### The blending modes used:

- **Normal:** This is the default blending mode. It does not change the appearance of the layers.
- **Multiply:** This blending mode darkens the underlying layers.
- **Screen:** This blending mode lightens the underlying layers.
- **Overlay:** This blending mode combines the effects of multiply and Screen.
- **Soft Light:** This blending mode is similar to Overlay, but it produces a softer effect.
- **Hard Light:** This blending mode is similar to Overlay, but it produces a more dramatic effect.
- **Color Dodge:** This blending mode lightens the underlying layers to the color of the top layer.
- **Color Burn:** This blending mode darkens the underlying layers to the color of the top layer.
- **Linear Dodge (Add):** This blending mode adds the colors of the layers together.
- **Linear Burn:** This blending mode subtracts the colors of the layers together.
- **Dissolve:** This blending mode fades the top layer into the underlying layers.
- **Exclusion:** This blending mode creates an effect similar to Overlay, but it only affects the areas where the top layer is not transparent.

There are 10 main types of layer styles in Photoshop:

- **Drop Shadow:** This layer style adds a shadow to the layer.
- **Inner Shadow:** This layer style adds a shadow to the inside of the layer.
- **Outer Glow:** This layer style adds a glow to the outside of the layer.
- **Inner Glow:** This layer style adds a glow to the inside of the layer.
- **Bevel and Emboss:** This layer style adds a 3D effect to the layer.
- **Satin:** This layer style adds a smooth, shiny effect to the layer.

- **Gradient Overlay:** This layer style adds a gradient to the layer.
- **Pattern Overlay:** This layer style adds a pattern to the layer.
- **Color Overlay:** This layer style adds a solid color to the layer.
- **Stroke:** This layer style adds a stroke around the layer.

### Applying fills and strokes

In Adobe Photoshop, a fill is a solid color or pattern that can be applied to a layer or selection. Fills are a versatile tool that can be used to create a variety of effects, such as creating solid backgrounds, adding textures, and filling in shapes.

### There are two main types of fills in Photoshop:

- **Solid color fills:** These fills apply a solid color to the layer or selection.
  - **Pattern fills:** These fills apply a pattern to the layer or selection.
- Fills are a powerful tool that can be used to create a variety of interesting effects in Photoshop. By understanding how to use fills, you can create more complex and interesting images.

### There are two main ways to add a stroke in Photoshop:

- **Using the Stroke command:** This method allows you to add a stroke to a selection or the entire contents of a layer.
- **Using the Layer Styles dialog box:** This method allows you to add a stroke to a layer and control its properties in more detail.



## Practical Activity 1.3.2: Manipulation of layers in adobe Photoshop



### Task:

1: Referring to the previous theoretical activity (1.3.1) you are requested to perform the following questions:

As a graphic designer, you are instructed to visit the computer lab to work with Adobe Photoshop features such as manipulating the background layer, creating new layers, duplicating layers, organizing layers into groups, scaling and rotating layers, adjusting opacity, aligning layers, using layer masks, merging, rasterizing, flattening layers, and applying blending modes, layer styles, fills, and strokes.

2: Apply safety precautions (Wear the PPE)

3: Present out the steps to manipulate layer in adobe Photoshop.

4: Referring to the steps provided on task 3, manipulate layer in adobe Photoshop

- 5: Present your work to the trainer and whole class
- 6: Read key reading 1.3.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 1.3.



### **Key readings 1.3.2: Manipulation of layers in adobe Photoshop**

#### **Manage layers in adobe Photoshop**

#### **15. Working with Background Layers:**

##### **Unlock the Background Layer:**

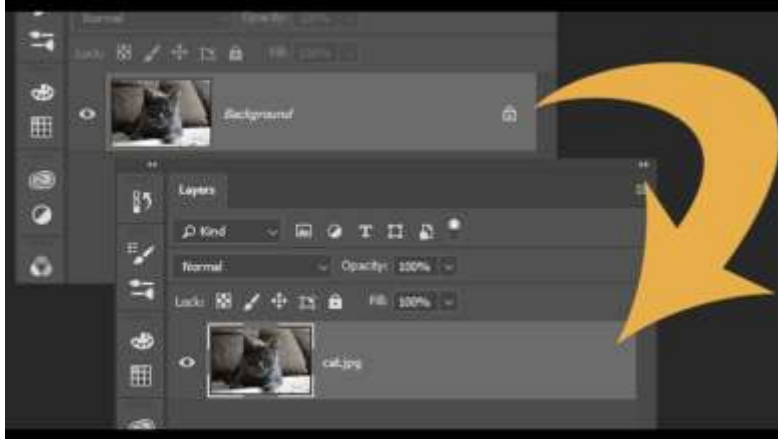
By default, the Background layer is often locked. To unlock it and make it editable, simply double-click on the layer in the Layers panel and hit OK in the dialog that pops up.



##### **Convert Background Layer to a Regular Layer:**

##### **Method 1: Double-clicking the Background layer in the Layers panel:**

This is the easiest and most straightforward way to convert the Background layer. Simply double-click on the Background layer in the Layers panel and a new layer will be created from the Background layer. The new layer will be unlocked and will replace the Background layer in the Layers panel.



### **Method 2: Using the Layer > New > Layer from Background command:**

This method gives you more control over the naming and creation of the new layer. To use this method, go to Layer > New > Layer from Background. A new layer will be created from the Background layer, leaving the Background layer locked. You can then give the new layer a name and edit it like any other regular layer.

### **Method 3: Dragging the padlock icon to the trash can:**

This method is the least common way to convert the Background layer, but it is also the fastest. To use this method, simply select the Background layer in the Layers panel and then drag the padlock icon to the trash can at the bottom of the Layers panel. The Background layer will be unlocked and you can then edit it like any other regular layer.

### **Convert a Regular Layer to a Background Layer:**

#### **1. Using the Layer > New > Background from Layer command:**

This is the most straightforward way to convert a regular layer to a Background layer. To use this method, simply go to Layer > New > Background from Layer. The selected layer will be converted to a Background layer and will be placed at the bottom of the Layers panel.

#### **2. Merging the regular layer with the Background layer:**

To use this method, select the regular layer that you want to convert to a Background layer and then go to Layer > Merge with Background. The regular layer will be merged with the Background layer, creating a single Background layer.

## **16. Creating a new layer**

### **1. Using the Layer > New > Layer command:**

This is the most common way to create a new layer. To use this method, go to Layer > New > Layer. A new layer will be created above the selected layer in the Layers

panel. You can then give the new layer a name and edit it like any other regular layer.

## **2. Using the New Layer button in the Layers panel:**

This method is quicker and easier than using the Layer > New > Layer command. To use this method, simply click on the New Layer button at the bottom of the Layers panel. A new layer will be created above the selected layer in the Layers panel.

## **3. Using the keyboard shortcut:**

If you want to create a new layer quickly, you can use the keyboard shortcut Ctrl + Shift + N (Windows) or Command + Shift + N (Mac). This will create a new layer above the selected layer in the Layers panel.

## **4. Dragging a selection to the New Layer button:**

This method is useful for creating a new layer from a selection. To use this method, select the area of the image that you want to create a new layer from and then drag the selection to the New Layer button at the bottom of the Layers panel. A new layer will be created from the selection and placed above the selected layer in the Layers panel.

## **Duplicating layers**

There are several different ways to duplicate layers in Photoshop:

- **Keyboard shortcuts:**
  - **Command/Ctrl + J:** This is the most common way to duplicate a layer. It will create a copy of the selected layer and place it directly above the original layer in the Layers panel.
  - **Option/Alt + Command/Ctrl + J:** This will create a duplicate of the selected layer and place it in a new document.
  - **Shift + Command/Ctrl + J:** This will create a duplicate of the selected layer and place it below the original layer in the Layers panel.
- **Menus:**
  - **Layer > New > Duplicate Layer:** This will create a copy of the selected layer and place it directly above the original layer in the Layers panel.
  - **Layer > Duplicate Layer as:** This will open a dialog box where you can choose to duplicate the selected layer as a new layer, a new document, or a new image.
- **Drag and drop:**

- Drag the layer icon from the Layers panel to the New Layer button at the bottom of the Layers panel: This will create a copy of the layer and place it directly above the original layer in the Layers panel.
- Drag the layer icon from the Layers panel to a new document window: This will create a copy of the layer and place it in a new document.
- Hold down the Option/Alt key and drag the layer icon from the Layers panel: This will create a duplicate of the layer and place it below the original layer in the Layers panel.

### **Hiding layers**

**There are two main ways to hide layers in Photoshop:**

- **Using the Eye icon:**

In the Layers panel, each layer has an Eye icon next to its name. When the Eye icon is visible, the layer is visible. When the Eye icon is hidden, the layer is hidden. To hide a layer, simply click on the Eye icon next to the layer's name. To make a hidden layer visible, click on the Eye icon again.

- **Using the keyboard shortcut:**

To hide the currently selected layer, you can use the keyboard shortcut Command + H (Mac) or Control + H (Windows). To make a hidden layer visible, you can use the keyboard shortcut Command + Shift + H (Mac) or Control + Shift + H (Windows).

### **Replacing an Image in a layer**

This is the easiest and most straightforward way to replace an image in a layer. To use this method, follow these steps:

- Select the layer that contains the image that you want to replace.
- Right-click on the layer and select Replace Contents.
- In the Replace Contents dialog box, select the new image that you want to use and click OK.

### **Using Layer groups**

#### **Creating and Managing Layer Groups**

- **Create a new layer group:**

Select the layers that you want to include in the layer group and then go to Layer > New > Group.

- **Rename a layer group:**

Select the layer group in the Layers panel and then double-click on the layer group name. Type in a new name for the layer group and press Enter.

- **Move layers to a different layer group:**

Select the layers that you want to move and then drag them to the layer group in the Layers panel.

- **Duplicate a layer group:**

Select the layer group in the Layers panel and then go to Layer > New > Duplicate Group.

- **Delete a layer group:**

Select the layer group in the Layers panel and then press the Delete key.

### **Organise Work using Layer Groups**

To organise your work using layer groups in Photoshop, follow these steps:

- Identify the related layers in your image. This could be layers that make up a specific object, background element, or text effect.
- Select the layers that you want to group together. You can use the Shift key to select multiple layers at once.
- Create a new layer group. To do this, go to Layer > New > Group.
- Give the layer group a descriptive name. This will help you to identify the layer group easily in the Layers panel.
- Drag the selected layers into the layer group. You can also create a new layer group and then drag and drop the layers into it.

Once you have created layer groups, you can use them to organize your work in a number of ways:

- Hide or show layer groups. To do this, click on the eye icon next to the layer group name in the Layers panel. This can be useful for decluttering your workspace or for previewing different versions of your image.
- Move layer groups around. To do this, drag and drop the layer group in the Layers panel. This can be useful for rearranging your image or for moving elements to different parts of the canvas.

- Apply effects to layer groups. You can apply layer effects, such as adjustments, filters, and blending modes, to layer groups. This can be useful for creating non-destructive edits to your image.
- Create nested layer groups. You can group layer groups together to create more complex organizational structures. This can be useful for organizing complex images with many different elements.

## **Scale and Rotate Layers**

### **Using the Free Transform Tool**

The Free Transform Tool is the most common and versatile way to scale and rotate layers in Photoshop. It allows you to scale and rotate layers proportionally or non-proportionally, and to skew and distort layers. To use the Free Transform Tool, follow these steps:

- Select the layer that you want to scale and rotate.
- Go to Edit > Free Transform (or press Ctrl+T on Windows or Command+T on Mac).
- A bounding box will appear around the layer. To scale the layer, drag the corner handles of the bounding box. To rotate the layer, click and drag anywhere inside the bounding box.
- To skew or distort the layer, hold down the Ctrl key (Windows) or Command key (Mac) and drag the side handles of the bounding box.
- To apply the transformation, press Enter (Windows) or Return (Mac).

### **Using the Transform Dialog Box**

The Transform Dialog Box provides more control over scaling and rotating layers than the Free Transform Tool. It allows you to specify the exact scaling and rotation values, and to apply transformations to multiple layers at once.

#### **To use the Transform Dialog Box, follow these steps:**

- Select the layer(s) that you want to scale and rotate.
- Go to Edit > Transform > Scale (or press Ctrl+Shift+A on Windows or Command+Shift+A on Mac).
- In the Transform Dialog Box, enter the desired scaling values in the Width and Height fields. You can also specify the scaling reference point in the Anchor Point section.

- To rotate the layer, enter the desired rotation value in the Rotation field. You can also specify the rotation reference point in the Anchor Point section.
- To apply the transformation, click OK.

- **Working with opacity**

**Adjusting the opacity of layers:**

- **Use the Opacity slider in the Layers panel.** This is the most common way to adjust the opacity of a layer. Simply select the layer that you want to adjust and then drag the Opacity slider to the desired level.
- **Use the keyboard shortcuts:** You can also use the keyboard shortcuts Ctrl/Cmd + Shift + [ and Ctrl/Cmd + Shift + ] to decrease and increase the opacity of a layer by 10%, respectively.
- **Use the layer blending modes:** Layer blending modes allow you to control how the layers in your document are mixed together. Some blending modes, such as Soft Light and Overlay, can be used to create interesting opacity effects.

Adjusting the opacity of tools and effects:

- **Use the Opacity slider in the Options bar.** When you select a tool or effect, the Opacity slider will appear in the Options bar. This slider allows you to adjust the opacity of the tool or effect before you apply it to your image.
- **Use the keyboard shortcuts:** You can also use the keyboard shortcuts Ctrl/Cmd + [ and Ctrl/Cmd + ] to decrease and increase the opacity of a tool or effect by 10%, respectively.

**Aligning layers**

There are a few different ways to align layers in Photoshop:

**Using the Move Tool**

- Select the Move tool (V).
- Select the layers that you want to align. You can use the Shift key to select multiple layers at once.
- Click on the Align icons in the Options bar. There are six Align icons: Align Top, Align Bottom, Align Center Vertically, Align Left, Align Right, and Align Center Horizontally.
- Click on the Align icon that you want to use. The selected layers will be aligned accordingly.

### **Using the Layer > Align menu**

- Select the layers that you want to align.
- Go to Layer > Align.
- Select the alignment option that you want to use from the submenu. The selected layers will be aligned accordingly.

### **Using Smart Guides**

- Enable Smart Guides by going to View > Show > Smart Guides.
- Select the layers that you want to align.
- Move the layers until they snap to the Smart Guides.

### **Using Rulers and Guides**

- Create rulers and guides by going to View > Rulers and View > Guides.
- Select the layers that you want to align.
- Move the layers until they are aligned to the rulers and guides.

### **Using the Distribute Spacing feature**

- Select the layers that you want to distribute evenly.
- Go to Layer > Distribute.
- Select the distribution option that you want to use from the submenu. The selected layers will be distributed evenly accordingly.

## **17. Layer masks**

In Adobe Photoshop, you can add and use layer masks in different ways to control the visibility and transparency of specific areas of a layer.

### **Several methods to add and utilize layer masks:**

#### **18. Adding a Layer Mask:**

1. Select the layer to which you want to add a mask.
2. At the bottom of the Layers panel, click the "Add Layer Mask" icon (it looks like a square with a white circle in it). This adds a white layer mask to the selected layer.
3. To start using the layer mask, make sure it's selected (you can click on the mask thumbnail in the Layers panel).

#### **19. Using the Brush Tool for Layer Masks:**

- Select the layer mask by clicking on it in the Layers panel.
- Choose the Brush tool (shortcut: B).
- Pick a brush size and set your foreground color to either black or white.
- Paint with black to hide parts of the layer or paint with white to reveal them. Gray tones will create varying levels of transparency.

## **20. Gradient Tool for Layer Masks**

- Select the layer mask.
- Choose the Gradient tool (shortcut: G).
- Ensure your foreground color is set to black.
- Drag the gradient tool across your image to create a smooth transition in the layer's visibility.

## **21. Selections for Layer Masks:**

- Make a selection on your layer by using tools like the Marquee, Lasso, or Magic Wand.
- Click the layer mask icon to create a mask that corresponds to your selection.
- The selected area will be visible, and the unselected area will be hidden.

## **22. Quick Mask Mode:**

- Press the letter "Q" to enter Quick Mask mode.
- Use your brush to paint over the areas you want to mask.
- Press "Q" again to exit Quick Mask mode, and the painted areas will become a layer mask.

## **23. Copying and Pasting Selections as Masks:**

- Make a selection on your layer.
- Copy the selection (Ctrl+C or Cmd+C).
- Click the layer mask thumbnail and paste the selection (Ctrl+V or Cmd+V).
- The pasted selection will become a layer mask.

## **24. Channel Masks:**

- Open the Channels panel.
- Ctrl-click (Cmd-click on Mac) on the RGB channel to load the luminosity of your image as a selection.

- Go back to the Layers panel and click the layer mask icon to create a mask based on the loaded selection.

## **25. Using Vector Shapes as Masks:**

- Create a vector shape using the Shape tool (e.g., Rectangle, Ellipse).
- Position the shape layer above the layer you want to mask.
- Right-click on the shape layer and choose "Create Clipping Mask" to use the shape as a layer mask.

## **26. Adding vector mask**

There are two main ways to add a vector mask to a layer in Photoshop:

### **1. Using the Pen tool or shape tools:**

- Select the layer to which you want to add the vector mask.
- Select the Pen tool or one of the shape tools from the toolbar.
- Draw a path on the canvas to define the shape of the vector mask.
- Once you have finished drawing the path, press Enter.
- In the Create Vector Mask dialog box, select the "Clip" option and click OK.

### **2. Using the Add Layer Mask icon:**

- Select the layer to which you want to add the vector mask.
- Click the Add Layer Mask icon at the bottom of the Layers panel.
- In the Select Channel dialog box, select the "Vector Mask" channel and click OK.

## **27. Converting a selection to a vector mask:**

1. Make a selection on the canvas of the area that you want to include in the vector mask.
2. Click the Add Layer Mask icon at the bottom of the Layers panel.
3. In the Select Channel dialog box, select the "Vector Mask" channel and click OK.

## **28. Converting a raster mask to a vector mask:**

1. Select the layer that contains the raster mask that you want to convert.
2. Right-click on the layer mask in the Layers panel and select Convert to Vector Mask.

## **29. Clipping masks**

### **There are two main ways to create clipping masks in Photoshop:**

#### **1. Using the Layers panel:**

- Select the layer that you want to use as the clipping mask.
- Hold down the Alt key and click on the line between the clipping mask layer and the layer that you want to clip.
- A small arrow will appear. Drag the arrow to the right to create the clipping mask.

#### **2. Using the Clipping Mask command:**

- Select the layer that you want to clip.
- Go to Layer > Create Clipping Mask.

This will create a clipping mask using the layer that is directly above the selected layer in the Layers panel.

Once you have created a clipping mask, you can edit the clipping mask layer without affecting the layer that is being clipped. This is useful for creating a variety of effects, such as clipping text to a shape or creating a hole in an image.

### **Examples of how to use clipping masks in Photoshop:**

- Clip text to a shape:
  - Create a text layer and then create a shape layer.
  - Select the text layer and then hold down the Alt key and click on the line between the text layer and the shape layer.
  - Drag the arrow to the right to create the clipping mask.
  - The text will now be clipped to the shape of the shape layer.
- Create a hole in an image:
  - Create a layer mask on the image layer.
  - Then, use the Paintbrush tool to paint black on the layer mask in the area where you want to create the hole.
  - The black pixels on the layer mask will hide the corresponding pixels on the image layer.
- Apply a non-destructive adjustment to a specific area of your image:
  - Create an adjustment layer and then create a clipping mask using the adjustment layer and the layer that you want to apply the adjustment to.

- The adjustment will now only be applied to the area of the image that is visible through the clipping mask.

### **Merging layers**

There are several ways to merge layers in Photoshop:

#### **1. Using the keyboard shortcut:**

- Select the layers that you want to merge.
- Press Ctrl+E (Windows) or Command+E (Mac).
- This will merge the selected layers into a single layer.

#### **2. Using the Layers menu:**

- Select the layers that you want to merge.
- Go to Layer > Merge Layers.
- This will merge the selected layers into a single layer.

#### **3. Using the right-click menu:**

- Right-click on one of the selected layers.
- Select Merge Layers from the context menu.
- This will merge the selected layers into a single layer.

#### **4. Using the Merge Visible:**

- Select the layers that you want to merge.
- Go to Layer > Merge Visible.
- This will merge all of the visible layers into a single layer.

#### **5. Using the Flatten Image:**

- Go to Image > Flatten Image.
- This will flatten all of the layers in your image into a single layer.

#### **Tips:**

- Before merging layers, it is a good idea to duplicate them. This will give you a backup copy of the original layers in case you make any mistakes.
- You can also merge layers by dragging and dropping them onto each other in the Layers panel.

- If you are merging layers that have different blending modes, the blending mode of the top layer will be used.
- If you are merging layers that have different opacities, the opacity of the top layer will be used.

### **Rasterizing layers**

There are three different ways to rasterize layers in Photoshop:

#### **1. Using the Layer > Rasterize > Layer command:**

- Select the layer that you want to rasterize in the Layers panel.
- Go to Layer > Rasterize > Layer.

#### **2. Right-clicking on the layer in the Layers panel and selecting Rasterize Layer:**

- Select the layer that you want to rasterize in the Layers panel.
- Right-click on the layer and select Rasterize Layer.

#### **3. Using the shortcut key Ctrl/Cmd + Shift + E:**

- Select the layer that you want to rasterize in the Layers panel.
- Press Ctrl/Cmd + Shift + E. This will create a new rasterized layer containing all of the visible layers in the document.

#### **Tips:**

- Before rasterizing a layer, it is a good idea to duplicate it. This will give you a backup copy of the original layer in case you make any mistakes.
- To duplicate a layer, select it in the Layers panel and then go to Layer > New > Duplicate Layer.
- You can also rasterize multiple layers at once. To do this, select all of the layers that you want to rasterize in the Layers panel and then go to Layer > Rasterize > Layers.
- When rasterizing a layer, you can choose to rasterize it to a specific resolution. To do this, go to Layer > Rasterize > Layer and then select the desired resolution from the drop-down menu.

### **flattening layers**

There are two main ways to flatten layers in Photoshop:

#### **1. Using the Layer > Flatten Image command:**

- Go to Layer > Flatten Image.

- A dialog box will appear asking you to confirm that you want to flatten the image. Click OK to continue.

## **2. Using the Shift + Ctrl + E (Mac: Shift + Command + E) keyboard shortcut:**

- Select the layers that you want to flatten.
- Press Shift + Ctrl + E (Mac: Shift + Command + E).

### **Other ways to flatten layers:**

- Using the Scripts menu: Go to File > Scripts > Flatten All Layer Effects. This will flatten all of the layer effects in your image without merging the layers.
- Using the Save for Web dialog box: When you save your image for the web, you can choose to flatten the layers in the Save for Web dialog box. To do this, open the Save for Web dialog box and then select the Flatten All Layers checkbox.

### **Tips:**

- Before flattening your layers, it is a good idea to duplicate them. This will give you a backup copy of the original layers in case you make any mistakes.
- To duplicate a layer, select it in the Layers panel and then go to Layer > New > Duplicate Layer.
- You can also flatten your layers by merging them. To do this, select the layers that you want to merge and then go to Layer > Merge Layers.

### **Blending modes/layer styles**

There are a variety of ways to apply Blending Modes and Layer Styles in Photoshop.

#### **Methods used in Blending modes/layer styles:**

##### **Using the Layer Styles Panel**

- Select the layer to which you want to apply the blending mode or layer style.
- Click on the Layer Styles panel icon at the bottom of the Layers panel.
- From the Layer Styles panel, select the blending mode or layer style that you want to apply.
- Adjust the settings for the blending mode or layer style as desired.
- Click OK to apply the blending mode or layer style.

##### **Using the Blending Mode Menu**

- Select the layer to which you want to apply the blending mode.

- From the Layers panel menu, select Blending Mode.
- From the Blending Mode menu, select the blending mode that you want to apply.

#### **Using the Layer Effects Menu**

- Select the layer to which you want to apply the layer style.
- From the Layers panel menu, select Layer Effects.
- From the Layer Effects menu, select the layer style that you want to apply.
- Adjust the settings for the layer style as desired.
- Click OK to apply the layer style.

#### **Using Keyboard Shortcuts**

There are a number of keyboard shortcuts that you can use to apply blending modes and layer styles in Photoshop. Here are a few of the most common:

##### **Blending Modes:**

- Overlay: Ctrl/Cmd + Shift + O
- Multiply: Ctrl/Cmd + Shift + M
- Screen: Ctrl/Cmd + Shift + E
- Soft Light: Ctrl/Cmd + Shift + L
- Hard Light: Ctrl/Cmd + Shift + H

##### **Layer Styles:**

- Drop Shadow: Ctrl/Cmd + Alt + Shift + D
- Inner Shadow: Ctrl/Cmd + Alt + Shift + I
- Outer Glow: Ctrl/Cmd + Alt + Shift + O
- Inner Glow: Ctrl/Cmd + Alt + Shift + G
- Bevel and Emboss: Ctrl/Cmd + Alt + Shift + B

#### **• Applying fills and strokes**

There are two main ways to apply fills and strokes in Photoshop:

##### **1. Using the Paint Bucket tool:**

The Paint Bucket tool is the simplest way to apply a fill to an area of an image. To use the Paint Bucket tool, follow these steps:

- Select the Paint Bucket tool from the toolbar.
- Select the fill color from the Color Picker.
- Click on the area of the image that you want to fill.

## **2. Using the Edit > Fill command:**

The Edit > Fill command gives you more control over the fill options, such as the blending mode and opacity. To use the Edit > Fill command, follow these steps:

- Select the area of the image that you want to fill.
- Go to Edit > Fill.
- In the Fill dialog box, select the fill color and blending mode.
- Adjust the opacity slider to set the opacity of the fill.
- Click OK to apply the fill.

## **Applying strokes:**

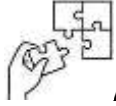
To apply a stroke to an area of an image, you can use the Stroke command. To use the Stroke command, follow these steps:

- Select the area of the image that you want to stroke.
- Go to Edit > Stroke.
- In the Stroke dialog box, select the stroke color and width.
- Click OK to apply the stroke.



## **Points to Remember**

- To create a new layer, go to Layer > New > Layer. You can also duplicate layers by pressing Ctrl+J (Windows).
- To hide a layer, click the eye icon next to the layer name in the Layers panel. To show a hidden layer, click the eye icon again.
- You can also group layers together by selecting them and then going to Layer > New > Group.
- To scale or rotate a layer, select it and then press **Ctrl+T (Windows)** or Command+T (Mac). A bounding box will appear around the layer. To scale the layer, drag the corner handles of the bounding box. To rotate the layer, click and drag anywhere inside the bounding box. To apply the transformation, press Enter (Windows).



### **Application of learning 1.3.**

You are a graphic designer working on a creative project that involves designing a poster for an upcoming event. The poster includes various elements such as text, images, and graphics, each requiring individual attention and adjustment. Use an effective management of layers in Adobe Photoshop to maintain organization, flexibility, and ease of editing throughout the design process.



## Indicative content 1.4: Adjust and Retouch Photo



Duration: 6 hrs



### Theoretical Activity 1.4.1: Description of photo retouch



#### Tasks:

- 1: You are requested to answer the following questions related to the photo retouch:
  - I. What do you understand in photo retouch?
  - II. Discuss the various retouching tools available in Photoshop
- 2: Provide the answer for the asked questions and write them on papers
- 3: Present the finding/answer to the whole class
- 4: For more clarification, read the key readings 1.4.1. In addition, ask questions where necessary.



### Key readings 1.4.1: Description of photo retouch

- **Photo retouching**

**Photo retouching** is the process of editing and altering digital images to improve their appearance. It can involve a wide range of techniques, from removing blemishes and wrinkles to enhancing colors and adjusting lighting. Adobe Photoshop is a powerful photo editing software that can be used to achieve a wide variety of retouching effects.

**The most common photo retouching techniques:**

- **Removing blemishes and imperfections:** This can be done using a variety of tools, including the Spot Healing Brush, the Patch Tool, and the Clone Stamp Tool.
- **Smoothing skin:** This can be done using the Blur tool or the Dodge and Burn tools.
- **Enhancing colors:** This can be done using the Levels tool, the Curves tool, or the Vibrance tool.
- **Adjusting lighting:** This can be done using the Dodge and Burn tools, the Shadows/Highlights tool, or the Levels tool.
- **Cropping and resizing:** This can be done using the Crop Tool, the Marquee Tool, or the Resize Image dialog box.
- **Adding effects:** This can be done using a variety of filters, such as the Blur filter, the Sharpen filter, or the Noise filter.



- **Using the cloning tool**

**Clone Stamp tool** is a versatile tool that allows you to copy pixels from one area of an image and paste them into another area.

This can be useful for a variety of tasks, such as:

- Removing unwanted objects or blemishes.
- Replicating patterns or textures.
- Creating seamless transitions between different areas of an image.
- Restoring damaged or faded images.

The Clone Stamp tool works by sampling pixels from a source area and then painting them onto a destination area. The source area is defined by the Alt (Windows) or Option (Mac) key, and the destination area is defined by the mouse cursor. You can adjust the size and hardness of the brush to control how the pixels are blended into the destination area.

- **Using the content aware tool**

**Content-Aware Fill tool** is a powerful tool that allows you to automatically fill in an area of an image by analysing the surrounding content and blending it seamlessly. This can be useful for a variety of tasks, such as:

- Removing unwanted objects or blemishes.
- Replacing backgrounds.
- Extending images.
- Creating photorealistic composites.

The Content-Aware Fill tool works by analysing the pixels around the area you want to fill in and then creating a pattern that matches the surrounding content.

- **Using the spot healing brush tool**

**The Spot Healing Brush tool:** is a powerful tool that allows you to quickly and easily remove unwanted spots, blemishes, and other small imperfections from your images. It works by analysing the surrounding pixels and blending them seamlessly into the area you want to clean up. This makes it an ideal tool for removing dust spots, scratches, and other small imperfections that can detract from the overall quality of your images.

- **Using the healing brush tool**

**The Healing Brush tool** is another powerful tool that allows you to repair imperfections in your images. It works by analysing the surrounding pixels and sampling them to create a pattern that matches the surrounding area. This pattern is then used to paint over the damaged area, resulting in a seamless transition.

Unlike the Spot Healing Brush tool, which is designed for removing small imperfections, the Healing Brush tool is better suited for repairing larger areas of damage. It is also more versatile, as it can be used to repair a wider variety of imperfections, including scratches, wrinkles, and even missing parts of an image.

**Guidelines for using the Spot Healing Brush tool:**

- Use a large brush size for larger imperfections and a smaller brush size for smaller imperfections.
- Use a soft brush hardness for blending in subtle imperfections and a harder brush hardness for more defined imperfections.
- If you're not happy with the results, you can always undo the Spot Healing Brush tool's actions by pressing Ctrl+Z (Windows) or Command+Z (Mac).

- **Using the patch tool**

**The Patch tool** is a versatile tool that allows you to seamlessly replace one area of an image with another. It works by sampling pixels from the source area and blending them into the destination area, creating a smooth transition between the two areas.

**Additional for using the Patch tool:**

- **Use a precise selection when defining the area to replace:** A well-defined selection will result in a more seamless transition between the source and destination areas.

- **Use a source area that closely matches the surrounding area:** The source area should have similar color, texture, and detail to the area you are replacing to create a natural-looking transition.
- **Adjust the blending mode if necessary:** The Patch tool offers different blending modes, such as Normal, Multiply, and Screen, which can affect how the source area's pixels blend into the destination area.
- **Use the Refine Edge tool to refine the edges of the patch:** The Refine Edge tool can help you achieve a more precise edge between the patch and the surrounding area.

- **Using the dodge and burn tools**

**Dodge and Burn tools** are two powerful tools that allow you to selectively lighten or darken areas of an image. They are commonly used for enhancing details, adding depth, and creating more dramatic lighting effects.

- Dodge Tool
- Burn Tool

- **Applying exposure compensation**

**Exposure compensation** is a technique used to adjust the brightness of an image by shifting the overall tonal range of the pixels. It is often used to correct for underexposed or overexposed images, or to create a specific mood or atmosphere.

When to Use Exposure Compensation:

- **Underexposed Images:** If an image is too dark overall, you can use exposure compensation to brighten it up.
- **Overexposed Images:** If an image is too bright overall, you can use exposure compensation to darken it down.
- **Creative Effects:** You can also use exposure compensation to create specific effects, such as high-key or low-key lighting.



### Theoretical Activity 1.4.2: Description of photo and colour correction



#### Tasks:

- 1: You are request to answer the following questions related to the colour correction:
  - I. Provide a description of Photo color correction
- 2: Provide the answer for the asked question and write them on paper.
- 3: Present the finding/answers to the whole class

4: For more clarification, read the key readings 1.4.2. In addition, ask question where necessary.



### Key readings 1.4.2: Description of photo and colour correction

- **Color correction**

Color correction in Adobe Photoshop is the process of adjusting the colors in an image to make them more accurate or aesthetically pleasing. This can be done for a variety of reasons, such as to correct for poor lighting conditions, to remove unwanted color casts, or to create a specific mood or atmosphere.

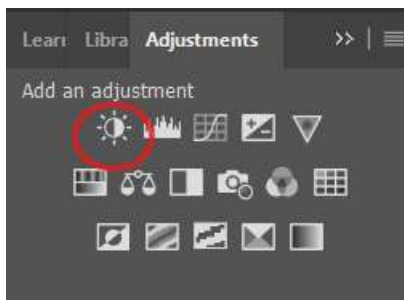
There are many different ways to use color correction on an image in Photoshop, but some of the most common methods include:

- **Using adjustment layers:** Adjustment layers are a non-destructive way to make color corrections to an image. They allow you to make changes to the image's colors without affecting the original pixels. Some of the most common adjustment layers for color correction include Levels, Curves, Hue/Saturation, and Color Balance.
- **Using the Eyedropper tool:** The Eyedropper tool can be used to sample colors from an image. This can be useful for setting the white point, black point, and neutral gray point in an image.
- **Using the Curves adjustment layer:** The Curves adjustment layer is a powerful tool for making precise color corrections. It allows you to adjust the tonal range of an image by dragging points on a curve.
- **Using the Levels adjustment layer:** The Levels adjustment layer is another powerful tool for making color corrections. It allows you to adjust the black point, white point, and gamma of an image.
- **Using the Hue/Saturation adjustment layer:** The Hue/Saturation adjustment layer allows you to adjust the hue, saturation, and lightness of an image. This can be useful for changing the overall color of an image or for adjusting the intensity of individual colors.
- **Using the Color Balance adjustment layer:** The Color Balance adjustment layer allows you to adjust the red, green, and blue components of an image. This can be useful for removing unwanted color casts.

- **Adjust Brightness and contrast**

**Brightness in Adobe Photoshop** refers to the overall lightness or darkness of an image. It is one of the most important aspects of image quality, as it can affect the overall mood and feel of an image.

Contrast in Adobe Photoshop refers to the difference between the lightest and darkest parts of an image. It is one of the most important aspects of image quality, as it can affect the overall mood and feel of an image. An image with high contrast will have sharp, well-defined details, while an image with low contrast will look flat and washed out.



**There are two main ways to adjust brightness in Photoshop:**

- Using the Brightness/Contrast adjustment layer: This is the most common way to adjust brightness in Photoshop.
- Using the Levels adjustment layer: This is a more advanced way to adjust brightness in Photoshop. It allows you to adjust the black point, white point, and gamma of an image.

In addition to these two methods, you can also adjust brightness by using the Dodge and Burn tools. The Dodge tool lightens an image, while the Burn tool darkens it.

- **Hue and saturation**

Hue and saturation are two of the most important aspects of color in Adobe Photoshop.

- Hue refers to the actual color itself, such as red, green, blue, yellow, and so on. It is measured in degrees, with 0 degrees being red and 360 degrees being red again.
- Saturation refers to the intensity or purity of a color. A color with high saturation is pure and vibrant, while a color with low saturation is dull and washed out. Saturation is measured on a scale of 0 to 100, with 0 being no color (gray) and 100 being the purest form of the color.



- **Color balance**

Color balance is an adjustment layer in Adobe Photoshop that allows users to adjust the overall color of an image. It is a non-destructive adjustment, meaning that the original image is not affected. Users can adjust the color balance of an image by dragging the sliders for each of the three primary colors: red, green, and blue. Dragging the slider to the left will add more of that color to the image, while dragging the slider to the right will remove more of that color. Users can also adjust the color balance for different areas of the image by using the eyedropper tool to select a specific area of the image and then dragging the sliders.

There are many different ways to use color balance to adjust the color of an image.

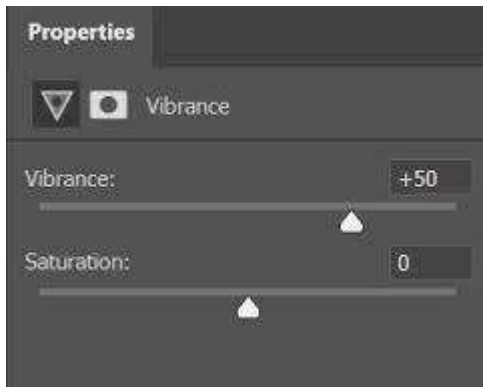
Some common uses include:

- **Making an image appear more warm or cool:** To make an image appear more warm, drag the red slider to the right. To make an image appear more cool, drag the blue slider to the right.
- **Correcting a color cast:** A color cast is an unwanted tint that is present throughout an image. To correct a color cast, drag the sliders for the opposite color to the left. For example, if an image has a green color cast, drag the red slider to the left.
- **Enhancing the colors in an image:** To enhance the colors in an image, drag the sliders for each of the primary colors to the right.
- **Matching the colors in two images:** To match the colors in two images, use the eyedropper tool to select a corresponding area in each image and then drag the sliders until the colors match.

- **Vibrance**

**Vibrance** is a non-destructive adjustment layer in Adobe Photoshop that allows users to selectively increase the saturation of muted colors in an image without affecting the already saturated colors. This is different from saturation, which increases the intensity of all colors in an image, including those that are already

saturated. Vibrance is a useful tool for enhancing the colors in an image without making them look unnatural.



Vibrance is a powerful tool that can be used to enhance the colors in an image. However, it is important to use it sparingly, as overusing it can make the image look unnatural.

- **Black and white**

Black and white in Adobe Photoshop is a non-destructive adjustment layer that allows users to convert an image to grayscale. This is a popular technique for creating dramatic and artistic images.

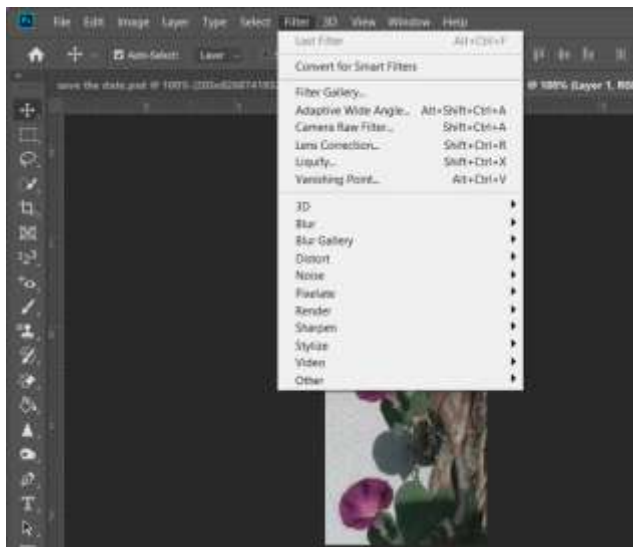


There are many different presets available for black and white conversion, and you can also experiment with the sliders to create your own custom look.

- **Photo filter**

**Photo filters** in Adobe Photoshop are non-destructive adjustments that allow you to easily enhance and transform the appearance of your images. They offer a wide

range of creative effects, from subtle adjustments to dramatic transformations.



Some popular photo filters in Photoshop include:

- **Artistic:** This category includes filters that mimic various painting styles, such as oil paint, watercolor, and dry brush.
- **Blur:** This category includes filters that blur the image, such as Gaussian Blur, Lens Blur, and Smart Blur.
- **Brush Strokes:** This category includes filters that add brush-like strokes to the image, such as Angular Stroke, Dark Strokes, and Light Strokes.
- **Distort:** This category includes filters that distort the image, such as Displace, Ripple, and Spherize.
- **Noise:** This category includes filters that add noise to the image, such as Add Noise, Gaussian Noise, and Median Noise.
- **Sharpen:** This category includes filters that sharpen the image, such as Sharpen, Unsharp Mask, and Smart Sharpen.
- **Styleize:** This category includes filters that apply various stylistic effects to the image, such as Colorize, Diffuse, and Emboss.

Photo filters can be used to achieve a variety of creative effects, such as:

- Enhancing the colors and contrast of an image
- Adding a vintage or retro look to an image
- Creating a soft focus or dreamy effect
- Adding a painterly or artistic touch to an image
- Simulating the effects of different camera lenses
- Applying dramatic distortions or transformations
- **Pattern**

A pattern in Adobe Photoshop is a repeating image or design that can be used to fill an area or add texture to an image. Patterns can be created from scratch or imported from a file. Once created, they can be applied to any layer in an image using the Fill tool or the Pattern Overlay option in the Layer Styles panel.

#### **The way of using Patterns in Photoshop:**

- **Creating seamless backgrounds:** Patterns can be used to create seamless backgrounds for images or documents. This can be useful for creating polished and professional-looking presentations or designs.
- **Adding texture to images:** Patterns can be used to add texture to images, such as fabric, wood, or metal. This can add depth and interest to an image and make it more visually appealing.
- **Creating custom brushes:** Patterns can be used to create custom brushes for painting. This can give you more control over the look of your brushstrokes and allow you to create unique and interesting effects.
- **Using patterns as clipping masks:** Patterns can be used as clipping masks to hide or reveal parts of an image. This can be a useful technique for creating complex designs or for adding interesting details to an image.
- **Palette**

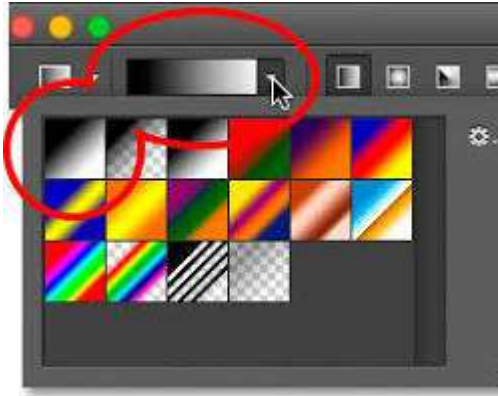
A palette in Adobe Photoshop is a collection of colors and color swatches that can be used to quickly and easily select and apply colors to your images. Palettes can be created, edited, and saved, and they can be shared with other Photoshop users.

#### **There are two main types of palettes in Photoshop:**

**Color palettes and swatch palettes.** Color palettes contain a list of colors, while swatch palettes contain swatches, which are small images of a color. Swatch palettes can also contain additional information, such as the name of the color, its hexadecimal code, and its CMYK or RGB values.

- **Gradient**

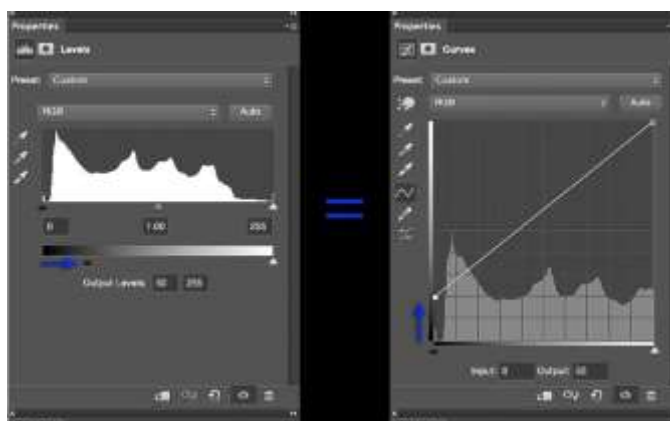
A gradient in Adobe Photoshop is a gradual transition between two or more colors. Gradients can be used to fill an area with a smooth transition of color, to create a drop shadow or highlight, or to add a decorative element to an image.



There are five different types of gradients in Photoshop:

- Linear Gradient: A linear gradient transitions between two colors in a straight line.
- Radial Gradient: A radial gradient transitions between two colors in a circular pattern.
- Angle Gradient: An angle gradient transitions between two colors in a diagonal line.
- Diamond Gradient: A diamond gradient transitions between two colors in a diamond-shaped pattern.
- Reflected Gradient: A reflected gradient transitions between two colors in a mirrored pattern.
- **Levels**

Levels is an adjustment layer in Adobe Photoshop that is used to adjust the overall brightness, contrast, and tonal range of an image. It is a powerful tool that can be used to improve the look of an image by making it brighter, darker, or more contrasty.

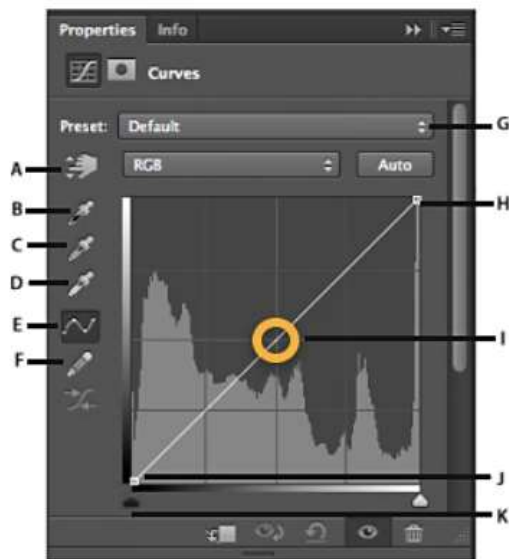


The Levels adjustment layer is based on a histogram, which is a graph that shows the distribution of tones in an image. The histogram is divided into three parts: the shadows, the midtones, and the highlights. The shadows are the darkest tones in

the image, the midtones are the tones in the middle of the range, and the highlights are the brightest tones in the image.

- **Curves**

Curves is an adjustment layer in Adobe Photoshop that allows you to precisely adjust the tonal range and color balance of an image. It is a more complex tool than Levels, but it also offers more control over the final outcome.



**A.** On-image adjustment tool

**B.** Sample in image to set black point.

**C.** Sample in image to set gray point.

**D.** Sample in image to set white point.

**E.** Edit points to modify the curve.

**F.** Draw to modify the curve.

**G.** Curves presets menu

**H.** Set black point.

**I.** Set gray point.

**J.** Set white point.

**K.** Show clipping.

The Curves adjustment layer is based on a graph, which shows the relationship between the input and output values of an image.

To adjust the curves of an image, you can drag the points on the graph. Dragging a point to the right will increase the brightness of the corresponding pixels in the image, and dragging a point to the left will decrease the brightness of the corresponding pixels. You can also add points to the graph to create more complex adjustments.

- **Auto tone**

Auto Tone is an adjustment layer in Adobe Photoshop that automatically adjusts the tonal range and color balance of an image to improve its overall appearance. It is a quick and easy way to make a basic adjustment to an image, and it can often produce good results. However, Auto Tone is not a substitute for manual adjustments, and it is important to use it in conjunction with other tools to achieve the best possible results.

Tips for using the Auto Tone adjustment layer:

- Use Auto Tone on high-contrast images. Auto Tone works best on images with high contrast, as this will give it more information to work with. If you try to use Auto Tone on a low-contrast image, the results may be disappointing.
- Use Auto Tone as a starting point for manual adjustments. Auto Tone can be a great way to get started with adjusting the tonal range and color balance of an image. Once you have applied Auto Tone, you can use other tools, such as Levels or Curves, to make further fine-tune adjustments.
- Don't be afraid to experiment with different settings. Auto Tone has a variety of settings that you can experiment with to achieve different effects. For example, you can try using the "Enhance Monochromatic Contrast" setting to convert an image to black and white, or you can use the "Target Color" setting to adjust the color balance of an image.



### **Practical Activity 1.4.3: Retouch and adjust a photo**



#### **Task:**

1: Referring to the previous theoretical activity (1.4.1) you are requested to go to the computer lab use adobe Photoshop installed in computer As a Designer you are asked to retouch and adjust the image below

Before                      After



by using the following tools: cloning tool, content aware tool, spot healing brush tool, healing brush tool, patch tool, dodge and burn tools, exposure compensation, color correction, Levels, Curves, auto tone. This task should be done individually.

2: Apply safety precautions.

3: Present out the steps to apply retouch and adjust a photo in adobe photoshop.

4: Referring to the steps provided on task 3, apply retouch and adjust a photo in adobe Photoshop.

5: Present your work to the trainer and whole class

6: read key reading 1.4.3 and ask clarification where necessary

7: Perform the task provided in application of learning 1.4.



### Key readings 1.4.3: Retouch and adjust a photo

#### ✓ Using the cloning tool

**Cloning tools:** it allows users to duplicate pixel from one part of image to another, blending the cloned pixels with the target area. This tool is particularly useful for removing unwanted objects, retouching imperfections, or duplication elements within the images.

How to use the cloning tool in Photoshop:

#### Step 1: Open Your Image

Launch Adobe Photoshop and open the image you want to work on. You can do this by going to "File" > "Open" and selecting your image file.

#### Step 2: Select the Clone Stamp Tool

In the toolbar on the left, you'll find the Clone Stamp Tool. It looks like a rubber stamp icon. Click on it to select the tool.

#### Step 3: Configure the Tool Settings

Before using the Clone Stamp Tool, adjust its settings in the options bar at the top of the screen:

- **Brush Size:** Set the brush size to match the area you want to clone. You can adjust this by clicking on the brush size dropdown and moving the slider.
- **Hardness:** You can set the hardness of the brush. A soft brush has a gradual edge, while a hard brush has a sharp edge. Adjust this based on the edges you want to blend.
- **Opacity:** The opacity determines how transparent or opaque your cloned strokes are. Lower opacity (e.g., 50%) creates more subtle blending.

- **Flow:** Flow controls how paint is applied with each stroke. Lower flow (e.g., 50%) lets you build up the effect gradually.

#### **Step 4: Choose the Clone Source**

To choose the area you want to clone from (the source), hold down the "Alt" key (Option key on Mac) and click on the part of the image you want to use as the source. This sets the reference point.

#### **Step 5: Clone an Area**

- Position your cursor over the area where you want to apply the cloned pixels. You'll see a preview of the clone source as a crosshair.
- Click and drag the cursor to paint with the cloned pixels from the source. As you drag, Photoshop will copy the pixels from the source to the target area.

#### **Step 6: Refine and Repeat**

- Release the mouse button as needed and reposition the clone source by holding "Alt" (Option on Mac) and clicking again on a new area.
- Continue to clone, refine, and repeat the process as necessary. You can use this tool to remove imperfections, duplicate objects, or blend textures.

#### **Step 7: Undo and Redo**

If you make a mistake, use "Ctrl+Z" (Cmd+Z on Mac) to undo your last action. To redo, press "Ctrl+Shift+Z" (Cmd+Shift+Z on Mac).

#### **Step 8: Save Your Work**

Once you are satisfied with your edits, make sure to save your image by going to "File" > "Save" or "Save As" to keep a copy of your edited file.

Remember that practice is key to mastering the Clone Stamp Tool. It may take some time to achieve the desired results, especially when working on complex or detailed edits.

#### **• Using the content aware tool**

Using the Content-Aware feature in Adobe Photoshop is a powerful tool for making precise selections and removing or moving objects in your images while maintaining a natural look.

#### **How to use the Content-Aware tool effectively:**

##### **1. Selection:**

- Open your image in Photoshop.
- Select the area you want to work on. You can use various selection tools like the Marquee, Lasso, or Magic Wand tool.

- For this guide, let's assume you want to remove an object from the image. Make a selection around the object you want to remove.

## **2. Content-Aware Fill:**

- With the selection made, go to "Edit" in the menu and choose "Content-Aware Fill." Alternatively, you can use the shortcut Shift+F5.

## **3. The Content-Aware Fill Workspace:**

- The Content-Aware Fill workspace will open, displaying your image with the selected area highlighted in blue.
- On the right side of the workspace, you'll find several options to customize the fill. These include the Sampling Area, Output Settings, and other settings.

## **4. Sampling Area:**

The Sampling Area is essential. It defines the area from which Photoshop will take content to fill the selected area. By default, it's set to "Auto," which automatically selects a sampling area based on the image's content. You can also use the Brush tool to manually define the sampling area by painting over the region.

## **5. Output Settings:**

- The Output Settings section allows you to specify how the filled area will be blended with the surrounding pixels.
- You can choose options like "New Layer" to create a new layer with the filled content or "Current Layer" to fill the selection on the existing layer.
- Experiment with the options to see which one works best for your specific task.

## **6. Refine and Preview:**

- Adjust the Sampling Area and Output Settings to fine-tune the result.
- Click the "Generate" button in the Content-Aware Fill workspace to see a preview of how the filled area will look.
- If you're satisfied with the preview, click "OK" to apply the Content-Aware Fill. If not, make further adjustments and generate again.

## **7. Post-Processing:**

- Once you apply the Content-Aware Fill, the selected area will be filled using content from the sampling area.
- You can further refine the result by using additional tools like the Clone Stamp Tool or the Spot Healing Brush to blend and correct any imperfections.

## **8. Saving the Result:**

- It's a good practice to work on a duplicate or separate layer when making significant changes to your image. This allows you to keep the original intact and make non-destructive edits.

- **Using the spot healing brush tool**

Is versatile tool used for quick image retouching and correction. It allows you to easy remove imperfections such as blemishes, scratches, and other small objects from Photos.

**How to use the spot healing brush tool in Photoshop:**

**Step 1: Open Your Image**

- Launch Adobe Photoshop and open the image you want to retouch. It's always a good idea to work on a duplicate layer to keep the original image intact. You can do this by right-clicking on the Background layer in the Layers panel and selecting "Duplicate Layer."

**Step 2: Select the Spot Healing Brush Tool**

- In the toolbar on the left, select the Spot Healing Brush Tool. It looks like a band-aid with a small brush icon.

**Step 3: Adjust the Brush Size**

- At the top of the screen, you can adjust the brush size using the brush size slider. Choose a brush size that's slightly larger than the blemish you want to remove.

**Step 4: Choose "Content-Aware" in the Options Bar**

- In the Options Bar at the top, make sure you have "Content-Aware" selected as the brush mode. This allows Photoshop to automatically sample and fill in the area around the blemish.

**Step 5: Sample a Clean Area**

- Hover your cursor over the blemish you want to remove. Photoshop will automatically show a preview of the area it's sampling. Click once to sample the clean area.

**Step 6: Brush Over the Blemish**

- With the clean area selected, click and drag your brush over the blemish. Photoshop will use the sampled area to replace the blemish.

**Step 7: Release the Mouse Button**

- Once you've brushed over the blemish, release the mouse button. Photoshop will analyze the surrounding area and automatically blend the sampled pixels for a seamless result.

#### **Step 8: Repeat for Other Blemishes**

- Continue this process for any other blemishes or imperfections in your image. Adjust the brush size as needed to match the size of the imperfections.

#### **Step 9: Zoom In and Inspect**

- After using the Spot Healing Brush Tool, it's a good practice to zoom in and inspect your work. Make sure the retouched areas look natural and haven't introduced any new issues.

#### **Step 10: Save Your Work**

- Once you're satisfied with the results, save your retouched image. You can save it as a new file or overwrite the original if you're confident in your edits.

- **Using the healing brush tool**

#### **Step 1: Open Your Image**

- Open Adobe Photoshop and load the image you want to work on. Make sure you select the layer that you want to retouch or create a new layer for non-destructive editing.

#### **Step 2: Select the Healing Brush Tool**

- In the Photoshop toolbar, locate the Healing Brush Tool. It looks like a bandage or patch icon. You can also access it by pressing "J" on your keyboard.

#### **Step 3: Adjust Tool Settings**

Before using the tool, adjust the settings to suit your retouching needs. In the options bar at the top of the screen, you'll find the following settings:

- **Brush Size:** Use the bracket keys "[" and "]" to increase or decrease the brush size.
- **Hardness:** For soft-edged retouching, set the hardness to a low percentage. Higher percentages give you a harder edge.
- **Sample:** Choose "Sample All Layers" if you want to sample from all visible layers, or select a specific layer to sample from.
- **Aligned:** Keep this option checked to maintain a consistent distance between the sample point and the brush.

#### **Step 4: Sample a Clean Area**

- To use the Healing Brush Tool, hold down the "Alt" key (Option key on Mac) and click on a clean and similar area near the imperfection you want to remove. This area will serve as the source or sample point for the correction.

#### **Step 5: Apply the Healing Brush**

- Position the cursor over the imperfection or blemish you want to retouch.
- Click and brush over the blemish, scar, or unwanted element. The Healing Brush Tool will use the sampled area to blend and replace the imperfection seamlessly.

#### **Step 6: Refine and Repeat**

- Continue sampling and retouching, working on one imperfection at a time.
- Adjust the brush size and hardness as needed for different areas of the image.
- If the result isn't perfect, you can undo (Ctrl+Z / Cmd+Z) and repeat the process with a different sample point.

#### **Step 7: Save Your Work**

- Once you're satisfied with the retouching, save your image. It's a good practice to save your edited image with a different file name to preserve the original.

#### **Tips for Effective Healing Brush Tool Usage:**

- Use a small brush size for precise retouching and a larger size for broader areas.
- Sample from areas close to the imperfection to maintain a natural look.
- Be mindful of texture, lighting, and color when choosing the sample point.
- Zoom in for detailed work, and periodically zoom out to check your progress.
- Work non-destructively by creating a new layer for retouching, allowing you to make adjustments later if needed.

With practice and attention to detail, the Healing Brush Tool can help you achieve professional-level retouching and photo enhancement in Photoshop, creating polished and flawless images.

#### **● Using the patch tool**

The Patch Tool in Adobe Photoshop is a powerful tool for retouching and repairing images by seamlessly blending areas together.

The use of Patch Tool effectively:

#### **Step 1: Select the Patch Tool**

- Open your image in Photoshop.
- In the Toolbar on the left side of the screen, locate the Patch Tool. It looks like a patch or a band-aid icon. Click on it to select the tool.

### **Step 2: Select the Area to Patch**

- With the Patch Tool selected, click and drag to create a selection around the area you want to fix. This selection defines the portion of the image you want to patch.

### **Step 3: Choose the Destination Area**

- After making the selection, move it to a clean area in your image that you want to use as the source to patch the selected area. The source area should closely match the texture and colour of the area you want to fix.

### **Step 4: Apply the Patch**

- Release the mouse button, and Photoshop will blend the selected area with the source area. You'll see the selection area gradually change to match the source.

### **Step 5: Fine-Tune the Result**

- If the patch doesn't look perfect, you can further refine it. The Patch Tool allows you to adjust the blending mode and opacity in the options bar at the top of the screen. Experiment with different settings to achieve the desired result.

### **Step 6: Deselect the Patch**

- To finish the patching process, deselect the selection. You can do this by going to "Select" in the menu and choosing "Deselect" or by using the keyboard shortcut Ctrl+D (Cmd+D on Mac).

### **Tips for Effective Patch Tool Usage:**

- Make sure to choose a source area that matches the texture and color of the area you're patching.
- Use a feathered selection for smoother transitions between the patched area and the source.
- For more complex patches, consider using a separate layer or a duplicate of the image, so you can work non-destructively.
- You can also use the Patch Tool to remove objects from images by selecting the object and dragging it to a source area that closely matches the background.

### **• Using the dodge and burn tools**

The Dodge and Burn tools in Adobe Photoshop are powerful for enhancing the light and shadows in your images.

### **The use of Dodge and burn tools:**

#### **1. Understanding the Dodge and Burn Tools:**

The Dodge Tool is used to lighten specific areas of an image, while the Burn Tool darkens them. These tools are primarily used for enhancing contrast and adding depth to your photos.

## **2. Accessing the Tools:**

Both tools are located in the same group on the Photoshop toolbar. Click and hold the tool in the toolbar to access a dropdown menu where you can choose between Dodge and Burn.

## **3. Tool Options:**

- Before you start, customise your tool settings. The options you can adjust include:
- Brush Size: Choose the appropriate brush size for the area you're working on.
- Range: Select the tonal range you want to affect. The options are Shadows, Midtones, and Highlights.
- Exposure: Control the strength of the effect. Lower values create a subtle effect, while higher values produce more significant changes.

## **4. Using the Dodge Tool:**

- To brighten specific areas of an image with the Dodge Tool, follow these steps:
- Select the Dodge Tool from the toolbar.
- Choose the appropriate Range (Shadows, Midtones, or Highlights) depending on the areas you want to lighten.
- Adjust the Exposure according to your needs.
- Brush over the area you want to lighten. You can use a soft-edged brush for smoother transitions or a hard-edged brush for more defined changes.
- Be subtle in your adjustments, and build up the effect gradually. You can make multiple passes to achieve the desired result.

## **5. Using the Burn Tool:**

- To darken specific areas of an image with the Burn Tool, follow these steps:
- Select the Burn Tool from the toolbar.
- Choose the appropriate Range (Shadows, Midtones, or Highlights) based on the areas you want to darken.
- Adjust the Exposure to control the strength of the effect.
- Brush over the area you want to darken. Again, use a soft-edged or hard-edged brush as needed.
- Apply the effect carefully, and build up the changes gradually.

## **6. Creating Depth and Dimension:**

- Dodge and Burn tools can be used to create depth in portraits by enhancing highlights and shadows. For example, you can make the eyes appear brighter and the cheekbones more defined.

### **7. Correcting Exposure Issues:**

Use the tools to correct exposure problems in your photos. For instance, you can brighten underexposed areas with the Dodge Tool or darken overexposed regions with the Burn Tool.

### **8. Non-Destructive Editing:**

It's a good practice to use these tools on separate adjustment layers. This allows you to make changes non-destructively and refine the effects later if needed.

### **9. Blend Mode and Opacity:**

You can change the blending mode and adjust the opacity of the Dodge and Burn layers to fine-tune the impact of the tools on your image.

### **10. Practice and Patience:**

Using Dodge and Burn effectively requires practice and a keen eye for detail. Be patient and experiment to get the best results.

### **Applying exposure compensation**

Applying exposure compensation in Adobe Photoshop allows you to adjust the brightness and contrast of your images. Here's a detailed guide on how to do this:

#### **1. Open Your Image:**

Start by opening the image you want to adjust in Adobe Photoshop.

#### **2. Duplicate the Background Layer:**

- Before making exposure adjustments, it's a good practice to duplicate the background layer. This allows you to work non-destructively, preserving the original image.
- In the Layers panel, right-click on the Background layer and select "Duplicate Layer." Name the duplicate layer if you prefer, then click "OK."

#### **3. Choose the Adjustment Layer:**

- To apply exposure compensation, go to the "Layer" menu and select "New Adjustment Layer." Choose "Exposure" from the list of adjustment layers.

#### **4. Adjust Exposure Settings:**

After creating the Exposure adjustment layer, the "Properties" panel for the adjustment will open. You'll see the following settings:

- **Offset:** This slider controls the overall brightness of the image. Moving it to the right makes the image brighter, and moving it to the left darkens it.
- **Gamma Correction:** This slider adjusts the mid-tones, allowing you to control the contrast of the image. Moving it to the right increases contrast, and moving it to the left decreases contrast.
- **Exposure:** This slider lets you fine-tune the brightness of the image. Positive values make the image brighter, while negative values make it darker.

#### **5. Fine-Tune the Settings:**

- To make your exposure adjustments, move the sliders as needed. Be careful not to overdo it, as extreme adjustments can lead to loss of detail and unnatural results.

#### **6. Masking and Brushing:**

- If you want to apply exposure compensation selectively to certain parts of your image, you can use a layer mask. Here's how:
  - Click on the mask icon in the Exposure adjustment layer.
  - Use the Brush tool to paint over the areas where you want to apply or remove the exposure adjustment. Painting with black conceals the effect, while painting with white reveals it.

#### **7. Preview Your Changes:**

- To see a before-and-after comparison of your exposure adjustments, you can click the eye icon next to the Exposure adjustment layer in the Layers panel to toggle the visibility on and off.

#### **8. Save Your Changes:**

- Once you're satisfied with your exposure compensation, save your image with the adjustments. You can do this by going to "File" > "Save" or "File" > "Save As" to create a new file.

#### **9. Non-Destructive Editing:**

- The benefit of using adjustment layers is that they allow non-destructive editing. You can always go back and readjust the exposure settings or even delete the adjustment layer if you change your mind.

#### **Applying colour correction**

Color correction in Adobe Photoshop is a crucial aspect of image editing that allows you to adjust the colors, brightness, and contrast of your photos.

The application of color correction with instructions for various adjustments:

### **1. Adjusting Brightness and Contrast:**

- Go to "Image" > "Adjustments" > "Brightness/Contrast."
- Use the sliders to adjust the brightness and contrast of your image. Increase brightness to make the image lighter and contrast to enhance the difference between light and dark areas.

### **2. Tweaking Hue and Saturation:**

- Navigate to "Image" > "Adjustments" > "Hue/Saturation."
- Use the Hue slider to shift the overall color balance. The Saturation slider adjusts the intensity of the colors. Lightening the Saturation makes colors more muted, while darkening makes them more vibrant.

### **3. Balancing Colors:**

- To correct color balance, go to "Image" > "Adjustments" > "Color Balance."
- Adjust the sliders for Shadows, Midtones, and Highlights to fine-tune the overall color balance of your image.

### **4. Enhancing Vibrance:**

- Access "Image" > "Adjustments" > "Vibrance."
- The Vibrance slider increases the intensity of less saturated colors without oversaturating already vibrant ones. It's a great tool for making colors pop.

### **5. Converting to Black and White:**

- To create a black and white version of your image, choose "Image" > "Adjustments" > "Black & White."
- Use the sliders for various color channels to control the grayscale conversion. Adjusting them allows you to emphasize or de-emphasize certain colors in your black and white image.

### **6. Applying a Photo Filter:**

- Select "Image" > "Adjustments" > "Photo Filter."
- Choose from various preset filters or create a custom one. Photo filters can add warmth or coolness to your images, simulating the effect of using a physical color filter on your camera lens.

### **7. Adding Patterns or Textures:**

To apply a pattern or texture to your image, use a Pattern Fill layer:

- Create a new layer by clicking the "New Layer" icon in the Layers panel.

- Go to "Edit" > "Fill" and choose "Pattern" from the "Use" dropdown.
- Pick a pattern from the Pattern Picker. Adjust the scale as needed and click "OK."

### **8. Applying Color Palettes:**

- To apply a specific color palette to your image, you can use Color Lookup Tables (LUTs) or Color Grading.
- Select "Image" > "Adjustments" > "Color Lookup."
- Choose a preset LUT or create your custom color grading adjustments.

### **9. Using Gradients:**

- To add a gradient overlay to your image:
- Create a new layer and select the Gradient Tool.
- In the Options bar, choose the gradient type, style, and colors.
- Click and drag on your image to apply the gradient.

### **Applying Levels**

Applying Levels adjustments in Adobe Photoshop is a powerful way to adjust the tonal range and enhance the overall contrast and brightness of your images.

The guide of using the Levels adjustment:

#### **1. Open Your Image:**

- Start by opening the image you want to adjust in Adobe Photoshop.

#### **2. Create a Levels Adjustment Layer:**

- To apply Levels adjustments, go to the "Layer" menu and select "New Adjustment Layer." Choose "Levels" from the list of adjustment layers.

#### **3. Understand the Levels Adjustment Panel:**

The Levels adjustment panel will appear, and it consists of three main components:

- **Input Levels Sliders:** These sliders represent the black, gray, and white points in your image. The left slider controls the shadows (blacks), the middle slider adjusts the mid-tones (grays), and the right slider modifies the highlights (whites).
- **Output Levels Sliders:** These sliders determine what parts of your image become pure black and pure white. The left slider sets the black point, and the right slider sets the white point.
- **Histogram:** The histogram is a graph that displays the distribution of tones in your image. It can help you visualize the distribution of shadows, mid-tones, and highlights.

#### **4. Adjust the Input Levels:**

- Begin by adjusting the Input Levels sliders to fine-tune the tonal range of your image:
- Drag the black point slider to the right to set the darkest point in your image.
- Move the white point slider to the left to define the lightest point.
- Adjust the gray point slider to control the mid-tones.

#### **5. Set the Output Levels:**

- You can further enhance contrast by adjusting the Output Levels sliders:
- Move the left output slider to determine what should be pure black.
- Adjust the right output slider to set what should be pure white.

#### **6. Review the Histogram:**

- Keep an eye on the histogram as you make adjustments. It should span the entire tonal range without excessive gaps at either end. If the histogram is bunched up on one side, it indicates an imbalance in the image's tonal distribution.

#### **7. Preset Options:**

- The Levels adjustment layer also offers preset options for common adjustments, like Auto Levels, Auto Contrast, and more. These can be a good starting point for quick adjustments.

#### **8. Non-Destructive Editing:**

- One of the benefits of using adjustment layers like Levels is that they allow non-destructive editing. You can always go back and readjust the Levels settings or delete the adjustment layer if you change your mind.

#### **9. Save Your Changes:**

- Once you're satisfied with your Levels adjustments, save your image with the changes. You can do this by going to "File" > "Save" or "File" > "Save As" to create a new file.

Applying Levels adjustments in Photoshop gives you the ability to fine-tune the tonal range and contrast of your images, making them more visually appealing. Experiment with the settings and practice to achieve the desired look for your photos.

#### **• Applying Curves**

Using the Curves adjustment in Adobe Photoshop is a powerful way to control the tonal range and contrast in your images.

The detailed guide on how to apply Curves adjustments:

#### **1. Open Your Image:**

- Start by opening the image you want to adjust in Adobe Photoshop.

## **2. Create a Curves Adjustment Layer:**

- To apply Curves, go to the "Layer" menu and select "New Adjustment Layer." Choose "Curves" from the list of adjustment layers.

## **3. The Curves Dialog:**

- The Curves dialog will appear, showing a graph with a diagonal line. The bottom-left point represents shadows, and the top-right point represents highlights. You can adjust the curve to modify the image's contrast and tonal balance.

## **4. Adjust the Curve:**

- To adjust the curve, click on the line to create anchor points. The more anchor points you create, the more control you'll have over the curve.
- To lighten the image, click and drag the curve upward in the highlights area. To darken the image, click and drag the curve downward in the shadows area.

## **5. Fine-Tune with Anchor Points:**

- You can add anchor points to make precise adjustments. To add an anchor point, simply click on the curve. Drag an anchor point to change the tonal values for that specific area.

## **6. Create an S-Curve for Contrast:**

- One common adjustment is to create an S-curve for added contrast. To do this, add an anchor point in the shadows and another in the highlights. Then, lift the shadows slightly and drop the highlights slightly, forming an S-shape.

## **7. Adjust Individual Channels:**

- In the Curves dialog, you can switch between the RGB channel and the individual color channels (Red, Green, and Blue) to make color-specific adjustments. This is useful for correcting color casts or enhancing specific color ranges.

## **8. Using the Eyedropper Tool:**

- To set white and black points accurately, use the Eyedropper tool in the Curves dialog. Click the white Eyedropper and then click on the lightest point in your image. Do the same with the black Eyedropper for the darkest point.

## **9. Clipping Warning:**

- At the bottom of the Curves dialog, there is a checkbox for "Show Clipping." Enabling this will display warning colors where the image is overexposed (red) or

underexposed (blue). This can help you avoid losing detail in the highlights and shadows.

#### **10. Preview and Compare:**

- To see a before-and-after comparison, you can click the eye icon next to the Curves adjustment layer in the Layers panel to toggle the visibility on and off.

#### **11. Masking and Fine-Tuning:**

- If you want to apply the Curves adjustment selectively to certain areas, you can use a layer mask with the Curves adjustment layer. Paint on the mask with black to hide the effect and white to reveal it.

#### **12. Save Your Changes:**

- Once you're satisfied with your Curves adjustments, save your image. You can do this by going to "File" > "Save" or "File" > "Save As."

#### **Applying Auto tone**

Applying Auto Tone in Adobe Photoshop is a quick and convenient way to automatically adjust the brightness, contrast, and color balance of an image.

#### **The use of Auto Tone feature:**

##### **1. Open Your Image:**

- Start by opening the image you want to adjust in Adobe Photoshop.

##### **2. Access the Auto Tone Command:**

- To apply Auto Tone, go to the "Image" menu at the top of the screen.

##### **3. Select "Auto Tone":**

- In the "Image" menu, hover over "Adjustments" to reveal a submenu. Choose "Auto Tone" from this submenu.

##### **4. Observe the Adjustments:**

- Photoshop will automatically analyze your image and make adjustments to improve its overall tonal balance, brightness, and contrast.

##### **5. Fine-Tune If Necessary:**

- After applying Auto Tone, evaluate the changes it made to your image. While Auto Tone often produces good results, you may still need to fine-tune the adjustments further to achieve your desired look.

##### **6. Additional Adjustments:**

- To make additional adjustments, you can use other adjustment tools and layers in Photoshop. For example, you can use the "Levels" or "Curves" adjustment layers to manually control the tonal balance. You can also use the "Hue/Saturation" or "Color Balance" adjustments to modify color tones.

#### **7. Save Your Adjustments:**

- Once you're satisfied with the adjustments made using Auto Tone and any additional manual changes, save your image with the applied adjustments. You can do this by going to "File" > "Save" or "File" > "Save As" to create a new file.

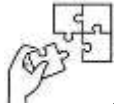
#### **8. Non-Destructive Editing:**

- It's a good practice to work with adjustment layers or duplicate your image before applying Auto Tone to maintain non-destructive editing. This way, you can always go back to the original image or make further adjustments.



#### **Points to Remember**

- Color correction in Photoshop involves various methods and techniques to adjust and enhance the colors in an image to achieve a desired look or correct color issues.
- There are some common methods used in color correction like: adjustment layers, Color Balance adjustment layer, Hue/Saturation adjustment layer, Curves adjustment layer, Eyedropper.
- **To use the cloning tool:** Open your image>Select the clone stamp tool>Configure the tool settings>Choose the clone source>Clone an area>refine and repeat.
- **To use content aware tool:** Open your image>Select the layer you want>Go to edit menu>Choose content-aware fill>Sample the area>Adjust the output settings>Refine and preview.
- **To use spot healing brush tool:** Open Your Image> Select the Spot Healing Brush Tool>Adjust the Brush Size>Choose "Content-Aware" in the Options Bar>Sample a Clean Area>Brush over the Blemish> Repeat for Other Blemishes>Save Your Work.



#### **Application of learning 1.4.**

You've captured a beautiful sunset portrait, but the harsh light has created unwanted shadows and blemishes. Additionally, you have a treasured vacation photo with a distracting element that needs to be removed. Your task is to remove those shadows and imperfections to prepare the photos for posting.

Original Image

After





## Indicative content 1.5: Apply Typography



Duration: 4 hrs



### Theoretical Activity 1.5.1: Description typography



#### Tasks:

- 1: You are requested to answer the following questions related to the typograph:
  - i. What do you understand in typography?
  - ii. What are the five main types of typefaces?
- 2: Participate in group formulation.
- 3: Present the finding/answers to the whole class
- 4: For more clarification, read the key reading 1.5.1. In addition, ask questions where necessary.



### Key readings 1.5.1: Description typography

- **Typography**

**Typography** is the art of arranging type to make written language more legible, readable, and aesthetically appealing. It involves various elements that designers consider to create effective and aesthetically pleasing text. Here are the key elements of typography:

- ❖ **Typeface (Font):** A typeface is a specific design of type, which includes variations such as bold, italic, and regular. Fonts define the overall style of the characters, including their shape, weight, and style.

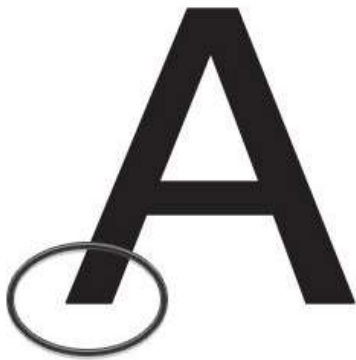
**There are five main types of typefaces:**

- a. serif,
  - b. sans-serif,
  - c. script,
  - d. monospaced,
  - e. display.
- **Serif typefaces** have small decorative features at the ends of their strokes. These features are called serifs, and they are thought to help improve readability. Serif typefaces are often used for body text and headings in printed materials.

**Examples** of serif typefaces include Times New Roman, Georgia, and Garamond.



- **Sans-serif typefaces** do not have serifs. They are often used for body text and headings in digital media, as well as for signage and other large-format applications. Examples of sans-serif typefaces include Arial, Helvetica, and Futura.



**Helvetica**  
sans serif font

- **Script typefaces** resemble handwriting or calligraphy. They are often used for decorative purposes, such as in logos and invitations. Examples of script typefaces include Lucida Calligraphy, Italics, and Monotype Corsiva.



**Image source:** Google.com

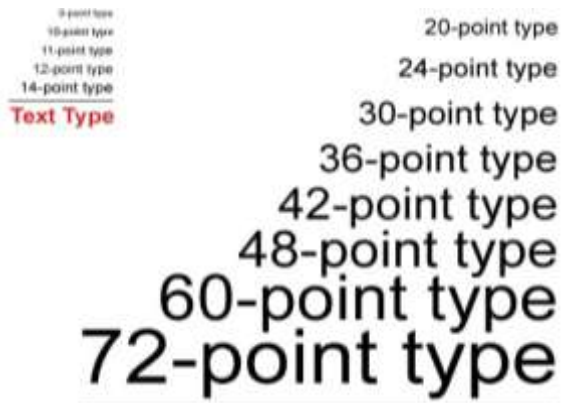
- **Monospaced typefaces** have all characters the same width. This makes them ideal for displaying code and other types of text where precise alignment is important. Examples of monospaced typefaces include Courier New, Monaco, and Consolas.

## Monospaced

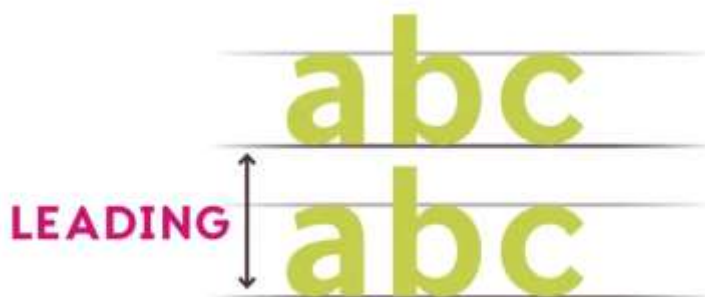
- **Display typefaces** are designed for large-scale applications, such as headlines and posters. They are often bold and decorative, and they may have unusual shapes or features. Examples of display typefaces include Impact, Trajan, and Comic Sans.

## Display

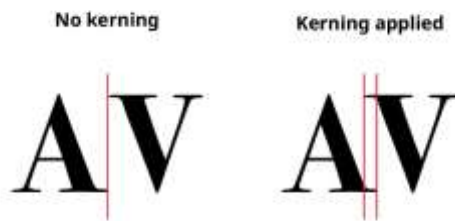
- **Font Size:** Font size refers to the height of characters in points (pt). Larger font sizes are used for headings and titles, while smaller sizes are used for body text.



- **Leading:** Leading is the vertical space between lines of text. Proper leading ensures readability and prevents lines from being too cramped or too



- **Kerning:** Kerning is the adjustment of space between individual letter pairs. It ensures even spacing between characters, improving overall readability and visual appeal.



- **Tracking (Letter-spacing):** Tracking refers to the uniform space between characters in a block of text. It is applied consistently across an entire range of characters.



- **Line Length (Measure):** Line length is the width of a block of text. Optimal line length is around 50-75 characters per line for readability. Extremely long or short lines can affect readability negatively.
- **Line height:** is the vertical distance between two lines of text. It is measured from the baseline of one line of text to the baseline of the next line. The baseline is the imaginary line where all the letters rest.  
Line height is an important typographic element because it affects the readability and aesthetics of text. A good line height will make the text easier to read and less tiring on the eyes. It will also create a sense of balance and harmony in the overall design.

#### **Factors to consider when choosing a line height:**

- **Font size:** The line height should be proportional to the font size. A larger font size will need a larger line height in order to maintain a comfortable reading experience.
- **Font type:** Some font types, such as serif fonts, are more readable with a larger line height. Other font types, such as sans-serif fonts, can be read with a smaller line height.
- **Leading:** Leading is the traditional term for line height. It is named after the thin strips of lead that were used to increase the vertical space between lines of type in metal typesetting. Leading is measured in points, which is the same unit of measurement as font size.

- **Purpose of the text:** The purpose of the text will also affect the choice of line height. For example, body text should have a larger line height than headings.

#### **General guidelines for choosing a line height:**

- For body text, a line height of 120-145% of the font size is generally recommended.
- For headings, a line height of 110-120% of the font size is generally recommended.
- For captions, a line height of 105-110% of the font size is generally recommended.
- ❖ **Alignment:** Alignment determines how text is positioned within a text box or column. Common alignments include left-aligned, right-aligned, centered, and justified.
- ❖ **Hierarchy:** Hierarchy refers to the visual arrangement of different elements in a design to indicate their importance. In typography, hierarchy is established using various font sizes, weights, and styles to distinguish headings, subheadings, and body text.
- ❖ **Color:** Can be used in typography to emphasize specific words or phrases. It's important to ensure there is enough contrast between the text color and the background for readability.
- ❖ **Type Contrast:** Type contrast refers to the variation in font styles within a design. Combining serif and sans-serif fonts, or mixing different weights and styles within the same font family, can create contrast and visual interest.
- ❖ **Legibility vs. Readability:** Legibility refers to the ease with which individual characters can be distinguished, while readability is the ease with which words, phrases, and blocks of text can be read. Both are crucial for effective typography.
- ❖ **Whitespace (Negative Space):** Whitespace is the empty space around text elements. It provides visual breathing room, improves readability, and enhances overall aesthetics.

#### **The importance of typography**

- Typography is important because it can have a significant impact on the readability, comprehension, and emotional impact of written language. A well-chosen typeface and font size can make text easier to read and understand, while a poorly chosen typeface and font size can make text difficult and frustrating to read.
- Typography can also be used to evoke certain emotions in the reader. For example, a bold, sans-serif typeface can be used to convey a sense of excitement or energy, while a delicate, serif typeface can be used to convey a sense of elegance or sophistication.

#### **How to choose the right typeface and font size**

When choosing a typeface and font size, it is important to consider the following factors:

- **The purpose of the text:** What is the text being used for? Is it for a formal document, a website, or a marketing brochure?
- **The audience:** Who is the intended audience for the text? What are their preferences and expectations?
- **The medium:** Where will the text be displayed? Will it be printed on paper, displayed on a screen, or both?

- **Combining types**

**Combining types** is the practice of using two or more different typefaces in a single design. This can be done to create visual interest, contrast, and hierarchy.

**Tips for combining types effectively:**

**Choose typefaces that are complementary:** Avoid pairing fonts that are too similar or too different.

Consider the purpose of the text and the audience. Choose fonts that are appropriate for the tone of the text and that will be easy for the intended audience to read.

**Use contrast to create emphasis and hierarchy:** Pair different typefaces with different weights, styles, and sizes to create contrast and make it easier for the reader to scan the text.

**Use white space to separate blocks of text:** This will make the text easier to read and less overwhelming.

**Experiment with different combinations until you find one that you like:** There are no hard and fast rules when it comes to combining types, so don't be afraid to experiment.

- **Using sizes and measurements of types**

**Using sizes and measurements of types** is the practice of choosing the right font sizes and other typographic measurements to create a visually appealing and readable design.

**There are a number of different factors to consider when choosing font sizes, including:**

**The purpose of the text:** Is the text for a headline, body text, or caption? Headlines should be larger than body text, and captions should be smaller than body text.

**The audience:** Who is the intended audience for the text? Elderly readers may need larger font sizes.

**The medium:** Where will the text be displayed? Text on a computer screen should be larger than text on a mobile phone screen.

In addition to font size, there are a number of other typographic measurements that can be used to create a more visually appealing and readable design. These measurements include: **Kerning, Tracking, Leading, Alignment**

By choosing the right font sizes and other typographic measurements, you can create a design that is both visually appealing and easy to read.



### **Practical Activity 1.5.2: Use typography**



#### **Task:**

- 1: referring to the previous theoretical activities (1.5.1) you are requested to go to the computer lab use adobe Photoshop installed in computer to use font and typefaces, Size and measurement of types and combine typefaces. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to apply typography.
- 4: Referring to the steps provided on task 3, apply typography.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 1.5.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 1.5.



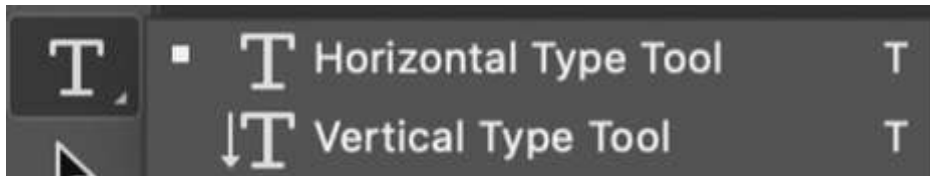
### **Key readings 1.5.2: Use typography**

- **To use typography, start by creating texts by:**
  - Step 1: Select the Type Tool.
  - Step 2: Click on the canvas where you want to add text.
  - Step 3: Type your text.
  - Step 4: Change the font and font size using the Character panel.
  - Step 5: Move and resize the text using the Move Tool and the Free Transform Tool.
- **Use fonts and typefaces**

To use fonts and typefaces in Photoshop, you will first need to install the fonts on your computer. Once you have installed the fonts, you can open them in Photoshop by going to Type > Font Browser.

Type texts Adobe Photoshop, follow these steps:

**Step 1:** Select the Type Tool. The Type Tool is located in the Tools panel on the left side of the screen. It looks like a capital "T." Select the Horizontal Text Tool or the Vertical Text Tool



**Step 2:** Click on the canvas where you want to add text. This will create a text box.

**Step 3:** Type your text. You can use the keyboard shortcuts Ctrl + Enter (Windows) or Command + Return (Mac) to create a new line of text.

**Step 4:** To change the font of your text, click on the Font Family dropdown menu in the Character panel and select the font that you want to use. To change the font size, click on the Font Size dropdown menu and select the size that you want to use.





**Step 5:** Move and resize your text. Once you are finished typing and formatting your text, you can use the Move Tool and the Free Transform Tool to move and resize your text box.

#### **Additional tips for using the Type Tool in Photoshop:**

- To create a block of text, click and drag on the canvas to create a text box. Then, type your text into the text box.

- To create a paragraph of text, click and drag on the canvas to create a text box. Then, press Enter to create a new line of text. Continue typing and pressing Enter until you are finished with your paragraph.

- To wrap your text, select the text layer in the Layers panel. Then, go to Type > Warp Text. Choose a warp style from the list and then click OK.

**To add a drop shadow to your text,** select the text layer in the Layers panel. Then, go to Layer Style > Drop Shadow. Adjust the drop shadow settings and then click OK.

To add a bevel and emboss effect to your text, select the text layer in the Layers panel. Then, go to Layer Style > Bevel and Emboss. Adjust the bevel and emboss settings and then click OK.

- **Combining typefaces**

There are many different ways to combine types.

**Some common strategies include:**

- **Pairing serif and sans-serif typefaces:** This is a classic and versatile combination that can be used for a variety of purposes.
- **Pairing typefaces from the same family:** This can create a sense of unity and consistency in your design.
- **Pairing typefaces with different weights and styles:** This can be used to create emphasis and contrast.
- **Pairing typefaces with different sizes:** This can be used to create hierarchy and make it easier for the reader to scan the text.

**Examples of effective type combinations:**

**Headline:** Futura Bold

**Body text:** Georgia Regular

**Headline:** Bodoni MT Bold

**Body text:** Garamond Regular

**Headline:** Montserrat Bold

**Body text:** Open Sans Regular

**Headline:** Playfair Display Bold

**Body text:** Merriweather Regular

**combining typefaces effectively:**

- **Pair serif and sans-serif typefaces:** This is a classic and versatile combination that can be used for a variety of purposes. For example, you could use a serif typeface for headings and a sans-serif typeface for body text.
- **Pair typefaces from the same family:** This can create a sense of unity and consistency in your design. For example, you could use a regular, bold, and italic version of the same typeface.
- **Pair typefaces with different weights and styles:** This can be used to create emphasis and contrast. For example, you could use a bold typeface for a headline and a regular typeface for body text.
- **Pair typefaces with different sizes:** This can be used to create hierarchy and make it easier for the reader to scan the text. For example, you could use a larger font size for headings and a smaller font size for body text.
- **Using Size and measurements of types**  
To use sizes and measurements of types effectively, it is important to consider the purpose of the text, the audience, and the medium.

#### Using sizes and measurements of types effectively:

- **Choose font sizes based on the purpose of the text:** For example, headlines should be larger than body text, and captions should be smaller than body text.
- **Choose font sizes based on the audience:** Elderly readers may need larger font sizes.
- **Choose font sizes based on the medium:** Text on a computer screen should be larger than text on a mobile phone screen.
- **Use a hierarchy of font sizes:** This will make the text easier to scan and read. For example, you could use a larger font size for headings and a smaller font size for body text.
- **Use leading to control the spacing between lines of text:** This can improve the readability of the text.
- **Use kerning to control the spacing between individual characters:** This can improve the overall appearance of the text.
- **Use tracking to control the spacing between all of the characters in a block of text:** This can be useful for creating special effects, such as condensed or expanded text.

#### Example of how to use sizes and measurements of types effectively:

-Headline: 30px, bold, sans-serif

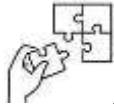
-Body text: 16px, regular, sans-serif

-Caption: 12px, italic, sans-serif



#### Points to Remember

- In typography, there are five main categories of typefaces, each with its unique characteristics and styles. The main types of typefaces like: serif, sans-serif, script, monospaced, and display.
- **To use typography, start by creating texts by**
  - Step 1: Select the Type Tool.
  - Step 2: Click on the canvas where you want to add text.
  - Step 3: Type your text.
  - Step 4: Change the font and font size using the Character panel.
  - Step 5: Move and resize the text using the Move Tool and the Free Transform Tool.



### **Application of learning 1.5.**

You've created a stunning image in Photoshop, but it feels incomplete without the perfect text overlay. Maybe it's a motivational quote for a social media post, a playful caption for a personal project. Now you are requested to add captions to the image so that it can be more interesting.

Original



After





## Indicative content 1.6: Transform Photo



Duration: 3 hrs



### Theoretical Activity 1.6.1: Description of photo transformation



#### Tasks:

- 1: You are requested to answer the following questions related to the photo transformation:
  - a) Define photo transforming.
  - b) Provide an explanation of photo transformation tools.
- 2: Participate in group formulation.
- 3: present the findings/answers to the whole class
- 4: For more clarification, read the key readings 1.6.1. In addition, ask questions where necessary.



### Key readings 1.6.1: Description of photo transformation

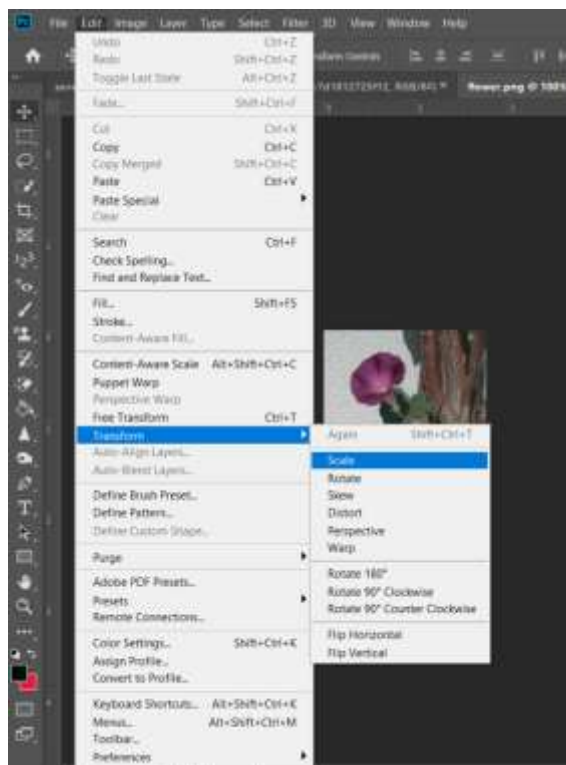
**Transforming a photo** in Adobe Photoshop refers to altering the image's appearance by manipulating its size, shape, orientation, or perspective. This can be done for various purposes, such as correcting image distortions, enhancing visual appeal, or creating artistic effects.

The common transformations you can perform on a photo in Adobe Photoshop:

1. **Resizing:** Resizing involves changing the overall dimensions of the image, making it larger or smaller. This can be useful for adjusting the image to fit a specific size requirement or for preparing it for online sharing or printing.
2. **Cropping:** Cropping involves removing unwanted portions of the image, focusing on a specific area of interest. This can be used to eliminate distracting elements, improve composition, or emphasize particular details.
3. **Rotating:** Rotating involves turning the image around its center, changing its orientation. This can be used to correct image tilt, align the image with a specific perspective, or create a sense of movement or dynamism.

4. **Flipping:** Flipping involves mirroring the image horizontally or vertically, reversing its left-right or up-down orientation. This can be used to create a sense of reflection, add variety to a composition, or produce special effects.
5. **Warping:** Warping involves distorting the shape of the image, bending or stretching it in a non-uniform manner. This can be used to create creative effects, such as adding curves or waves, or to correct lens distortions.

**The tools used and their functions:**



- ❖ **Scale Tool:** This tool is used to resize the selected area of an image by scaling it proportionally up or down. It can also be used to skew the selection horizontally or vertically.
- ❖ **Distort tool** in Adobe Photoshop is a powerful tool for transforming photos in a variety of ways. It can be used to create a wide range of effects, from subtle distortions to dramatic alterations. The tool is especially useful for correcting perspective distortions and creating artistic effects.
- ❖ **Skew tool** in Adobe Photoshop is used to slant or distort an image horizontally or vertically. It is a non-destructive tool, meaning that it does not permanently alter

the original image. The Skew tool can be used to correct perspective distortions, create artistic effects, or simply to add a little extra personality to an image.

- ❖ **Perspective Transform Tool:** This tool is used to correct perspective distortions in images, such as those caused by tilting the camera. It allows you to adjust the perspective of the image to make it appear as if it was shot from a different angle.
- ❖ **Warp Tool:** This tool is used to apply non-uniform distortions to the selected area, such as bending, curving, or twirling it. It provides more creative control over shape manipulation.
- ❖ **Rotate Tool:** This tool is used to rotate the selected area of an image around its center. It can also be used to flip the selection horizontally or vertically.
- ❖ **The Flip transform tool** in Adobe Photoshop is used to flip an image or selection horizontally or vertically. This can be useful for creating mirrored images or for correcting images that have been accidentally flipped.



### Practical Activity 1.6.2: Use photo transformation tools



#### Task:

1: Referring to the previous theoretical activity (1.6.1) you are requested to perform the following task:

As a graphic designer, you are assigned to visit the computer lab to utilize various photo transformation tools like Scale, Distort, Skew, Perspective, Warp, Rotate, and Flip. This task should be done individually.

2: Apply safety precautions.

3: Present out the steps to use photo transformation tools.

4: Referring to the steps provided on task 3, use photo transformation tools.

5: Present your work to the trainer and whole class

6: Read key reading 1.6.2 and ask clarification where necessary

7: Perform the task provided in application of learning 1.6.



## **Key readings 1.6.2: Use photo transformation tools**

### **✓ Using Scale**

There are two main ways to use the Scale tool in Photoshop:

#### **1. Using the Image Size dialog box:**

- Go to Image > Image Size.
- Enter the desired width and height for the image in the Pixel Dimensions section.
- Select the desired resampling method from the Resample drop-down menu.
- Click OK to resize the image.

#### **2. Using the Free Transform tool:**

- Select the layer or object you want to scale.
- Go to Edit > Free Transform.
- A bounding box with corner and side handles will appear around the layer or object.
- To scale proportionally, drag any corner handle. To scale disproportionately, drag a side handle.
- To constrain the aspect ratio, hold down the Shift key while dragging.
- To scale from the center, hold down the Alt (Windows) or Option (Mac) key while dragging.
- Press Enter to commit the transformation.

#### **Tasks that you can perform using the Scale tool:**

##### **Resize an image:**

You can use the Scale tool to resize an image to a specific width, height, or resolution. you can accomplish this by following these steps:

- Open Photoshop and go to File > Open to load the image you want to resize.
- Select the layer containing your image in the Layers panel on the right.
- Go to Edit > Free Transform (Ctrl+T or Cmd+T).
- A bounding box with handles will appear around your image.

- To resize, click and drag any of the corner handles inward or outward while holding the Shift key to maintain the aspect ratio. You can also type in the new dimensions in the Options bar.
- Press Enter or click the checkmark icon in the Options bar to apply the transformation.
- Save your resized image by going to File > Save or Save As.

#### **Resize an layer:**

You can use the Scale tool to scale a layer independently of the other layers in an image. This can be useful for adjusting the size of a specific element in an image without affecting the other elements. you can accomplish this by following these steps:

- Select the layer you want to scale in the Layers panel.
- Go to Edit > Free Transform (Ctrl+T or Cmd+T).
- A bounding box appears around the layer.
- Click and drag any corner handle without holding Shift to scale independently.
- Press Enter or click the checkmark icon to confirm.

#### **Scale an object:**

You can use the Scale tool to scale any object in an image, such as a shape, text, or a selection from another image. you can accomplish this by following these steps:

- Select the object you want to scale by clicking on its layer in the Layers panel.
- Go to Edit > Free Transform (Ctrl+T on Windows or Cmd+T on Mac).
- A bounding box with handles will appear around the selected object.
- To scale, click and drag any corner handle of the bounding box. Hold down the Shift key while dragging to maintain the object's aspect ratio. You can also scale from the center by clicking and dragging the reference point at the center of the bounding box.
- Once you're satisfied with the size, press Enter or click the checkmark icon in the Options bar to apply the transformation.

#### **Maintain the aspect ratio:**

You can use the Constrain Proportions button in the options bar to maintain the aspect ratio of an image or object while scaling. This is useful for preventing images and objects from becoming stretched or distorted. you can accomplish this by following these steps:

- Select the layer you want to scale.
- Go to Edit > Free Transform (Ctrl+T or Cmd+T).
- A bounding box will appear around the layer.
- In the Options bar at the top, you'll see the "Constrain Proportions" button (a chain-link icon). Click on it to activate it; it should turn into a linked chain symbol.
- Now, when you click and drag any corner handle to scale the layer, the aspect ratio will be maintained automatically.
- Once you're satisfied with the size, press Enter or click the checkmark icon to confirm the transformation.

#### **Scale from the centre:**

You can hold down the Alt (Windows) or Option (Mac) key while scaling to scale from the centre of an image or object. This can be useful for maintaining the alignment of an image or object in a composition.

#### **✓ Using Distort**

Distorting in Photoshop can be a creative and powerful tool. Here are different ways and tasks related to using the Distort function, both with filters and transformation, explained in a less formal way:

#### **Using Distort with Transformation:**

##### **1. Free Transform Distort:**

- Select the layer or object you want to distort.
- Go to Edit > Free Transform.
- Hold down the Ctrl (Windows) or Command (Mac) key and drag any of the corner handles.
- To constrain your movement to horizontal or vertical, add the Shift key.

- Release the key(s) to return to Free Transform.

## **2. Perspective Distort:**

- Select the layer or object you want to distort.
- Go to Edit > Perspective Warp.
- Click and drag on the corners of the image to create a grid.
- Drag the grid nodes to distort the image.
- When you are finished, press Enter to commit the transformation.

## **Using Distort with Filters:**

### **1. Filter > Distort > Liquify:**

- Select the layer you want to distort with a filter.
- Go to Filter > Distort > Liquify.
- The Liquify dialog will open, allowing you to use various tools like the Forward Warp Tool, Pucker Tool, Bloat Tool, etc., to distort and manipulate the image.

### **2. Filter > Distort > Spherize:**

- Pick the layer you want to apply the spherize effect to.
- Go to Filter > Distort > Spherize.
- Adjust the Amount slider to control the level of distortion, creating a spherical or bulging effect.

### **3. Filter > Distort > Pinch:**

- Choose the layer you want to apply the pinch effect to.
- Go to Filter > Distort > Pinch.
- Adjust the Amount slider to control the degree of pinching, which can make objects appear thinner or bulge.

### **4. Filter > Distort > ZigZag:**

- Select the layer you want to distort with the zigzag effect.
- Go to Filter > Distort > ZigZag.

- Adjust the Amount and Ridges sliders to create a zigzag distortion, great for creating artistic effects.

### ✓ Using Skew

Skewing in Photoshop can help you create interesting and dynamic effects by distorting your images or objects. Here are different ways and tasks related to using the Skew function in Photoshop, explained in a less formal way:

#### Using Skew:

##### 1. Free Transform Skew:

- Select the layer you want to skew.
- Go to Edit > Free Transform (Ctrl+T or Cmd+T).
- Right-click inside the bounding box and choose "Skew."
- You'll see handles on the top and sides of the bounding box. You can drag these handles to skew the layer either horizontally or vertically.

##### 2. Perspective Skew:

- While in Free Transform, right-click inside the bounding box and choose "Perspective."
- Now, you can drag the top or bottom side handles horizontally to create a perspective skew effect. This can make objects appear to recede into the distance or lean.

##### 3. Custom Skew with Warp Tool:

- Select the layer you want to skew.
- Choose the "Warp" option from the Edit menu.
- This opens a grid on your image that you can manipulate by dragging the control points. It's a more advanced way to skew and distort your image to your liking.

##### 4. Skewing Text:

- If you want to skew text, you can select the text layer, then use Free Transform or Edit > Transform > Skew.
- Remember to hold the Shift key to maintain the aspect ratio if needed.

#### **5. Skew with the Perspective Crop Tool:**

- Select the Perspective Crop Tool (nested under the Crop Tool in the Tools panel).
- Draw a cropping box around the area you want to skew.
- Adjust the corners of the box to create a skewed perspective effect. Press Enter to apply.

These techniques allow you to skew and warp your images or objects to add depth, perspective, or unique creative touches to your designs.

#### **✓ Using Perspective**

Working with perspective in Photoshop can add depth and realism to your designs and images. Here are different ways and tasks related to using perspective in a less formal way:

#### **Applying Perspective Transformations:**

- To adjust the perspective of a layer, select the layer you want to transform.
- Go to Edit > Transform > Perspective.
- Now, you'll see corner handles that you can drag to change the perspective of your layer. This is handy for simulating a 3D effect.

#### **Using Vanishing Point:**

- If you want to work with a more complex perspective, you can use the Vanishing Point filter.
- Go to Filter > Vanishing Point.
- Create a grid by defining the four corners of a perspective plane. Then, you can copy and paste elements into this grid, and they'll adapt to the perspective.

#### **Creating Text in Perspective:**

- To make text appear as if it's in perspective, start by typing your text on a new layer.
- Use the Free Transform tool (Ctrl+T or Cmd+T) and right-click to choose Perspective.
- Drag the corner handles to adjust the text's perspective. This is great for creating signs or labels that fit into your image's perspective.

### **Combining Multiple Images with Perspective:**

When you're creating a composite image by blending several pictures into one cohesive scene, it's essential to make sure that all the elements match in terms of perspective.

How you can do it:

#### **1. Select Your Images:**

- Start by selecting the images you want to combine into your composite. These could be photos of different objects, people, or backgrounds.

#### **2. Arrange the Base Image:**

- Choose one image as your base or background image. This image will serve as the foundation for your composite. Open it in Photoshop.

#### **3. Add New Layers:**

- To add the other images to your composite, go to File > Place Embedded or simply drag and drop them onto the base image. This will create new layers for each added image.

#### **4. Match Perspective:**

- To ensure the added elements match the base image's perspective, use the Free Transform tool (Ctrl+T or Cmd+T) on each added layer.
- Right-click inside the bounding box and select "Perspective."
- Adjust the corner handles to align the added element with the perspective of the base image. For example, if you're adding a building to a cityscape, make sure the building lines up with the angles in the cityscape.

### **5. Blend and Refine:**

- Use layer masks, blending modes, and adjustment layers to seamlessly integrate the added elements with the base image. This may involve adjusting brightness, contrast, and color to match the lighting of the scene.

### **6. Work on Shadows and Reflections:**

- To make the composite look more realistic, consider adding shadows and reflections. Create a new layer and use soft brushes to paint in shadows where needed. You can also use the Warp tool to distort the shadow to match the perspective.

### **7. Fine-Tune Details:**

- Pay attention to small details like sharpness, grain, and color consistency across all elements. Use the Camera Raw Filter or other adjustment tools to match the elements more accurately.

### **8. Group Layers and Organize:**

- As you progress with your composite, group layers together and keep your workspace organized. This makes it easier to make adjustments and maintain a clear overview.

### **Distorting and Warping with Perspective:**

Distorting and warping with perspective in Photoshop can be a versatile and powerful technique.

Here's are step to follow:

#### **1. Select Your Layer:**

- Open your image in Photoshop and choose the layer you want to manipulate. This can be an image, text, or any graphic element.

#### **2. Free Transform:**

- With the layer selected, go to "Edit > Free Transform" or use the shortcut Ctrl+T (Cmd+T on a Mac).
- A bounding box with handles will appear around your selected layer.

### **3. Choose Distort or Warp:**

- Right-click (or Control-click on a Mac) anywhere inside the bounding box. A context menu will appear.
- In this menu, choose either "Distort" or "Warp" based on the effect you want to achieve.

### **4. Distort:**

- If you select "Distort," you'll notice that the corner handles of the bounding box become active. Each corner can be dragged independently.
- Click and drag any of the corner handles to distort your layer. For instance, you can simulate a perspective effect by adjusting the corners to match the angles in the image.

### **5. Warp:**

- If you choose "Warp," a grid will appear over the bounding box with different control points.
- Click and drag the control points to bend and distort the layer in a more flexible way. This is particularly useful for creating curved or wavy effects that follow a specific perspective.

### **6. Applying the Transformation:**

- Once you're satisfied with the distortion or warping effect, press Enter or click the checkmark icon in the Options bar to apply the changes.

### **Creating Reflections:**

creating reflections that follow the perspective of a surface in Photoshop can add a realistic touch to images, making objects appear as if they are reflecting on a surface.

step-by-step explanation:

#### **1. Duplicate the Layer:**

- Start by selecting the layer or object that you want to create a reflection for in the Layers panel.
- Right-click on the layer and choose "Duplicate Layer." This will create a copy of the selected object.

#### **2. Flip the Duplicate Layer:**

- With the duplicated layer selected, go to Edit > Transform > Flip Vertical. This will flip the layer vertically, making it appear like a reflection.

#### **3. Position the Reflection:**

- Drag the duplicated layer down to the area where you want the reflection to appear. Make sure it's positioned below the original object layer in the Layers panel.

#### **4. Apply a Layer Mask:**

- Add a Layer Mask to the duplicated layer by clicking the Layer Mask icon at the bottom of the Layers panel. This allows you to hide parts of the reflection if needed.

#### **5. Adjust Transparency:**

- Lower the opacity of the reflection layer to make it semi-transparent. This will give it a more realistic appearance, like a reflection is typically less vivid than the object itself.

#### **6. Transform with Perspective:**

- To make the reflection follow the perspective of the surface it's on, use the Perspective Transform tool. Select the duplicated layer, go to Edit > Transform, and choose Perspective.

- Adjust the corner handles to match the perspective of the surface. Drag the handles in a way that the reflection seems to recede into the distance, following the surface's angle.

#### **7. Fine-Tune with the Layer Mask:**

- If the reflection needs further adjustments or blending, use the Layer Mask. You can paint with black on the mask to hide parts of the reflection that should be less visible, creating a smoother transition.

#### **8. Blur if Necessary:**

- Depending on the surface and lighting conditions, you might want to apply a slight Gaussian Blur to the reflection layer. This softens the reflection and makes it look more natural.

#### **✓ Using Wrap**

Using the "Wrap" feature in Photoshop can be really handy for distorting and manipulating parts of an image or object. Here are various ways and tasks related to using the Wrap function:

##### **1. Warp Text:**

- You can warp text in Photoshop to create interesting effects. Select your text layer, go to Edit > Transform > Warp, and then choose a warp style from the dropdown menu. You can then adjust the control points to warp the text.

##### **2. Warp a Layer:**

- Select the layer you want to warp, and go to Edit > Transform > Warp. This allows you to distort the entire layer using various warp styles and control points.

##### **3. Warp Grid:**

- You can create a custom warp grid by selecting a layer, going to Edit > Transform > Warp, and then clicking the "Custom" button in the Options bar. This lets you define your own control points and warp style.

#### **4. Warp Presets:**

Warp presets in Photoshop provide you with a quick and easy way to apply specific distortions to your images or text. Here's how to use them:

- Select the layer you want to warp.
- Go to Edit > Transform > Warp.
- In the Options bar at the top, you'll see a dropdown menu with various warp styles. These are the presets.
- Click on the dropdown, and you'll find options like Arch, Bulge, Flag, Wave, and many more.
- Choose a preset that fits your project. Each preset has its own unique distortion effect.
- Once you select a preset, you'll see a grid with control points appear on your layer.
- You can click and drag the control points to adjust the intensity and direction of the warp effect.
- Press Enter or click the checkmark icon in the Options bar to apply the warp.

Warp presets are great for quickly applying specific distortions without having to manually adjust control points. They can add a fun and creative touch to your designs.

#### **5. Warp Perspective:**

The Warp Perspective feature in Photoshop is particularly useful when you need to adjust the perspective of an object or layer. Here's how to use it:

- Select the layer you want to apply the perspective warp to.
- Go to Edit > Transform > Warp.
- In the Options bar, you'll see a dropdown menu that includes the Perspective warp style.
- Select "Perspective."
- Your layer will now have a grid with corner control points.

- Drag the corner control points to change the perspective of the selected layer. This is great for making objects fit into a specific scene or creating a 3D effect.

## **6. Warp Envelope:**

Warp Envelope is a powerful feature that allows you to create custom shapes for warping your image or layer.

### **How to use it:**

- Select the layer you want to warp.
- Go to Edit > Transform > Warp.
- In the Options bar, you'll see the Warp dropdown menu.
- Click on the "Custom" option within the dropdown.
- Your layer will display a grid with control points at the corners and along the edges.
- You can add and manipulate these control points to create custom distortions. For example, you can bend and twist an object in unique ways.
- Click and drag the control points to adjust the warp effect as needed.

Warp Envelope is a versatile tool that gives you more control over the distortion. You can create complex, custom shapes and distortions to suit your specific design requirements.

## **7. Warp Mode with Liquify:**

The Liquify filter in Photoshop is a powerful tool that allows you to perform detailed warp and distortion operations.

How to use it and some applications:

- **Access Liquify:** To use Liquify, go to Filter > Liquify.
- **Warp and Distort:** Inside the Liquify dialog, you'll find various tools, like the Forward Warp Tool, Pucker Tool, Bloat Tool, and many others. These tools let you warp, push, pull, and distort the pixels in your image. For example, you can use the Forward Warp Tool to push elements around and create caricature-like effects or adjust facial features in portraits.

- **Face Retouching:** Liquify is often used in portrait retouching. You can make subtle adjustments to a subject's face, such as slimming down the nose, brightening the eyes, or smoothing out imperfections.
- **Creating Artistic Effects:** Liquify is also great for creating artistic effects. You can use it to simulate water ripples, create swirling patterns, or add a surreal touch to your images.

### 8. Warp Text in a Curve:

This technique involves warping text to follow a curved path. It's handy for creating text that fits into various design elements, such as banners or circular shapes.

#### How to do it:

- **Create a Path:** Use the Pen tool to draw a path on your canvas. This path represents the curve along which you want your text to bend.
- **Select the Type Tool:** Click on the Type tool in the toolbar.
- **Click on the Path:** Move your Type tool over the path you created and click on it. This will create a text cursor on the path.
- **Type Your Text:** Start typing your text, and it will automatically follow the curve of the path.
- **Adjust Text and Path:** You can still adjust the position of the text along the path and make further adjustments if needed.

### 9. Warp for Retouching:

Using the Warp feature for retouching allows you to make subtle adjustments to a subject's features in portraits. Here's how to use it:

- **Make a Selection:** Use a selection tool, like the Lasso tool or the Pen tool, to create a selection around the area you want to retouch. For example, you might select a person's facial features.
- **Go to Edit > Transform > Warp:** With the selection in place, go to Edit > Transform > Warp.

- **Adjust Features:** You can now use the Warp handles to make slight adjustments. For instance, you can raise an eyebrow, adjust a smile, or reshape the lips.
- **Subtle Changes:** The key with this technique is to make subtle, natural-looking changes. It's commonly used in portrait retouching to enhance expressions without making it look obvious.

#### **10. Warp for Special Effects:**

Warping is a creative tool for generating various special effects in your images. Here are some examples:

- **Simulating Water Ripples:** You can use the Warp feature to create the illusion of water ripples on a calm surface by distorting and warping parts of the image. This is great for adding realistic water effects.
- **Fabric Folds:** If you want to create the appearance of fabric folds or drapery in an image, you can use the Warp tool to add bends and wrinkles to the clothing or fabric elements.
- **Surreal Twists:** For more artistic and surreal effects, you can apply extreme warping to objects or elements in your image. This can lead to distorted, dreamlike visuals, which are popular in modern digital art.

#### **✓ Using Rotate**

Rotating in Photoshop can be quite handy for various tasks. Here are different ways and tasks related to using the Rotate function:

##### **1. Free Transform:**

- Select the layer or object you want to rotate.
- Go to Edit > Free Transform (Ctrl+T or Cmd+T).
- Move your cursor outside the bounding box, and it will turn into a curved double-sided arrow.
- Click and drag to rotate the layer. Hold Shift to constrain rotation to 15-degree increments.

## **2. Rotate View Tool:**

- Access the Rotate View tool from the toolbar on the left (it looks like a hand with an arrow).
- Click and drag in your document to rotate the view for easier editing. This doesn't affect the actual content, just the view.

## **✓ Using Flip**

Flipping in Photoshop can be quite handy for creating mirror effects or reversing an image. Here are different ways and tasks related to using the Flip function, explained in a less formal way:

### **1. Flip Horizontally:**

- Open your image in Photoshop.
- To flip a layer horizontally, select the layer you want to flip in the Layers panel.
- Go to Edit > Transform > Flip Horizontal.
- The selected layer will be flipped as a mirror image.

### **2. Flip Vertically:**

- For a vertical flip, select the layer.
- Go to Edit > Transform > Flip Vertical.
- This flips the layer upside down.

### **3. Flip a Selection:**

- You can also flip a selection within a layer.
- Use the Marquee tool (Rectangular or Elliptical) to select the portion you want to flip.
- Then, go to Edit > Transform > Flip Horizontal or Flip Vertical.

### **4. Flip a Text Layer:**

- To flip text, select the text layer.
- Go to Edit > Transform > Flip Horizontal or Flip Vertical.

- This is useful for creating mirrored text effects.

#### 5. Using Keyboard Shortcuts:

- For quicker flips, you can use keyboard shortcuts. Press Ctrl+T (Cmd+T on a Mac) to enter Free Transform mode.
- Right-click on the layer, and you'll see options to flip horizontally or vertically.

#### 6. Flip a Smart Object:

- If your layer is a Smart Object, you can also flip it.
- Right-click on the Smart Object layer in the Layers panel and choose Edit Contents.
- Inside the Smart Object, go to Edit > Transform > Flip Horizontal or Flip Vertical.

Flipping is often used for creating symmetrical designs, checking image balance, or creating interesting compositions. It's a straightforward but powerful tool.



#### Points to Remember

- **Methods to transform a photo:**
  - **Using perspective:** Go to edit>Transform>Perspective>drag and drop the corner handles>Accept the changes
  - **Using wrap:** Select your text layer, go to Edit > Transform > Warp, and then choose a warp style from the dropdown menu.
  - **Using rotate:** Select the layer or object you want to rotate>Go to Edit > Free Transform (Ctrl+T or Cmd+T)> Move your cursor outside the bounding box, and it will turn into a curved double-sided arrow>Click and drag to rotate the layer. Hold Shift to constrain rotation to 15-degree increments.
  - **Using flip:** Go to Edit > Transform > choose the flip option you want



#### Application of learning 1.6

You're a photographer specializing in portrait photography, and you've just finished a photoshoot for a client's professional headshots. While you captured some great shots, you know that a bit of post-processing can elevate the images to the next level. To enhance the portraits and deliver stunning results to your client, you decide to utilize photo transformation tools in Adobe Photoshop.



## Learning outcome 1 end assessment

### Theoretical assessment

1. What is the difference between a clipping mask and a regular layer mask?
  - a) A clipping mask uses the contents of one layer to determine the visibility of another layer.
  - b) A regular layer mask uses a grayscale image to control the opacity of a layer.
  - c) There is no difference between a clipping mask and a regular layer mask.
  - d) A clipping mask is more powerful than a regular layer mask.
2. What does merging layers do?
  - a) It combines two or more layers into a single layer.
  - b) It creates a new layer that is a copy of the selected layer.
  - c) It allows you to resize an image or layer.
  - d) It allows you to apply adjustments to the layers below it.
3. What are rulers and guides used for in Adobe Photoshop?
4. What are the three main ways to arrange multiple opened documents in Photoshop?
5. What are guides and how do they help with design accuracy in Photoshop?

### Practical assessment

X-RAY HIGH TECH, an advertising company based in Musanze city, hired DM Design in 2022 to edit high-quality images for billboards, but the results were deemed substandard. Now, as an expert in image manipulation, you are tasked with enhancing product images for an upcoming e-commerce campaign featuring high-end electronic gadgets. Your goal is to create visually striking and polished photos that highlight the products' features and attract potential buyers. This involves using advanced Photoshop techniques to ensure the images meet the brand's high standards and captivate the target audience.



## References

(2022, June 4). Retrieved from <https://www.linkedin.com>

Burkus, S. (2010). *The Adobe Photoshop CS5 Book Professional + Web Design*. United States.

Evening, M. (2013). The Complete Guide for Photographers. In M. Evening, *The Adobe Photoshop Lightroom 5 Book*. United Kingdom: Pearson Education.

Geisen, N. (2016). *Photoshop for Beginners - Learn the Basics of Photoshop in Under 10 Hours!*. . United States:: CreateSpace Independent Publishing Platform.

Kelby, S. (2023). The Adobe Photoshop Book for Digital Photographers. In S. Kelby, *The Adobe Photoshop Book for Digital Photographers*. United Kingdom: Pearson Education.

O'Reilly. ((2005)). *A Designer's Notebook. Illustrations with Photoshop:*.

PATTINSON, R. (2018). *A Beginners Guide for Adobe Photoshop , Adobe Illustrator , Adobe In-Design Basics. (n.p.):*. Amazon Digital Services LLC - KDP Print US. .



### Indicative contents

**2.1: Description of workspace**

**2.2: Create vector paths**

**2.3: Design shapes**

**2.4: Description of brand identity**

**2.5. Design infographics**

### Key Competencies for Learning Outcome 2: Manipulate Graphics with Adobe Illustrator

Knowledge	Skills	Attitudes
<ul style="list-style-type: none"> <li>• Description of workspace in adobe illustrator</li> <li>• Description of vector paths in adobe illustrator</li> <li>• Explanation of basic shapes in adobe illustrator</li> <li>• Explanation of object transformation in adobe illustrator</li> <li>• Explanation of colors in adobe illustrator</li> <li>• Description of adobe illustrator tools</li> <li>• Description of adobe illustrator panels</li> <li>• Description of brand identity</li> <li>• Description of infographics in adobe illustrator</li> </ul>	<ul style="list-style-type: none"> <li>• Using Adobe Illustrator workspace elements</li> <li>• Using artboards and layers</li> <li>• Creation of vector paths in adobe illustrator</li> <li>• Creation of shapes in adobe illustrator</li> <li>• Transformation of an objects</li> <li>• Applying fill and stroke colors</li> <li>• Using adobe illustrator tools</li> <li>• Using and Manage adobe illustrator panels</li> <li>• Creating brand identity</li> <li>• Designing infographics</li> </ul>	<ul style="list-style-type: none"> <li>• Having Creativity</li> <li>• Being Problem solver</li> <li>• Being Patient</li> <li>• Being Critical thinker</li> <li>• Being Practical oriented</li> <li>• </li> </ul>



**Duration: 40 hrs**

**Learning outcome 2 objectives:**



By the end of the learning outcome, the trainees will be able to:

1. Describe clearly adobe illustrator workspace based on project goal.
2. Explain clearly vector paths and shapes as found in adobe illustrator based on project goal
3. Describe clearly brand identity and infographics as used in company branding based on project requirements.
4. Use effectively adobe illustrator workspace elements based on project goal
5. Design properly shapes and paths as done in adobe illustrator based on project goal
6. Transform properly objects in adobe illustrator based on the project goal
7. Design properly infographics as done in graphic design based on project requirements.



**Resources**

Equipment	Tools	Materials
<ul style="list-style-type: none"><li>• Computer</li><li>• Projector</li></ul>	<ul style="list-style-type: none"><li>• Adobe Illustrator</li><li>•</li></ul>	<ul style="list-style-type: none"><li>• N/A</li></ul>



## Indicative content 2.1: Description of Workspace



Duration: 8 hrs



### Theoretical Activity 2.1.1: Description of Workspace



#### Tasks:

- 1: You are requested to answer the following questions related to the workspace:
  - a) What do you understand about workplace?
  - b) Provide a description of the elements found in the workspace of Adobe Illustrator?
- 3: Present the findings/answers to the whole class
- 4: For more clarification, read the key readings 2.1.1. In addition, ask questions where necessary.



#### Key readings 2.1.1.:

##### 1. Description of workspace

A workspace: is the graphical user interface (GUI) that you use to create and edit vector graphics in Illustrator. The workspace consists of various panels, toolbars, and menus that you can use to access all of the features and functionality of the software.

You can customise the workspace to suit your own preferences. For example, you can move and resize panels, add and remove panels, and create your own custom workspaces.

##### 2. Adobe illustrator workspace elements

The elements of the Adobe Illustrator workspace are as follows:

###### ➤ Menus

Menus in Adobe Illustrator are lists of commands that allow you to perform various tasks, such as creating and editing objects, applying effects, and managing files. The menus are located at the top of the screen and are organised into categories, such as File, Edit, Object, Type, Effect, View, and Window.

The following is a detailed description of the Adobe Illustrator menu:

###### **File:**

**New:** Creates a new Illustrator document.

**Open:** Opens an existing Illustrator document.

**Save:** Saves the current Illustrator document.

**Save As:** Saves the current Illustrator document as a new document.

**Place:** Places an image or graphic into the current Illustrator document.

**Export:** Exports the current Illustrator document to a different format, such as PDF, SVG, or PNG.

**Close:** Closes the current Illustrator document.

#### **Edit:**

**Undo:** Undoes the previous action.

**Redo:** Redoes the previous action.

**Cut:** Cuts the selected object to the clipboard.

**Copy:** Copies the selected object to the clipboard.

**Paste:** Pastes the contents of the clipboard into the document.

**Delete:** Deletes the selected object.

**Select All:** Selects all objects in the document.

**Deselect All:** Deselects all objects in the document.

**Preferences:** Opens the Preferences dialog box, where you can customise the Illustrator settings.

#### **Object:**

**Arrange:** Contains commands for arranging objects in the document, such as Bring to Front, Send to Back, and Group.

**Path:** Contains commands for manipulating paths, such as Join Paths, Combine Paths, and Intersect Paths.

**Appearance:** Contains commands for changing the appearance of objects, such as Fill, Stroke, and Effects.

**Convert to Shape:** Contains commands for converting objects to different shapes, such as Line, Rectangle, and Ellipse.

**Expand:** Contains commands for expanding objects, such as Expand Appearance and Expand Stroke.

#### **Type:**

**Font:** Contains commands for changing the font, size, and color of text.

**Character:** Contains commands for formatting text characters, such as Tracking, Leading, and Kerning.

**Paragraph:** Contains commands for formatting text paragraphs, such as Alignment and Indentation.

**Area Type:** Contains commands for creating area text, which is text that flows around other objects.

#### **Select:**

**Select menu** is a drop-down menu located in the menu bar at the top of the application window. It contains a variety of options for selecting objects and paths in your artwork, including:

**All:** Selects all objects and paths in the document.

**Deselect:** Deselects all currently selected objects and paths.

**Reselect:** Reselects the most recent selection.

**Invert:** Inverts the current selection, so that the previously selected objects and paths are now deselected, and vice versa.

**By Same:** Selects all objects and paths in the document that have the same fill color, stroke color, stroke weight, or other attributes as the currently selected object.

**By Feature:** Selects all objects and paths in the document that share a particular feature, such as a stroke, a fill, or an anchor point.

**Linked Objects:** Selects all objects that are linked to the currently selected object.

**Deselect All on Layer:** Deselects all objects on the currently active layer.

**Invert Selection on Layer:** Inverts the current selection on the currently active layer.

#### **Effect:**

**Raster Effects:** Contains commands for applying raster effects to objects, such as Gaussian Blur, Drop Shadow, and Bevel and Emboss.

**Stylize:** Contains commands for applying stylize effects to objects, such as Inner Glow, Feather, and Roughen Edges.

**Distort & Transform:** Contains commands for distorting and transforming objects, such as Warp, Transform, and Perspective.

**Art Brushes:** Contains commands for creating and using art brushes.

**Graphic Styles:** Contains commands for creating and using graphic styles.

**Image Filters:** Contains commands for applying image filters to objects, such as Sharpen, Noise, and Adjust Colours.

#### **View:**

**Zoom:** Contains commands for zooming in and out of the document.

**Rulers & Guides:** Contains commands for displaying and hiding rulers and guides.

**Panels:** Contains commands for displaying and hiding panels.

**Proof Setup:** Contains commands for setting up the document for proofing.

**Overprint Preview:** Toggles the display of overprint preview.

Window:

**Arrange:** Contains commands for arranging windows on the screen.

**Workspace:** Contains commands for loading and saving workspaces.

**Utilities:** Contains commands for accessing utility windows, such as the Gradient Editor and the Symbol Browser.

**Help:** Contains commands for accessing help documentation and support.

The Adobe Illustrator menu is a powerful tool that can be used to access all the commands and features in Illustrator. By understanding the different menus and commands, you can work more efficiently and effectively in Illustrator.

- **Panels:** Panels are windows that contain specific tools and options for working with Illustrator. Some common panels include the Tools panel, the Color panel, and the Character panel.
- **Toolbars:** Toolbars contain icons that represent different tools and commands. You can click on a toolbar icon to select the corresponding tool or command.
- **Menus:** Menus contain lists of commands that you can use to perform various tasks in Illustrator. You can access the menus by clicking on the Menu bar at the top of the screen.

## 6. Panels

In Adobe Illustrator, panels are windows that contain specific tools and options for working with illustrations.

Adobe Illustrator panels are dockable windows that contain specific tools and options for working with Illustrator. Some common panels include the Tools panel, the Color panel, and the Character panel. You can customize the workspace to suit your own needs, by moving and resizing panels, adding and removing panels, and creating your own custom workspaces.

### Adobe Illustrator panels:

**Tools panel:** The Tools panel contains all of the tools you need to create and edit your illustrations, such as the Pen tool, the Selection tool, and the Gradient tool. Each tool has a different function, so it is important to understand how to use each tool in order to create the desired results.

**Color panel:** The Color panel allows you to select and apply colors to your illustrations. You can choose from a variety of color palettes, or you can create your own custom colors. The Color panel also allows you to adjust the brightness, contrast, and saturation of colors.

**Character panel:** The Character panel allows you to format text in your illustrations, such as changing the font, size, and color of the text. You can also use this panel to adjust the spacing between letters and words. The Character panel also allows you to add special characters and symbols to your text.

**Paragraph panel:** The Paragraph panel allows you to format paragraphs of text in your illustrations, such as changing the alignment and indentation of the text. You can also use this panel to add bullets and numbering to your paragraphs. The Paragraph panel also allows you to adjust the line spacing and spacing between paragraphs.

**Properties panel:** The Properties panel allows you to view and edit the properties of the selected object in your illustration. You can change the size, position, and rotation of the object, as well as its fill and stroke colors. The Properties panel also allows you to apply effects to objects, such as drop shadows and bevels.

**Layers panel:** The Layers panel allows you to organize your illustrations into different layers. You can show or hide layers, change the order of the layers, and lock or unlock layers. The Layers panel is especially useful for complex illustrations, as it allows you to work on different parts of the illustration without affecting the other parts.

**Symbols panel:** The Symbols panel allows you to create and manage symbols in your illustrations. Symbols are reusable graphics that can be used throughout your document. The Symbols panel allows you to create new symbols, edit existing symbols, and insert symbols into your illustrations.

**Gradient panel:** The Gradient panel allows you to create and edit gradients. Gradients are smooth transitions between two or more colors. The Gradient panel allows you to choose the type of gradient you want to create, as well as the colors and opacity of the gradient.

These are just a few of the many Adobe Illustrator panels that are available. You can explore different panels to find ones that are helpful for your specific workflow. You can also customise the workspace to include the panels that you use most often.

#### ➤ Toolbar

**The toolbar** is a horizontal row of icons that provide quick access to frequently used tools and commands. It is located at the top of the workspace, below the menu bar.

The toolbar contains a variety of tools, including the Selection tool, the Pen tool, the Shape tools, the Type tool, and the Gradient tool. You can also find tools for editing text, applying effects, and navigating the document.

#### **Common Adobe Illustrator tools:**

##### **Selection tool**

The Selection tool is used to select objects in your document. You can use the Selection tool to select one or multiple objects at a time. To select an object, simply click on it with the Selection tool. To select multiple objects, hold down the Shift key and click on the objects you want to select.

##### **Pen tool**

**The Pen tool** is used to draw freehand curves and shapes. To use the Pen tool, click and drag to create a path. You can release the mouse button to create a corner point, or you can continue dragging to create a smooth curve. You can also use the Pen tool to add anchor points to a path. To add an anchor point, click on the path with the Pen tool. To delete an anchor point, right-click on the anchor point and select Delete Anchor Point.

##### **Shape tools**

**The Shape tools** are used to create basic shapes, such as rectangles, circles, and polygons. To create a shape with one of the Shape tools, simply click and drag on the document window. The shape will be created at the size and position you drag the

mouse. You can also use the Shape tools to create more complex shapes by combining multiple shapes together.

### **Type tool**

**The Type tool** is used to add text to your document. To add text with the Type tool, simply click and drag on the document window to create a text box. Then, type your text into the text box. You can also use the Type tool to format your text, such as changing the font, size, and color of the text.

### **Gradient tool**

**The Gradient tool** is used to create gradients, which are smooth transitions between two or more colors. To create a gradient with the Gradient tool, simply click and drag on the document window to create a gradient line. Then, select the colors you want to use in the gradient from the Color panel. You can also adjust the direction and opacity of the gradient.

### **Edit tools**

**The Edit tools** are used to edit text, objects, and effects. The most common Edit tools are the Direct Selection tool, the Rotate tool, and the Scale tool.

**Direct selection tool:** is used to select and edit individual anchor points and segments of a path.

**Rotate tool:** is used to rotate objects around a pivot point.

**Scale tool:** is used to scale objects up or down.

**The Navigation tools** are used to zoom in and out of the document, and to pan around the document. The most common Navigation tools are the Zoom tool, the Hand tool, and the Scroll tool.

**The Zoom tool** is used to zoom in and out of the document.

**The Hand tool** is used to pan around the document.

**The Scroll tool** is used to scroll through the document vertically or horizontally

➤ **Undo command and history panel**

**The Undo command** is used to reverse the last action that was performed. It can be used to undo a variety of actions, such as creating an object, deleting an object, moving an object, or changing the appearance of an object.

The Undo command is a very useful tool for correcting mistakes or experimenting with different ideas. It can also be used to save time by quickly undoing an action that you accidentally performed.

**Examples of how to use the Undo command in Adobe Illustrator:**

- If you accidentally delete an object, you can use the Undo command to bring it back.
- If you move an object to the wrong location, you can use the Undo command to move it back to its original location.
- If you change the appearance of an object and don't like the results, you can use the Undo command to revert to the object's original appearance.
- If you're experimenting with different ideas and don't like the way things are turning out, you can use the Undo command to go back to the previous state of your document.

➤ **Preferences in adobe illustrator**

**Preferences** allow you to customise the application's appearance and behavior to suit your individual needs. You can change a variety of settings, including:

- **General preferences:** These settings control the overall look and feel of the application, such as the color scheme, font size, and workspace layout.
- **File handling preferences:** These settings control how Illustrator handles files, such as how it saves files, how it opens files, and how it handles file formats.
- **Display preferences:** These settings control how Illustrator displays objects on the screen, such as the zoom level, the grid, and the rulers.
- **Tool preferences:** These settings control the behavior of specific tools, such as the Pen Tool, the Path Eraser Tool, and the Gradient Tool.
- **Unit and rulers preferences:** These settings control the units of measurement that Illustrator uses, and how the rulers are displayed on the screen.

- **Type preferences:** These settings control the appearance of text, such as the font, the size, and the leading.
- **Performance preferences:** These settings control how Illustrator uses the computer's resources, such as how much memory it uses and how it handles previews.
- **Plug-in preferences:** These settings control how Illustrator uses plug-ins, such as how it loads plug-ins and how it manages plug-ins.
- **File association preferences:** These settings control which applications are associated with Illustrator files, such as which application opens Illustrator files by default.

➤ **Setting, switching, and saving workspaces**

**Setting, switching, and saving workspaces** is a crucial aspect of customising your workspace to suit your specific workflow and preferences. By organising your panels, toolbars, and menus effectively, you can enhance your productivity and streamline your creative process.

➤ **Keyboard shortcuts**

**Keyboard shortcuts** are key combinations that allow you to perform actions in Adobe Illustrator quickly and easily. They can be used to access menus, tools, and options, as well as to perform common tasks such as selecting objects, editing paths, and applying effects. Using keyboard shortcuts can significantly improve your workflow and efficiency in Adobe Illustrator.

Keyboard shortcuts play a crucial role in Adobe Illustrator, enabling users to perform actions quickly and efficiently without relying solely on the mouse. These key combinations provide direct access to various tools, menus, and options, streamlining the workflow and enhancing productivity.

**Benefits of using keyboard shortcuts in Adobe Illustrator:**

1. **Increased Speed and Efficiency:** Keyboard shortcuts allow users to perform actions with a few keystrokes instead of navigating through menus and toolbars with the mouse. This reduces the amount of time spent clicking and searching, leading to a faster and more efficient workflow.

- 2. Reduced Mouse Fatigue:** Over Reliance on the mouse can lead to fatigue and discomfort. Keyboard shortcuts minimise mouse usage, promoting a more ergonomic and comfortable working environment.
- 3. Improved Focus and Concentration:** By using keyboard shortcuts, users can stay focused on their work without constantly switching between the mouse and keyboard. This can lead to improved concentration and a deeper state of flow.
- 4. Enhanced Task Completion:** Keyboard shortcuts allow users to complete tasks more quickly and accurately. This can be particularly beneficial when working on complex projects with tight deadlines.
- 5. Accessibility and Adaptability:** Keyboard shortcuts are particularly valuable for users with limited mobility or those who prefer to work with a keyboard-centric approach. They provide an alternative to mouse-based interactions, ensuring accessibility and adaptability.
- 6. Streamlined Learning and Familiarity:** Once users become familiar with common keyboard shortcuts, they can easily learn new ones, further enhancing their productivity and efficiency.
- 7. Customizable Workspace:** Adobe Illustrator allows users to customize their keyboard shortcuts, tailoring them to their specific needs and preferences. This personalization ensures that shortcuts align with individual workflows and preferences.
- 8. Expert Workflow Enhancement:** For experienced Adobe Illustrator users, keyboard shortcuts become an essential tool for achieving expert-level proficiency. They allow for rapid execution of complex tasks and manipulation of design elements.



### Theoretical Activity 2.1.2: Description of artboards and layers



#### Tasks:

1: In small groups, you are requested to answer the following questions related to the artboards and layers:

- What do you understand about Artboard?
- Provide an explanation of Art board and Layers in Adobe Illustrator

2: Participate in group formulation.

3: Present the findings/answers to the whole class

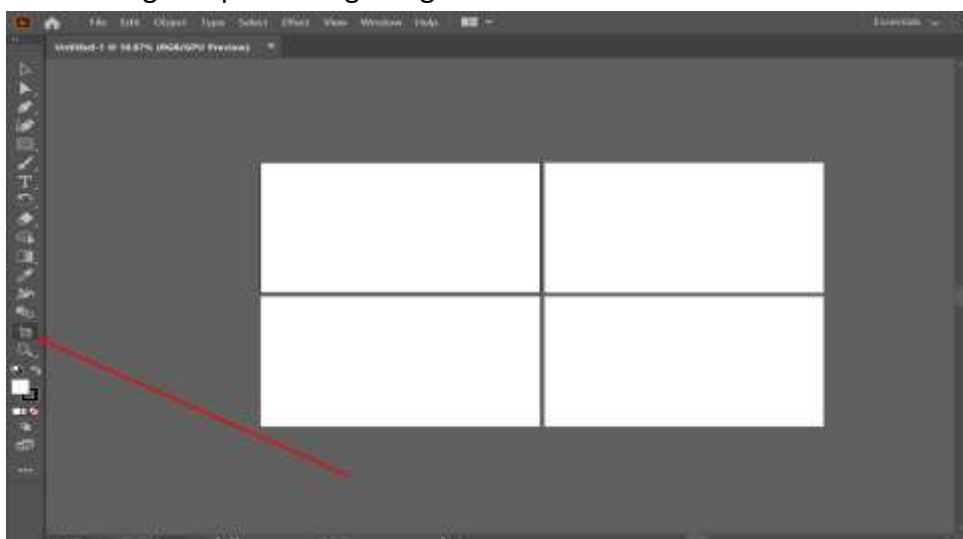
4: For more clarification, read the key readings 2.1.2. In addition, ask questions where necessary.



### Key readings 2.1.2: Description of artboards and layers

1. **Artboards** in Adobe Illustrator are like pages in a document. They are used to define the boundaries of your artwork and to organise it in a logical way. You can create multiple artboards in a single Illustrator document, and each artboard can have its own size, orientation, and settings.

Artboards in Adobe Illustrator serve as individual workspaces within a document where users can create and design their artwork. They can be customized in size, orientation, and arrangement to fit specific design needs. Multiple artboards allow for working on different designs or variations within the same file, providing organization and efficiency in the design process. Artboards can be managed, rearranged, and exported individually or as a group, making them a versatile tool for creating and presenting designs in Illustrator.



Artboards are useful for a variety of tasks, such as:

Creating designs for different devices, such as websites, smartphones, and tablets.

- Creating multi-page documents, such as brochures and presentations.
- Organising your artwork into different sections, such as logos, icons, and illustrations.
- Exporting your artwork in different formats, such as PNG, JPEG, and SVG.

- **Creating a project in adobe illustrator**

**Creating a project in Adobe Illustrator** refers to the process of using Illustrator's tools and features to produce a piece of artwork or design. This could involve anything from creating a simple logo or icon to designing a complex illustration or infographic. The specific steps involved in creating a project will vary depending on the complexity of the project, but they will typically involve some or all of the following:

- **Planning and sketching:** Before you start using Illustrator, it's important to have a clear idea of what you want to create. This may involve sketching out your ideas on paper or creating a digital mockup.
- **Creating artboards:** An artboard is a rectangular area within Illustrator where you can create your artwork. You can create multiple artboards in a single Illustrator file, and you can control the size and orientation of each artboard.
- **Drawing and shaping:** Illustrator provides a variety of tools for drawing and shaping objects. These tools include pens, pencils, shapes, and the Pathfinder panel.
- **Adding color and texture:** Illustrator allows you to add color and texture to your artwork using a variety of tools and techniques. These tools include the color panel, the gradient panel, and the pattern panel.
- **Adding effects:** Illustrator provides a variety of effects that you can use to enhance your artwork. These effects include filters, shadows, and glows.

- **Customise artboard**

**Customising artboards** refers to the process of modifying the appearance and behaviour of artboards to suit your specific needs. This can involve anything from changing the size and orientation of an artboard to adding guides and grids.

**For customizing the artboards in Illustrator, you have to:**

- **Change the size and orientation:** You can resize artboards by dragging their edges or by entering new dimensions in the Properties panel.
- **Add guides and grids:** Guides are helpful for aligning objects on your artboard. You can create guides by dragging them from the rulers or by using the Guide tool. Grids are helpful for creating evenly spaced objects. You can create grids by using the Grid tool.

- **Change the background color:** You can change the background color of an artboard by clicking the Fill Color box in the Properties panel and selecting a new color.
- **Add a border:** You can add a border to an artboard by clicking the Stroke Color box in the Properties panel and selecting a new color. You can also control the width of the border by entering a value in the Stroke Weight field.
- **Change the bleed:** The bleed is an area that extends beyond the edges of the artboard. This can be helpful for ensuring that your artwork doesn't get cut off when it is printed.
- **Change the margins:** The margins are the area between the edge of the artboard and the edge of the document. You can change the margins by entering new values in the Margins field in the Properties panel.
- **Change the registration marks:** Registration marks are helpful for aligning multiple artboards on a single page. You can enable or disable registration marks by clicking the Registration Marks checkbox in the Properties panel.
- **Change the preview quality:** The preview quality determines the level of detail that is displayed when you preview your artboard. You can change the preview quality by clicking the Preview Quality box in the Properties panel and selecting a new quality.

#### **Guidelines for Creating Artboards in Adobe Illustrator:**

- **Plan your artboard layout:** Before creating artboards, consider the overall layout of your project and how you want to organize your artwork.
- **Use artboard presets:** Adobe Illustrator provides artboard presets for common sizes and orientations, which can save time and effort.
- **Name your artboards:** Giving your artboards descriptive names will help you identify and manage them easily.
- **Use guides and grids:** Guides and grids can help you align and position objects accurately within your artboards.
- **Group related artboards:** If you have multiple artboards that belong together, consider grouping them together for easier management.

#### ● **Creating multi artboard document**

**Multi-artboards** are a feature in Adobe Illustrator that allows you to create multiple artboards within a single document. This can be useful for creating multiple designs or illustrations in one place, or for creating a series of designs that share a common theme or style.

#### **Benefits of using multi-artboards:**

- **Efficiently create multiple designs:** You can create multiple designs or illustrations in one place, which can save time and effort.

- **Easily share and collaborate on designs:** You can easily share and collaborate on designs with others by saving the Illustrator file as a PDF or EPS file.
- **Create mock-ups and presentations:** You can use multi-artboards to create mock-ups and presentations that showcase your designs in different contexts.

- **Arranging the artboards panel**

**Arranging the artboards panel** refers to the process of organising and customising the appearance of the Artboards panel to suit your workflow.

**Here are some of the things you can do to arrange the Artboards panel:**

- **Change the panel's layout:** You can change the layout of the Artboards panel by clicking the panel's menu button and selecting a layout option. There are three layout options available: List, Grid, and Thumbnail.
- **Add or remove columns and rows:** You can add or remove columns and rows in the Artboards panel by clicking the panel's menu button and selecting Add Columns or Add Rows. You can also remove columns and rows by clicking the X button in the header of the column or row.
- **Customise the appearance of individual artboards:** You can customise the appearance of individual artboards in the Artboards panel by clicking the artboard's name and selecting a color from the Color Picker. You can also change the opacity of the artboard by dragging the Opacity slider.
- **Sort artboards:** You can sort artboards in the Artboards panel by clicking the panel's menu button and selecting Sort by Name, Sort by Size, or Sort by Date Modified.

- **Modifying and saving a project in adobe illustrator**

**Modifying and saving a project in Adobe Illustrator** is the process of making changes to an existing Illustrator file and then saving those changes so that the file is updated. This can involve a wide range of tasks, from making simple adjustments to individual objects to adding new elements and effects to the overall design.

**Make the desired changes to your project:** This could involve anything from changing the color of an object to adding new text or shapes. You can use the various tools and features in Illustrator to make your changes.

**Save and Save As options in Adobe Illustrator**

In addition to making changes to individual objects and effects, you can also modify your Illustrator project by changing the document settings, such as the page size, orientation, and margins. You can also add guides, grids, and registration marks to your project to help you align and position objects.

## **2.Layers**

**A layer** is a transparent sheet that contains one or more objects. Layers are stacked on top of each other, and the order of the layers determines which objects appear in front of others. This allows you to create complex designs by editing and manipulating individual layers without affecting the objects on other layers.

Layers in Adobe Photoshop are essential organizational tools that allow users to separate and work on different elements of an image independently. Each layer can contain various elements such as text, shapes, images, or adjustments, and they can be stacked on top of each other to create a composite image. Layers can be edited, reordered, hidden, or manipulated individually without affecting other parts of the image.

#### **The benefits of using layers in Adobe Illustrator:**

- **Organized workflow:** Layers allow you to keep your artwork organized and easy to manage. You can easily hide, lock, and delete layers, and you can also group layers together for more complex compositions.
- **Non-destructive editing:** Editing one layer does not affect the objects on other layers. This allows you to experiment with different designs without having to worry about ruining your artwork.
- **Flexibility:** Layers can be moved, resized, and rotated independently of other layers. This gives you a lot of flexibility when creating and editing your designs.
- **Transparency:** Layers can be set to different levels of transparency, which allows you to create overlapping objects and effects. You can also use the Blending options panel to create different interactions between layers.
- **Collaboration:** Layers make it easy to collaborate with other designers. You can share your Illustrator files with others, and they can add to or modify the layers without affecting your work.
- **Creating, editing layers and sublayers**
  - **Layers and sublayers** are fundamental aspects of organising and managing your artwork. They allow you to separate different elements of your design, control their visibility and interaction, and make non-destructive edits without affecting other parts of your project.
  - **Creating Layers:** Creating layers is the first step towards organizing your artwork in Illustrator. Each layer acts as a transparent sheet that can hold one or more objects. Layers are stacked on top of each other, determining the order in which objects appear on the artboard.
  - **Creating Sublayers:** Sublayers are nested within layers, allowing you to further organize your artwork. They act as smaller transparent sheets within a larger layer, providing a deeper level of hierarchy.
  - **Editing Layers and Sublayers:** You can edit layers and sublayers to modify their properties and visibility.

- **Moving Layers and Sublayers:** You can move layers and sublayers up or down in the hierarchy to change their order on the artboard.
- **Merging Layers:** Merging layers combines two or more layers into a single layer, effectively flattening the hierarchy.
- **Arranging Layers:** You can arrange layers by different criteria, such as size, color, or name.



### Practical Activity 2.1.3: Use of Workspace elements



#### Task:

- 1: Referring to the previous theoretical activity (2.1.1) you are requested to go to the computer lab to Select menus, arrange panels, Selecting and customizing toolbar, use undo command and history panel, set preferences, use keyboard shortcuts. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to use workspace elements.
- 4: Referring to the steps provided on task 3, use workspace elements in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.1.3 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.1.



### Key readings 2.1.3: Use of Workspace elements

#### ✓ Use of Workspace elements

Adobe Illustrator provides a lot of flexibility when it comes to customise your workspace and its elements. Let's break down these practical tasks:

- **Selecting Menus:**

- Menus in Illustrator are located at the top of the application.
- You can select different menus like "File," "Edit," "Object," and many others to access various functions and tools.

**To select menus in Adobe Illustrator, follow these steps:**

1. **Locate the Menu Bar:** is typically located at the top of the Illustrator interface.
2. **Navigate the Menus:** Click on a menu name (e.g., File, Edit, Object) to open a drop-down list of commands and options.
3. **Select a Menu Item:** Hover over the desired menu item in the drop-down list to reveal further options or click directly on the menu item to execute the command.

- **Managing Windows:**

Managing windows in Adobe Illustrator is essential for customising your workspace to suit your needs.

**The process of working with windows in Illustrator:**

1. **Document Windows:**

- When you open multiple documents in Illustrator, each one appears in its own separate window.
- To switch between open documents, click on the document's window in the taskbar at the bottom of the screen (Windows) or on the application icon in the dock (Mac).

2. **Tiling and Arranging Windows:**

- You can arrange open document windows in various ways. Go to "Window > Arrange" to access options like "Cascade," "Tile," or "Float All in Windows."
- "Cascade" stacks windows, "Tile" arranges them side by side, and "Float All in Windows" makes each document a separate window.

3. **Tabbed Documents:**

- In newer versions of Illustrator, you can have documents open as tabs within a single window. This is called the "Tabbed Documents" view.
- To switch between tabs, click on the tab representing the document you want to work on.

4. **Consolidating Windows:**

- You can consolidate all open documents into a single window by going to "Window > Application Frame." This is useful for managing your workspace when working with multiple documents.

5. **Working with Multiple Monitors:**

- If you have multiple monitors, you can drag Illustrator windows and panels between them for a more expansive workspace.
- This is great for working on complex projects, as it allows you to spread your tools and documents across different screens.

## **6. Window and Workspace Arrangement:**

- Remember that your arrangement of windows and panels can be saved as part of your custom workspace. This allows you to maintain your preferred setup and easily switch between different workspaces tailored for specific tasks.

- **Arranging panels**

In Adobe Illustrator, panels are essential elements of your workspace that contain various tools and options for different tasks. Knowing how to manage these panels can help you work more efficiently and tailor your workspace to your needs.

### **Different panels explanation.**

#### **1. Opening and Closing Panels:**

- To open a panel, go to the "Window" menu at the top. You'll find a list of panels you can open. Simply click on the panel name to open it.
- To close a panel, click the "X" in the top-right corner of the panel. This is handy when you need to declutter your workspace.

#### **2. Rearranging Panels:**

- Illustrator allows you to arrange panels according to your workflow.
- You can drag a panel by its tab to move it to a different location within your workspace. For example, you can move the "Layers" panel from the right side to the left side.
- Panels can also be grouped together. To do this, drag one panel tab onto another. This creates a panel group, which can be expanded or collapsed as needed.

#### **3. Docking and Undocking Panels:**

- Panels in Illustrator can be either docked or undocked.
- Docked panels are attached to the edges of the workspace, like the right or left side. They stay in place as you switch between tools.
- To undock a panel, simply drag it away from the edges. An undocked panel becomes a floating window that you can place anywhere on your screen.

#### **4. Collapsing and Expanding Panels:**

- Some panels, like the "Color" panel, have collapsible sections. You can click the double arrow icon on the top-right of a panel to collapse it to a smaller size.
- To expand it again, click the double arrow icon once more.

#### **5. Saving Panel Layouts:**

- If you've carefully organised your panels to suit your workflow, you can save this layout as a custom workspace.
- After arranging your panels as desired, go to "Window > Workspace" and choose "New Workspace." Give it a name and save it.
- This way, you can quickly switch between different custom panel layouts for specific tasks or projects.

- **Selecting and Customising the Toolbar**

The toolbar in Adobe Illustrator is a collection of essential tools that you use to create, modify, and manipulate objects in your artwork.

#### **The use and customizing the toolbar**

#### **2. Selecting Tools:**

- To select a tool from the toolbar, simply click on the tool icon in the toolbar on the left side of the Illustrator workspace.
- Each tool has a specific function, like the Selection Tool (V) for selecting objects, the Pen Tool (P) for creating paths, or the Type Tool (T) for adding text.

#### **3. Customising the Toolbar:**

- Adobe Illustrator allows you to customise the toolbar to fit your workflow and preferences.
- To do this, click on the three horizontal dots at the bottom of the toolbar. This opens the "Edit Toolbar" dialog.

#### **4. Rearranging Tools:**

- In the "Edit Toolbar" dialog, you can see a list of all available tools. You can rearrange the order of the tools by dragging and dropping them within the dialog.

**Example,** if you frequently use the Pen Tool, you can move it to the top for easy access.

#### 5. **Adding Tools:**

- You can also add additional tools to the toolbar by clicking on the "Extra Tools" button in the "Edit Toolbar" dialog.
- This lets you include tools that might not be in the default toolbar.

#### 6. **Removing Tools:**

- If there are tools you rarely use, you can remove them from the toolbar. Simply uncheck the tools you want to remove in the "Edit Toolbar" dialog.

#### 7. **Saving and Resetting:**

- Once you've customised the toolbar to your liking, you can save your customised toolbar layout as a preset by clicking the "Save Tool Presets" button in the "Edit Toolbar" dialog.
- If you ever want to go back to the default toolbar layout, click the "Reset Toolbar" button.

#### 8. **Tool Selection Shortcuts:**

- For faster tool selection, you can use keyboard shortcuts. For example, pressing "V" on your keyboard will select the Selection Tool, and "P" will select the Pen Tool.

#### ● **Setting Preferences:**

Preferences allow you to customize various settings and options to tailor the application to your specific needs. The preference cover a wide range of aspects, including interface layout, tools behaviour, file handling and performance setting. User can adjust keyboard shortcuts, Color settings, and units of measurement to streamline their workflow.

#### ● **Switching workspaces**

Adobe Illustrator offers a flexible workspace environment that allows you to tailor the application to your specific needs.

The details for managing your workspace:

### **1. Switching between Workspaces:**

- Illustrator provides a variety of predefined workspaces to choose from, like "Essentials," "Typography," "Painting," and more.
- To switch between workspaces, go to the "Window" menu and select "Workspace."
- Here, you'll see a list of available workspaces. Click on the one that best suits your current task. Illustrator will reconfigure the layout to match the selected workspace.

### **2. Saving Custom Workspaces:**

- If you've tailored your workspace to your specific needs, you can save it as a custom workspace.
- Arrange your panels and tools as you like, set up your document views, and even customize keyboard shortcuts if needed.
- To save your custom workspace, go to "Window > Workspace" and select "New Workspace." Give your workspace a name, and click "OK." Your custom workspace is now saved and accessible from the workspace menu.

### **3. Deleting Custom Workspaces:**

- If you no longer need a custom workspace, you can delete it.
- Go to "Window > Workspace" and select "Delete Workspace."
- Choose the custom workspace you want to remove and click "Delete." This won't affect the predefined workspaces; only your custom ones are deletable.

### **4. Resetting to Default Workspace:**

- If you've made changes to your workspace and want to revert to the default layout, you can do so by going to "Window > Workspace" and selecting "Reset Essentials" (or another preset, depending on your choice).

- **Using Keyboard Shortcuts:**

Keyboard shortcuts are a great way to streamline your workflow and perform tasks more efficiently.

**The Explanation of using and customizing keyboard shortcuts:**

### **1. Accessing Keyboard Shortcuts:**

- To access keyboard shortcuts in Illustrator, go to "Edit" (on Windows) or "Illustrator" (on Mac) in the top menu.
- From the dropdown menu, select "Keyboard Shortcuts."

### **2. Default Keyboard Shortcuts:**

- Illustrator comes with a set of default keyboard shortcuts that you can use for common tasks. These are organized into categories like File, Edit, Object, Type, and more.

### **3. Searching for a Shortcut:**

- To find a specific shortcut, type the task or tool name in the search bar in the Keyboard Shortcuts dialog. Illustrator will show you any related shortcuts.

### **4. Changing a Shortcut:**

- To customize a shortcut, select the task or tool from the list.
- Click in the "New Shortcut" field and press the key combination you want to assign.
- If the combination is already in use, Illustrator will notify you. You can choose to reassign it or cancel.

### **5. Saving Custom Sets:**

- You can create custom sets of shortcuts by clicking on the "Save Set" button.
- This allows you to save your personalized shortcuts and load them later.

### **6. Resetting to Defaults:**

- If you ever want to reset your shortcuts to the default settings, click the "Use Default" button. This is handy if you've made a lot of changes and want to start fresh.

### **7. Export and Import Shortcuts:**

- Illustrator allows you to export your custom shortcuts as a file for backup or to use on another computer. You can also import shortcuts from a file.

### **8. Practice and Efficiency:**

- Learning and using keyboard shortcuts takes a bit of practice, but it can greatly increase your efficiency. For example, "V" is for the Selection tool, "P" is for Pen tool, and "C" is for Scissors tool.

### **9. Personalise Your Workflow:**

- You can set shortcuts based on your preferences and the tools you use most frequently. This personalization can save you a lot of time in the long run.



#### **Practical Activity 2.1.4: Use artboards**



#### **Task:**

- 1: Referring to the previous theoretical activity (2.1.2) you are requested to go to the computer lab uses adobe illustrator installed in computer to create a project, customise artboard, create multi artboard document, Arrange the artboards panel, Modify and save a project in adobe illustrator. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to use artboards.
- 4: Referring to the steps provided on task 3, use artboard in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.1.4 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.1.



#### Key readings 2.1.4: Use artboards

##### ➤ Creating a project in adobe illustrator

**Step 1:** Launch Adobe Illustrator

**Step 2:** Open the New Document dialog box. You can do this in three ways:

**Step 3:** Click the "Create New" button on the Start workspace.

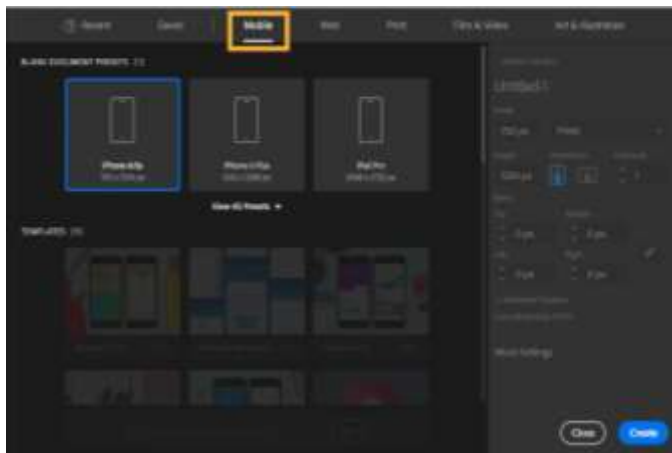
**Step 4:** Choose File > New from the menu bar.

Use the keyboard shortcut Ctrl+N (Windows) or Command+N (macOS).

**Step 5:** Select a category. In the New Document dialog box, you'll see a variety of categories, such as Print, Web, and Mobile. Choose the category that best suits your project. For example, if you're creating a logo for a website, you would choose the Web category.

**Step 6:** Customize your document settings. Depending on the category you chose, you'll be able to customize various settings for your document, such as the page size, orientation, and color mode.

**Step 7:** Click the "Create" button. Once you're satisfied with your document settings, click the "Create" button to create your new project.



##### ➤ Customise artboard

**Step 1:** Select the artboard you want to customize

Click on the artboard you want to customize to select it. The selected artboard will have a blue border around it.

**Step 2:** Open the Properties panel

If the Properties panel is not already open, you can open it by going to Window > Properties or by using the keyboard shortcut Ctrl+F (Windows) or Command+F (macOS).

### **Step 3: Customize artboard properties**

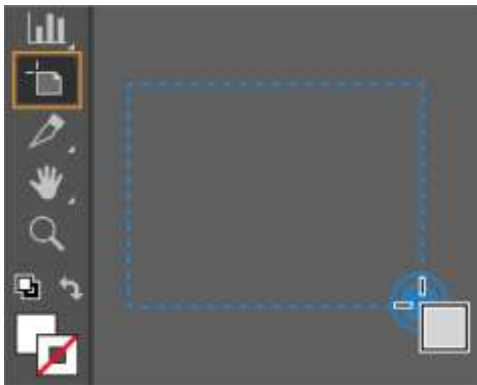
In the Properties panel, you can customize various properties of the selected artboard, including: **Size, Orientation, Background color, Border, Bleed, Margins, Preview quality**

### ➤ **Creating multi artboard document**

Creating artboards allows you to organize and manage your artwork effectively, especially when working on multiple designs or illustrations within a single project.

### **The creation of artboards in Adobe Illustrator:**

#### **Method 1: Using the Artboard Tool**



#### **Step 1: Select the Artboard Tool**

Locate the Artboard Tool in the Tools panel. It usually resembles a square with a diagonal line through it. You can also access the Artboard Tool using the keyboard shortcut Shift+F9.

#### **Step 2: Drag to Create Artboards**

Click and drag on the artboard to create an artboard of the desired size and position. As you drag, the artboard dimensions will display in the Properties panel.

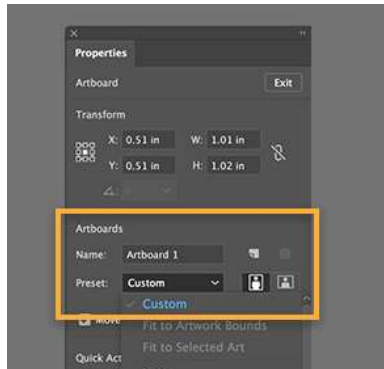
#### **Step 3: Adjust Artboard Properties (Optional)**

If you want to adjust the properties of the newly created artboard, select it and use the Properties panel. You can modify the size, orientation, background color, border, bleed, margins, registration marks, and preview quality.

#### Step 4: Create Additional Artboards (Repeat)

To create additional artboards, repeat steps 2 and 3 for each artboard you want to add. You can create artboards of different sizes and orientations to accommodate your design needs.

#### Method 2: Using the New Document dialog box



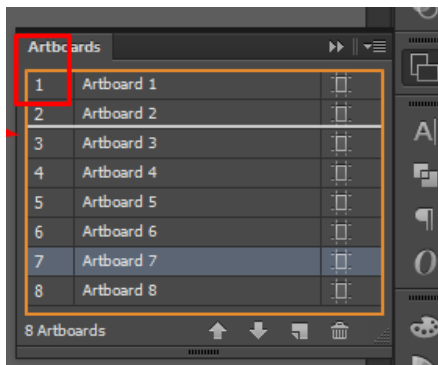
**Step 1:** Open the New Document dialog box (File > New or Ctrl+N).

**Step 2:** In the Preset Details panel, select the desired number of artboards.

**Step 3:** You can also customize the size and orientation of the artboards by clicking the Advanced Settings button.

**Step 5:** Click the Create button.

#### ➤ Arranging the artboards panel



#### Step 1: Open the Artboards Panel

- If the Artboards panel is not already open, you can open it by going to Window > Artboards or by using the keyboard shortcut Ctrl+O (Windows) or Command+O (macOS).

#### Step 2: Change the Panel's Layout

- Click the panel's menu button and select a layout option. There are three layout options available: List, Grid, and Thumbnail.

### **Step 3: Add or Remove Columns and Rows**

- Click the panel's menu button and select Add Columns or Add Rows. You can also remove columns and rows by clicking the X button in the header of the column or row.

### **Step 4: Customize the Appearance of Individual Artboards**

- Click the artboard's name and select a color from the Color Picker. You can also change the opacity of the artboard by dragging the Opacity slider.

### **Step 5: Sort Artboards**

- Click the panel's menu button and select Sort by Name, Sort by Size, or Sort by Date Modified.

#### **➤ Modifying and saving a project in adobe illustrator**

**Modifying and saving a project in Adobe Illustrator** is an essential part of the design process. It allows you to make changes to your artwork, save your progress, and share your work with others.

#### **→ Modifying a Project**

Once you have created an Illustrator project, you can modify it in a variety of ways. Here are some of the things you can do:

- **Edit objects:** You can edit the properties of objects, such as their size, shape, and color.
- **Add or delete objects:** You can add new objects to your project or delete existing objects.
- **Apply effects:** You can apply effects to your objects, such as filters, shadows, and glows.
- **Change the document settings:** You can change the document settings, such as the page size, orientation, and margins.

#### **→ Saving a Project**

It is important to save your project regularly to prevent losing your work. To save your project, you can do the following:

**Step 1:** Choose File > Save from the menu bar.

Use the keyboard shortcut Ctrl+S (Windows) or Command+S (macOS).

**Step 2:** Choose the location where you want to save your project>Give it a name

Click the Save button in the toolbar.

**Step 3:** Saving a Project in a Different Format

You can also save your project in a different format, such as PNG, JPEG, or SVG.

To do this, choose File > Export > Export For ([Format]) from the menu bar.



### **Practical Activity 2.1.5: Use layers**

#### **Task:**

- 1: Referring to the previous theoretical activities (2.1.2) you are requested to go to the computer lab use the computer which installed adobe Illustrator to use the layer panel, Create, edit layers and sublayers, move layers, Merge layer, Arrange layers in adobe illustrator. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to use layers
- 4: Referring to the steps provided on task 3, use layers in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.1.5 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.1.



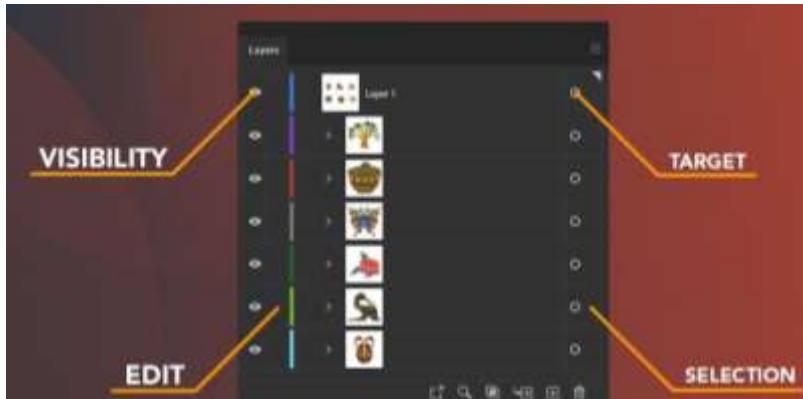
### **Key readings 2.1.5: Use layers**

#### **✓ Use layers**

Using layers is one of the most important things to learn when using Adobe

Illustrator. Layers allow you to organize your artwork, add and remove elements without affecting other elements, and control the order in which they appear.

- **Using the layer panel**



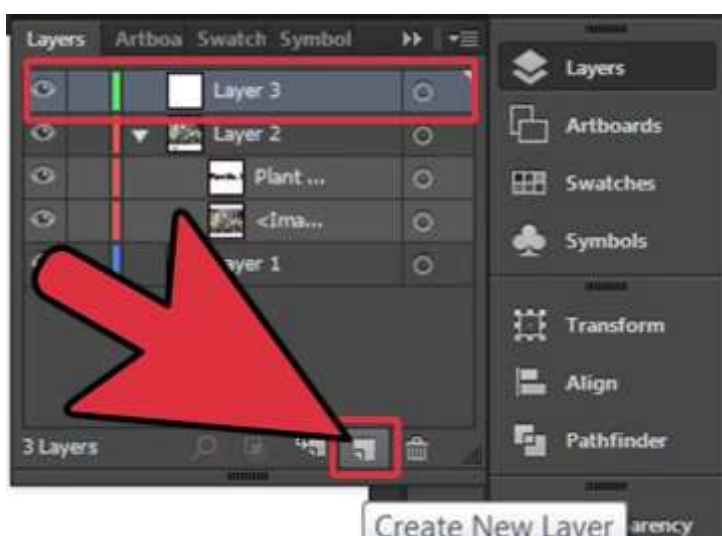
### **Accessing the Layers Panel**

**Open the Layers panel:** If the Layers panel is not already open, you can access it by going to Window > Layers or by using the keyboard shortcut F9 (Windows) or Fn+F9 (macOS).

- **Creating Layers**

- **Create a new layer**

**To create a new layer,** click the "Create New Layer" button at the bottom of the Layers panel. A new layer named "Layer 1" will be added to the list of layers.



**Create a sublayer:** To create a sublayer, drag and drop an existing layer onto

another layer. The sublayer will be indented below the parent layer.

- **Editing Layers**

- **Rename a layer:** To rename a layer, double-click the layer's name in the Layers panel and type in the desired name.
- **Change layer properties:** To change a layer's properties, double-click the layer's name in the Layers panel. This will open the Layer Options dialog box, where you can modify the layer's name, color, blending mode, and other properties.

- **Arranging Layers**

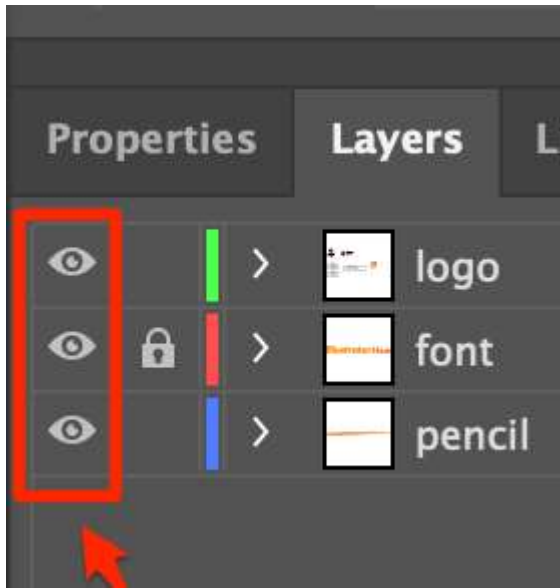
**Reorder layers:** To reorder layers, click and drag a layer up or down in the Layers panel. The layer will be moved to the new position.

**Use layer shortcuts:** You can also use the following keyboard shortcuts to arrange layers:

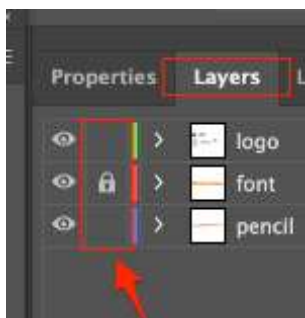
- **Move Up:** Shift+↑
- **Move Down:** Shift+↓
- **Send to Back:** Ctrl+Alt+[ (Windows) or Command+Option+[ (macOS)
- **Bring to Front:** Ctrl+Alt+] (Windows) or Command+Option+] (macOS)

**Controlling Layer Visibility and Locking**

- **Toggle layer visibility:** To toggle the visibility of a layer, click the eye icon next to the layer's name in the Layers panel. A hidden layer will not be visible in the artboard.



- **Lock a layer:** To lock a layer, click the lock icon next to the layer's name in the Layers panel. A locked layer cannot be edited or accidentally moved.
- **Unlock a layer:** To unlock a layer, click the locked icon next to the layer's name in the Layers panel. The layer will be unlocked and editable.



### Using Layer Blending Modes

**Set blending mode:** To set the blending mode for a layer, select the desired mode from the Blending Mode dropdown menu in the Layers panel. Blending modes control how the color of a layer interacts with the colors of underlying layers.

- **Merging layers**

**Step 1: Select the layers you want to merge:** Hold down the Ctrl (Windows) or Command (macOS) key to select multiple layers, or click and drag to select a contiguous range of layers.

**Step 2: Access the Layer Options menu:** Right-click on any of the selected layers

and choose "Merge Selected" from the context menu. Alternatively, you can click the hamburger menu (three stacked horizontal lines) in the Layers panel and select "Merge Selected".

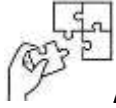
**Step 3: Confirm the merge:** A confirmation dialog box will appear asking if you want to merge the selected layers. Click "OK" to proceed with the merge.



### Points to Remember

- Artboards in Adobe Illustrator serve as individual workspaces within a document where users can create and design their artwork. They can be customized in size, orientation, and arrangement to fit specific design needs.
- Layers in Adobe Photoshop are essential organizational tools that allow users to separate and work on different elements of an image independently.
- **To select and customize the toolbar**
- **Selecting a Workspace:**
- Open Adobe Illustrator and go to the "Window" menu.
- Select "Workspace" to view a list of available workspaces, such as Essentials, Typography, or Advanced.
- **Customizing the Toolbar:**
- Click on the small double-arrow icon at the bottom of the toolbar to enter the customization mode.
- In the customization mode, you can see the entire toolbar with icons and tools.
- To add a tool to the toolbar, drag it from the Tools panel (found in the left sidebar) to the toolbar.
- To remove a tool, drag it out of the toolbar to the Tools panel.
- **Creating a project in Adobe Illustrator**
- Launch Adobe Illustrator and open the New Document dialog box.
- Select a category (Print, Web, or Mobile) and customize document settings.
- Click the "Create" button to create your new project.
- **Customizing artboards**
- **Step 1:** Select the artboard you want to customize.
- **Step2:** Open the Properties panel and adjust artboard properties (size, orientation, background color, etc.).
- **Step 3:** Repeat steps for additional artboards.
- **To access layers panel:** Window > Layers or by using the keyboard shortcut F7
- To create a new layer: Click the "Create New Layer" button at the bottom of the Layers panel.

- **To create a sublayer:** drag and drop an existing layer onto another layer. The sublayer will be indented below the parent layer.
- **To rename a layer:** To rename a layer, double-click the layer's name in the Layers panel and type in the desired name.



#### **Application of learning 2.1.**

You're a graphic designer tasked with creating a series of social media graphics for a client's marketing campaign. The client has provided you with a collection of product images and branding assets to incorporate into the designs. To efficiently manage the project, you decide to leverage artboards and layers in Adobe Illustrator.



## Indicative content 2.2: Create Vector Paths



Duration: 8 hrs



### Theoretical Activity 2.2.1: Description of vector paths



#### Tasks:

- 1: You are requested to answer the following questions related to the vector paths:
  - i. What do you understand about Vector paths?
  - ii. Provide an explanation of tools used in vector paths
- 2: Participate in group formulation.
- 3: Present the findings/answers to the whole class
- 4: For more clarification, read the key readings 2.2.1. In addition, ask questions where necessary.



### Key readings 2.1.1.: Description of vector paths

- **Vector paths**

**Vector paths** are the fundamental building blocks of illustrations and designs. Unlike raster graphics, which are composed of pixels, vector paths are defined by mathematical formulas that describe their shape and properties. This makes vector graphics infinitely scalable and resolution-independent, allowing them to be resized and printed without any loss of quality.

**The advantages of using vector paths in Adobe Illustrator:**

- **Scalability:** Vector paths can be resized to any size without any loss of quality.
- **Resolution independence:** Vector paths can be printed at any resolution without any loss of quality.
- **Smoothness:** Vector paths can be made to appear smooth and crisp, even at very high zoom levels.
- **Editability:** Vector paths can be easily edited and modified.
- **File size:** Vector files are typically much smaller than raster files.

**The disadvantages of using vector paths in Adobe Illustrator:**

- **Complexity:** Vector paths can be more complex to create and edit than raster graphics.
- **Limited effects:** Some effects, such as filters and blurs, cannot be applied to vector paths.
- **File compatibility:** Some file formats, such as JPEG and PNG, do not support vector graphics.

The term "**path type**" refers to the fundamental classification of a path based on its structural characteristics and how it is represented in the software.

These path types i

1. **Open Path:** An open path has a beginning and an end, with the path starting at one anchor point and ending at another. Open paths are commonly used to create outlines, borders, and strokes.
  2. **Closed Path:** A closed path has no beginning or end, with the path connecting back to itself to form a closed shape. Closed paths are commonly used to create solid shapes, fills, and complex designs.
  3. **Compound Path:** A compound path is a grouping of two or more paths that are combined into a single path. This allows for layered designs and complex shapes with multiple components.
  4. **Sub-path:** A sub-path is a segment of a compound path that can be independently edited and manipulated. This enables precise control over individual sections of a complex path.
  5. **Text Path:** A text path is a path that is created by placing text along a curved or straight path. This creates a unique text effect that follows the contours of the path.
  6. **Clipping Path:** A clipping path is a special type of path that is used to mask or hide portions of another object. It essentially cuts away the unwanted areas, revealing only the desired portion.
  7. **Dashed Path:** A dashed path is a path that has a series of dashes or gaps along its length. This creates a stylistic effect and can be used to indicate movement or breaks in the path.
  8. **Curved Path:** A curved path is a path that has one or more curves along its length. This allows for creating organic and smooth shapes that follow natural contours.
  9. **Straight Path:** A straight path is a path that consists of one or more straight line segments. This is commonly used for creating geometric shapes, borders, and outlines.
  10. **Smart Guide Path:** A smart guide path is a path that automatically snaps to other objects, making it easier to align and position objects precisely.
- **The Pen Tool**

**The Pen Tool;** in Adobe Illustrator is a powerful tool that allows you to create precise and complex vector paths. It is the go-to tool for creating illustrations, logos, icons, and other vector graphics.

Unlike other drawing tools that rely on dragging or clicking, the Pen tool utilizes anchor points and direction lines to define the shape of a path. Anchor points are the points that define the shape of the path, and direction lines determine the direction of the curve between anchor points. By placing anchor points strategically and adjusting the direction lines, you can create a wide variety of shapes, from simple lines to intricate curves.

**The key features of the Pen Tool in Adobe Illustrator:**

1. **Precise path creation:** The Pen tool allows you to create precise and accurate vector paths, making it ideal for creating detailed illustrations and designs.
2. **Versatility:** The Pen tool can be used to create a wide variety of shapes, including straight lines, curves, complex shapes, and closed shapes.
3. **Control over curves:** The direction lines of the Pen tool allow you to control the curvature of your paths, enabling you to create smooth and natural curves.
4. **Anchor point editing:** You can easily adjust the position, curvature, and deletion of anchor points to refine your path.
5. **Smoothness and sharpness:** The Pen tool provides control over the smoothness or sharpness of curves, allowing you to create both smooth organic shapes and sharp geometric shapes.
6. **Combination with other tools:** The Pen tool can be used in conjunction with other tools, such as the Shape Builder tool and the Pathfinder tool, to create even more complex designs.
7. **Essential for vector illustration:** The Pen tool is an essential tool for any vector illustrator, as it provides the precision and flexibility needed to create high-quality vector graphics.

- **Control handles**

**Control handles** are small squares or circles that appear on anchor points. They play a crucial role in manipulating and shaping vector paths, allowing you to control the direction and curvature of curves. By adjusting the control handles, you can fine-tune the shape of your path and achieve the desired design aesthetic.

- **The Selection tool**

**The Selection tool** is a fundamental tool in Adobe Illustrator that allows you to select and manipulate objects within your artwork. It is the primary tool for interacting with objects, enabling you to move, resize, rotate, and transform them

as needed. The Selection tool is also used to select multiple objects, group them together, and apply attributes to them collectively.

**The key features of the Selection tool in Adobe Illustrator:**

1. **Object manipulation:** The Selection tool allows you to select and manipulate individual objects, including paths, shapes, text, and images. You can move, resize, rotate, and transform objects using the Selection tool.
2. **Multi-object selection:** The Selection tool can select multiple objects simultaneously. Click and drag to create a marquee selection, or hold down the Shift key while clicking on individual objects to add them to the selection.
3. **Grouping and ungrouping:** The Selection tool can group and ungroup objects. Select multiple objects and right-click to access the grouping options. Grouping objects allows you to manipulate them as a single unit.
4. **Attribute application:** The Selection tool allows you to apply attributes to selected objects. Select the desired objects and use the Swatches panel, the Control panel, or the Properties panel to apply attributes such as fill color, stroke color, stroke width, and opacity.
5. **Sub selection:** The Selection tool can be used to select individual anchor points or segments within a path. Hold down the Command key (Mac) or Control key (Windows) while clicking on a path to select its anchor points or segments.
6. **Direct selection:** The Selection tool can be used to directly select individual components within a grouped object. Double-click on a grouped object to enter direct selection mode and select individual components.
7. **Object alignment and distribution:** The Selection tool can be used to align and distribute selected objects. Use the Align panel or the Distribute panel to align objects horizontally, vertically, or to edges, and to distribute them evenly or with specified spacing.
8. **Object transformation:** The Selection tool can be used to transform selected objects using the Transform panel. This includes scaling, rotating, skewing, and reflecting objects.
9. **Object combination and simplification:** The Selection tool can be used to combine or simplify objects using the Pathfinder panel. This includes combining objects using different operations, such as Add, Subtract, Intersect, and Exclude.

- **The Scale tool**

**The Scale tool** in Adobe Illustrator is a versatile tool that allows you to resize objects uniformly or non-uniformly. It is commonly used to adjust the size of paths, shapes, text, and images to fit your desired dimensions and achieve the desired scale within your artwork.

### **The key features of the Scale tool in Adobe Illustrator:**

1. **Uniform scaling:** The Scale tool allows you to resize objects uniformly, maintaining their original proportions. Select the desired object and click on the Scale tool in the toolbar. Click and drag a corner handle to resize the object while maintaining its proportions.
2. **Non-uniform scaling:** The Scale tool also allows you to resize objects non-uniformly, altering their width and height independently. Select the desired object and click on the Scale tool in the toolbar. Click and drag a side handle to resize the object's width, or click and drag a top or bottom handle to resize the object's height.
3. **Constrained scaling:** The Scale tool can be used to scale objects while constraining their proportions. Hold down the Shift key while clicking and dragging a corner handle to resize the object while maintaining its original aspect ratio.
4. **Reference point:** The Scale tool allows you to specify a reference point for scaling. To change the reference point, click on the desired location within the object before clicking and dragging a handle.
5. **Scaling by percentage:** The Scale tool allows you to scale objects by a specific percentage. Enter the desired percentage value in the Scale dialog box, accessible by double-clicking the Scale tool or using the Transform panel.
6. **Scaling multiple objects:** The Scale tool can be used to scale multiple objects simultaneously. Select the desired objects and click on the Scale tool. Click and drag a corner handle to resize all selected objects while maintaining their proportions.
7. **Scaling with other tools:** The Scale tool can be used in conjunction with other tools, such as the Free Transform tool, to achieve more precise transformations. Use the Free Transform tool to scale objects while also rotating or skewing them simultaneously.
8. **Scaling with keyboard shortcuts:** The Scale tool can be used with keyboard shortcuts for faster adjustments. Use the [ ] keys to increase or decrease the object's size, and use the Shift key while pressing [ ] keys to scale the object uniformly.

- **The Rotate**

The Rotate tool in Adobe Illustrator is a versatile tool that allows you to rotate objects around a fixed point. It is commonly used to orient paths, shapes, text, and images to specific angles, creating visual interest and dynamic compositions within your artwork.

### **The key features of the Rotate tool in Adobe Illustrator:**

1. **Rotation around a fixed point:** The Rotate tool allows you to rotate objects around a fixed point, which can be any point within the object or outside the object. The default reference point is the object's center point, but you can specify a different

reference point by clicking on the desired location before clicking and dragging the rotation handle.

2. **Angle rotation:** The Rotate tool allows you to rotate objects by a specific angle. Enter the desired angle value in the Rotate dialog box, accessible by double-clicking the Rotate tool or using the Transform panel.
3. **Visual feedback:** The Rotate tool provides visual feedback during rotation, displaying the angle and reference point as you rotate the object. This enables precise and controlled rotation.
4. **Clockwise and counterclockwise rotation:** The Rotate tool allows you to rotate objects clockwise or counterclockwise. Click and drag the rotation handle in one direction to rotate clockwise, and drag it in the opposite direction to rotate counterclockwise.
5. **Rotating multiple objects:** The Rotate tool can be used to rotate multiple objects simultaneously. Select the desired objects and click on the Rotate tool. Click and drag the rotation handle to rotate all selected objects around the same reference point.
6. **Rotating with other tools:** The Rotate tool can be used in conjunction with other tools, such as the Free Transform tool, to achieve more complex transformations. Use the Free Transform tool to rotate objects while also scaling or skewing them simultaneously.
7. **Rotating with keyboard shortcuts:** The Rotate tool can be used with keyboard shortcuts for faster adjustments. Use the Alt + ] and Alt + [ keys to rotate the selected object clockwise or counterclockwise by 45 degrees.
8. **Applying rotation to strokes and fills:** The Rotate tool can apply rotation to both strokes and fills of an object. To rotate only the stroke or fill, select the desired stroke or fill before using the Rotate tool.

- **The Direct Selection tool**

**The Direct Selection tool** in Adobe Illustrator is a powerful tool that allows you to select and manipulate individual anchor points and segments within a path or shape. It is essential for refining the shape and appearance of vector paths, enabling you to create intricate details, smooth curves, and precise adjustments.

**The key features of the Direct Selection tool in Adobe Illustrator:**

1. **Individual anchor point selection:** The Direct Selection tool allows you to select individual anchor points within a path or shape. Click on an anchor point with the Direct Selection tool to select it.
2. **Segment selection:** The Direct Selection tool allows you to select individual segments within a path or shape. Click and drag across a segment with the Direct Selection tool to select it.

3. **Multiple anchor point selection:** The Direct Selection tool allows you to select multiple anchor points simultaneously. Hold down the Shift key while clicking on individual anchor points to add them to the selection.
4. **Marquee selection:** The Direct Selection tool allows you to select a group of anchor points using a marquee selection. Click and drag to create a marquee selection, and all anchor points within the marquee will be selected.
5. **Anchor point manipulation:** The Direct Selection tool allows you to manipulate selected anchor points. Click and drag an anchor point to move it, or click and drag one of its direction lines to adjust the curve of the path.
6. **Segment manipulation:** The Direct Selection tool allows you to manipulate selected segments. Click and drag a segment to move it, or click and drag one of its control handles to adjust the curvature of the segment.
7. **Adding and deleting anchor points:** The Direct Selection tool allows you to add and delete anchor points. Right-click on a selected anchor point and select "Add Anchor Point" or "Delete Anchor Point" from the context menu.
8. **Converting anchor points and corners:** The Direct Selection tool allows you to convert anchor points and corners. Right-click on a selected anchor point and select "Convert to Corner" or "Convert to Curved" from the context menu.
9. **Fine-tuning curves:** The Direct Selection tool allows you to fine-tune the curves of a path using the Smooth tool. Select the Smooth tool and click and drag along the path to automatically smooth out irregularities and create a more natural-looking curve.

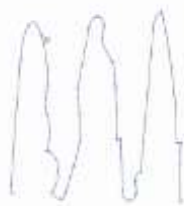


### Practical Activity 2.2.2: Create vector paths



#### Task:

1: Referring to the previous theoretical activities (2.2.1) you are requested to go to the computer lab use the computer which installed adobe Illustrator to use Path types, Pen tool, control handles, selection tool, scale tool, rotate tool, direct selection tool. This task should be done individually. Like



- 2: Apply safety precautions.
- 3: Present out the steps to create vector paths.
- 4: Referring to the steps provided on task 3, create vector paths in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.2.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.2.

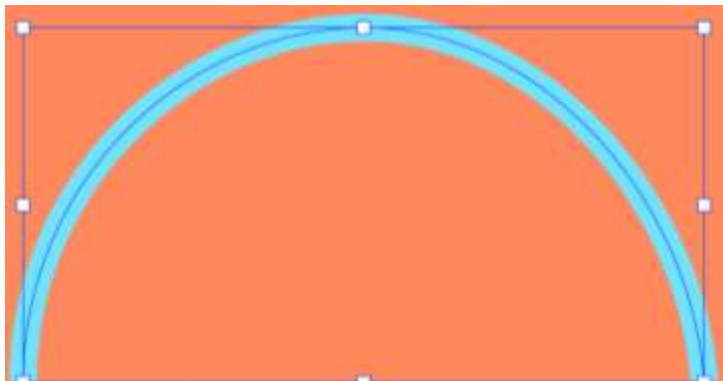


### **Key readings 2.2.2: Create vector paths**

- **Create vector paths**

Vector paths are the building blocks of vector graphics, allowing you to create precise and scalable designs. In Adobe Illustrator, you can create vector paths using various path types and tools.

- **Creating Open Paths**



**To create an open path using the Pen tool, follow these steps:**

**Step 1:** Select the Pen tool from the toolbar.

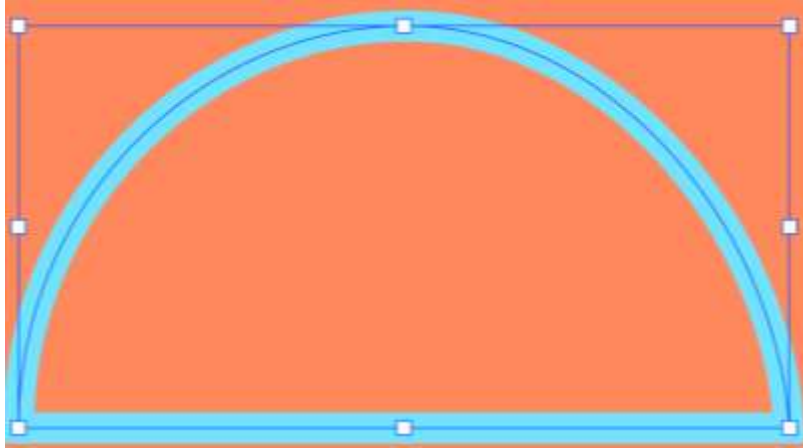
**Step 2:** Click and drag to draw a path segment without releasing the mouse button.

**Step 3:** To add anchor points along the path, click at desired locations while dragging.

**Step 4:** To create a straight line, hold the Shift key while clicking and dragging.

**Step 5:** To end the path, release the mouse button.

- **Creating Closed Paths**



**To create a closed path using the Pen tool, follow these steps:**

**Step 1:** Select the Pen tool from the toolbar.

**Step 2:** Click and drag to draw a path segment, and then click back on the starting point to close the path.

**Step 3:** To add anchor points along the path, click at desired locations while dragging.

**Step 4:** To create a straight line, hold the Shift key while clicking and dragging.

➤ **Converting Paths**

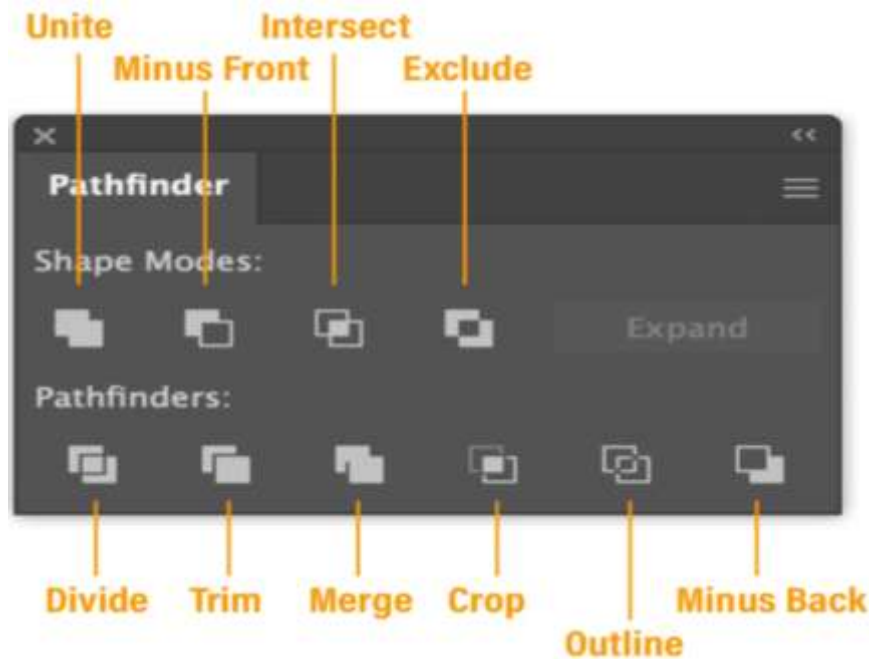
You can convert an open path to a closed path and vice versa using the Direct Selection tool:

**Step 1:** Select the path with the Direct Selection tool.

**Step 2:** If it's an open path, double-click the starting point to close it.

**Step 3:** If it's a closed path, double-click the endpoint to open it.

➤ **Path Operations**



Adobe Illustrator offers various path operations to manipulate and combine paths:

- **Union:** Combines multiple paths into a single closed path, eliminating overlapping areas.
- **Intersect:** Creates a new path from the overlapping areas of two or more paths.
- **Minus Front:** Subtracts the topmost path from the selected paths, leaving the remaining areas.
- **Exclude:** Creates a new path from the areas that do not overlap in the selected paths.
- **Divide:** Splits a closed path into multiple open paths based on the intersection points with other paths.
- **Cap:** Adds caps to the ends of open paths, closing them off.
- **Join:** Merges adjacent anchor points of two or more paths into a single anchor point.

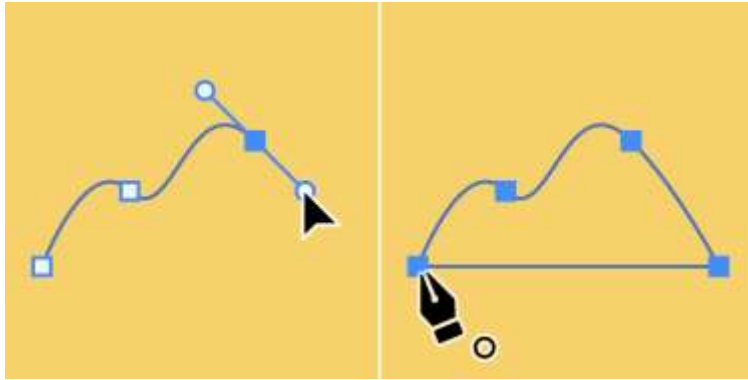
**To use path operations, follow these steps:**

**Step 1: Select the paths you want to use:** Click and drag to select multiple paths, or hold down the Ctrl (Windows) or Command (macOS) key to select individual paths.

**Step 2: Choose the desired path operation:** Click the desired path operation button in the Pathfinder panel. The Pathfinder panel is located in the right-side toolbar.

**Step 3: View the results:** The selected paths will be modified according to the chosen path operation. The resulting paths will be displayed in the artboard.

- **Using the Pen Tool**



**Step 1:** Select the Pen tool from the toolbar.

**Step 2:** Click and drag to draw a path segment.

**Step 3:** To add anchor points, click at the desired points along the path.

**Step 4:** To adjust the curvature of a path segment, click and drag the control handles that appear next to anchor points.

**Step 5:** To create a straight line, click and hold the Shift key while clicking and dragging.

- **Using Control Handles**

## Curved line



Control handles provide control over the curvature of a path segment.

**Step 1:** Select a path segment with the Direct Selection tool.

**Step 2:** Click and drag the control handles to adjust the curvature of the path segment.

**Step 3:** Double-click a control handle to convert it to a corner point, which creates a sharp angle.

- **Using the Direct Selection Tool**

The Direct Selection tool allows you to directly select and manipulate individual

anchor points and control handles.

**Step 1:** Select the Direct Selection tool from the toolbar.

**Step 2:** Click an anchor point or control handle to select it.

**Step 3:** Click and drag to move an anchor point or control handle.

**Step 4:** Double-click an anchor point to remove it, or double-click a control handle to convert it to a corner point.

- **Using the Scale Tool**

The Scale tool allows you to resize vector paths uniformly or non-uniformly.

**Step 1:** Select the desired path with the Selection tool.

**Step 2:** Click and drag a corner handle to resize the path uniformly.

**Step 3:** Hold down the Ctrl (Windows) or Command (macOS) key while clicking and dragging a corner handle to resize the path non-uniformly.

- **Using the Rotate Tool**

The Rotate tool allows you to rotate vector paths around a specific point.

**Step 1:** Select the desired path with the Selection tool.

**Step 2:** Click and drag the rotation point handle to rotate the path.

**Step 3:** Hold down the Alt (Windows) or Option (macOS) key while clicking and dragging the rotation point handle to rotate the path from its center.

**Step 4:** You can also specify the rotation angle in the Rotate dialog box, accessible from the Control panel.

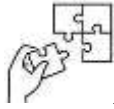
**Additional Tips**

- Use the Eyedropper tool to quickly apply the path properties of one object to another.
- Use the Pathfinder tools to combine, subtract, intersect, or exclude shapes based on their overlapping areas.
- Use the Appearance panel to adjust the visual properties of your paths, such as stroke width, stroke color, and fill color.
- Use the Live Paint Bucket tool to fill closed paths with color or patterns.



### Points to Remember

- Tools used in creating vector paths in Adobe Illustrator are essential for precise and intricate design work. These tools commonly used in working with vector paths including: **Pen Tool, Control handles, Selection tool, Scale tool, rotate tool, Direct Selection tool.**
- **Creating Open Paths:** use the Pen tool to draw open paths>Hold the Shift key while dragging to create straight lines>Click and drag to add anchor points>Click and drag control handles to adjust curvature.
- **Creating Closed Paths:** use the Pen tool to draw closed paths>Double-click the starting point to close an open path>Double-click the endpoint to open a closed path.
- **Converting Paths:** use the Direct Selection tool to convert paths>Double-click the starting point to convert an open path to a closed path>Double-click the endpoint to convert a closed path to an open path.



### **Application of learning 2.2.**

You're a graphic designer tasked with creating a logo for a new client's business. They've provided you with a rough sketch of their vision, and now it's your job to bring it to life using vector paths in Adobe Illustrator.

Like this





## Indicative content 2.3. Design Shapes



Duration: 8 hrs



### Theoretical Activity 2.3.1: Description of basic shapes



#### Tasks:

1: You are requested to answer the following questions related to the shapes in Adobe Illustrator:

- I. Could you provide a description of basic shapes?
- II. Can you provide an explanation of object orientation?
- III. Can you provide an explanation of:
  - a) fill and strokes
  - b) swatches and color panel
  - c) Opacity
  - d) Type tools
  - e) Character style panel

2: Provide the answer for the asked questions and write them on papers.

3: Present the findings/answers to the whole class

4: For more clarification, read the key readings 2.3.1. In addition, ask questions where necessary.



### Key readings 2.3.1.: Description of basic shapes

- **Shapes**

**Shapes** are fundamental elements that can convey various meanings and messages. Shapes are two-dimensional forms with defined boundaries, such as squares, circles, triangles, or custom shapes. They are essential tools for designers and are used to create visually appealing compositions, convey ideas, and communicate messages effectively.

#### The shapes used in graphic design

- **Visual Hierarchy:** Shapes can be used to establish a visual hierarchy within a design. Larger or bolder shapes often attract more attention, guiding the viewer's eyes to specific elements on a page.

- **Emotional Impact:** Different shapes can evoke different emotions. For example, sharp and angular shapes like triangles can convey energy, aggression, or tension, while soft and rounded shapes like circles can represent unity, harmony, or stability.
- **Symbolism:** Certain shapes have cultural or universal meanings. For instance, a heart shape is commonly associated with love, while a stop sign (an octagon) universally signals to halt. Designers can leverage these associations to enhance the message they want to convey.
- **Balance and Symmetry:** Shapes are instrumental in creating balance and symmetry in designs. Symmetrical shapes can create a sense of stability and order, while asymmetrical arrangements can add dynamism and interest.
- **Whitespace:** The empty spaces (negative spaces) between and around shapes are equally important in graphic design. Properly utilizing whitespace can enhance readability, draw attention to specific elements, and create a sense of sophistication in the overall design.
- **Composition:** Shapes are used to create the overall composition of a design. They can be combined, overlapped, or arranged in specific ways to create visually appealing layouts, whether in print media, web design, or other forms of visual communication.
- **Branding:** Unique shapes or outlines are often used in logos and brand identities to create distinct and memorable visual representations of a company or product.
- **Basic shapes**

**Basic shapes** refer to simple, geometric forms that are commonly used as building blocks for creating more complex designs. These shapes include



## Lines



**Lines** are one of the most basic shapes in graphic design. They can be used to create a variety of different effects, such as:

- **Leading the viewer's eye:** Lines can be used to lead the viewer's eye around a design, or to focus their attention on a particular element.
- **Creating emphasis:** Lines can be used to create emphasis on a particular element, such as a heading or a call to action.
- **Dividing space:** Lines can be used to divide space on a page or screen, to create a sense of order and organization.
- **Creating mood:** Lines can be used to create different moods and atmospheres in a design. For example, horizontal lines can create a sense of calm and stability, while vertical lines can create a sense of energy and excitement.
- **Curves**



**Curves** are another basic shape in graphic design. They can be used to create a variety of different effects, such as:

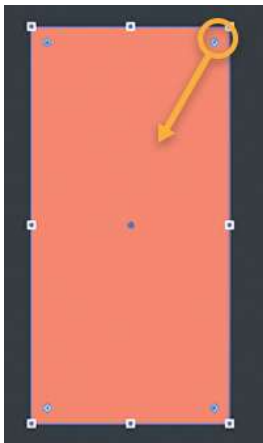
- **Softening the mood:** Curves can be used to soften the mood of a design and make it more inviting.
- **Creating a sense of flow:** Curves can be used to create a sense of flow and movement in a design.
- **Suggesting depth:** Curves can be used to suggest depth in a design, by creating the illusion of perspective.
- **Creating a sense of dynamism:** Curves can be used to create a sense of dynamism and excitement in a design.

**Spirals**



**Spirals** are more complex shapes than lines and curves, but they can be used to create some of the most visually appealing and effective designs. Spirals can be used to:

- **Draw attention:** Spirals are naturally eye-catching, and can be used to draw attention to a particular element in a design.
- **Create a sense of mystery and intrigue:** Spirals can create a sense of mystery and intrigue in a design, by suggesting that there is more to see than what is immediately apparent.
- **Represent growth and change:** Spirals can be used to represent growth and change, as they are often associated with natural phenomena such as seashells and galaxies.
- **Rectangles**

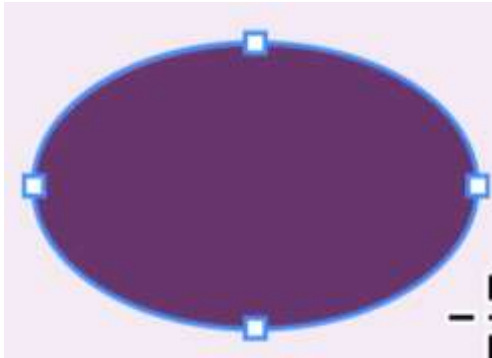


**Rectangles** are one of the most common shapes in graphic design. They are versatile and easy to use, and can be used to create a wide range of different designs. Rectangles can be used to:

- **Create a sense of structure and order:** Rectangles can be used to create a sense of structure and order in a design, by providing a framework for other elements.
- **Group related elements:** Rectangles can be used to group related elements together, making them easier for the viewer to scan and understand.

- **Create contrast:** Rectangles can be used to create contrast with other shapes, such as circles and triangles. This can help to make a design more visually appealing and interesting.

- **Ellipses**



**Ellipses** are similar to circles, but they are elongated in one direction. This gives them a more unique and interesting appearance. Ellipses can be used to create a variety of different effects, such as:

- **Creating a sense of movement and flow:** Ellipses can be used to create a sense of movement and flow in a design, by suggesting that the elements are moving in a particular direction.
- **Adding visual interest:** Ellipses can be used to add visual interest to a design, by breaking up the monotony of straight lines and rectangles.
- **Representing femininity and elegance:** Ellipses are often associated with femininity and elegance, and can be used to create a sense of sophistication in a design.

- **Polygons**



**Polygons** are shapes with multiple sides and angles. They can be used to create a variety of different effects, such as:

- **Creating a sense of complexity and visual interest:** Polygons can be used to create a sense of complexity and visual interest in a design.
- **Representing different concepts:** Polygons can be used to represent different concepts, such as strength, stability, and power.

- **Creating patterns and textures:** Polygons can be used to create patterns and textures, which can add visual interest and depth to a design.
- **Stars**

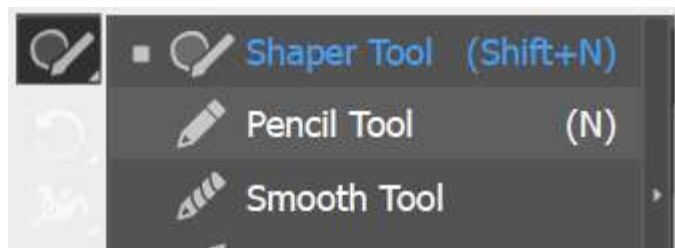


**Stars** are unique and eye-catching shapes that can be used to create a variety of different effects, such as:

- **Adding a sense of fun and excitement:** Stars can be used to add a sense of fun and excitement to a design.
- **Representing celebration and achievement:** Stars are often associated with celebration and achievement, and can be used to create a sense of occasion in a design.
- **Adding a touch of luxury and glamour:** Stars can be used to add a touch of luxury and glamour to a design.

- **Pencil tool for freehand drawing**

**The Pencil tool** is a freehand drawing tool that allows you to create freeform paths and shapes. It is similar to the brush tool in other software, but it is more precise and easier to control.

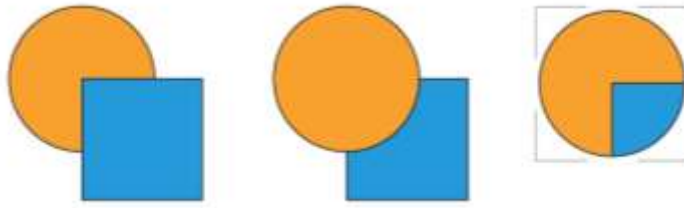


The Pencil tool is a versatile tool that can be used for a variety of tasks, including:

- Drawing illustrations
- Creating sketches and concepts
- Creating logos and icons
- Creating paths for text to follow
- Creating masks and clipping paths
- Editing existing paths

- **Modifying shapes and paths**

### ➤ Drawing modes



- **Drawing modes** control how new artwork is drawn in relation to existing artwork. There are three drawing modes: Normal, Draw Behind, and Draw Inside.
- **Normal mode:** This is the default drawing mode. New artwork is drawn on top of existing artwork.
- **Draw Behind mode:** New artwork is drawn behind all existing artwork.
- **Draw Inside mode:** New artwork is drawn inside existing artwork.

**Drawing modes can be used to create a variety of effects, such as:**

- **Creating depth:** By drawing some artwork in the Draw Behind mode, you can create the illusion of depth.
- **Creating masks:** By drawing artwork in the Draw Inside mode, you can create masks that hide or reveal underlying artwork.
- **Creating clipping paths:** By drawing artwork in the Draw Inside mode, you can create clipping paths that restrict the area where other artwork is displayed.

Drawing modes can also be used to simplify the drawing process. For example, if you are drawing a complex shape, you can draw the outline of the shape in the Normal mode and then fill it in with colour in the Draw Inside mode. This can be helpful for creating shapes that are difficult to draw using the fill tools.

#### • **Compound paths and shapes**

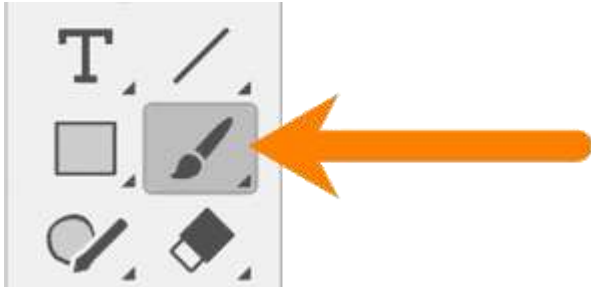
A compound path in Adobe Illustrator is a group of two or more paths that are treated as a single object. Compound paths can be used to create a variety of effects, such as:

- **Creating complex shapes:** Compound paths can be used to create shapes that would be difficult or impossible to create using basic drawing tools.
- **Adding holes to shapes:** Compound paths can be used to create shapes with holes in them.
- **Creating outlines around shapes:** Compound paths can be used to create outlines around shapes, which can be used to create a variety of effects, such as drop shadows and strokes.

- **Creating masks:** Compound paths can be used to create masks that hide or reveal underlying artwork.

#### Examples of the use of compound paths in Adobe Illustrator:

##### ➤ The Brush tool



**The Brush Tool** is a versatile drawing tool that allows users to create strokes of various shapes, sizes, and styles. It mimics the look of traditional artistic brushes and can be used to draw freeform paths, lines, shapes, and intricate designs. The Brush Tool is particularly useful for creating artistic illustrations, digital paintings, calligraphy, and decorative elements in vector format.

#### Features and functionalities of the Brush Tool in Adobe Illustrator:

- **Brush Libraries:** Illustrator provides a wide range of brush libraries that include various brush styles, such as artistic brushes, pattern brushes, scatter brushes, and more. Users can access these libraries to choose the desired brush style for their artwork.
- **Custom Brushes:** Users can create custom brushes by modifying existing brushes or designing new ones from scratch. Custom brushes allow for unique and personalized artistic effects, giving artists and designers creative freedom.
- **Stroke Settings:** The Brush Tool offers extensive stroke settings, allowing users to adjust the size, opacity, color, and other attributes of the brush strokes. These settings can be adjusted to achieve different visual effects and textures.
- **Pressure Sensitivity:** For users with graphic tablets or stylus devices that support pressure sensitivity, Illustrator's Brush Tool can respond to pressure, tilt, and rotation. This feature enables artists to create natural and expressive brush strokes that vary in thickness and opacity based on pressure.
- **Editing Paths:** Brush strokes in Illustrator are vector-based, which means they are composed of editable paths. Users can modify and edit the paths created with the Brush Tool using Illustrator's selection and editing tools, ensuring precise control over the artwork.
- **Variable Width Profiles:** Illustrator allows users to apply variable width profiles to brush strokes. This feature enables artists to create tapered or width-varying strokes, adding depth and dimension to illustrations.

- **Artistic Effects:** The Brush Tool can be used to create a wide range of artistic effects, from realistic pencil sketches to bold ink drawings. By experimenting with different brushes and settings, artists can achieve diverse visual styles in their artwork.

#### ➤ **The Pathfinder panel**

**The Pathfinder** is a tool that allows you to combine and cut shapes in different ways. It has a variety of different functions,

**The functions of The Pathfinder panel include:**

- **Unite:** This function combines two or more shapes into a single shape.
- **Minus Front:** This function subtracts the front shape from the back shape.
- **Intersect:** This function combines only the overlapping portions of two or more shapes.
- **Exclude:** This function combines all of the portions of two or more shapes that are not overlapping.
- **Divide:** This function divides the shapes along their intersecting lines.
- The Pathfinder can be used to create a variety of different effects, **such as:**
- ✓ **Merged shapes:** You can use the Pathfinder to merge two or more shapes into a single shape, which can be useful for creating complex shapes or for creating shapes with multiple colors.
- ✓ **Cut outs:** You can use the Pathfinder to cut out shapes from other shapes, which can be useful for creating geometric patterns or for creating icons.
- ✓ **Backgrounds:** You can use the Pathfinder to divide shapes into different parts, which can be useful for creating backgrounds with different textures or colors.

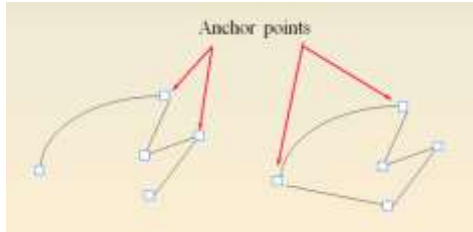
#### ➤ **Using the Eraser tool**



**The Eraser tool** is used to erase parts of paths and shapes. It is a destructive tool, meaning that once you erase something, it cannot be undone.

The Eraser tool can be used to erase any type of path or shape, including open paths, closed paths, and filled shapes. It can also be used to erase strokes and fills independently.

#### ➤ **The anchor points**



**An anchor point** is a point on a path that defines its shape. Anchor points can be added, deleted, or moved to edit the shape of a path.

Anchor points are displayed as small squares on the path. Solid squares indicate selected anchor points, while hollow squares indicate unselected anchor points.

To select an anchor point, click on it with the Direct Selection tool. To move an anchor point, drag it to its new location. To add an anchor point, click on the path with the Add Anchor Point tool. To delete an anchor point, click on it with the Delete Anchor Point tool.

Anchor points can be used to create a variety of different shapes, including lines, curves, polygons, and freeform shapes. The more anchor points a path has, the more complex the shape can be.

#### ➤ **The Shape Builder tool**



**The Shape Builder tool** is a powerful tool that can be used to create and edit complex shapes. It allows you to combine, subtract, and merge shapes in a variety of ways.

The Shape Builder tool can be used to create a variety of different effects, such as:

- **Merged shapes:** You can use the Shape Builder tool to merge two or more shapes into a single shape, which can be useful for creating complex shapes or for creating shapes with multiple colors.
- **Cutouts:** You can use the Shape Builder tool to cut out shapes from other shapes, which can be useful for creating geometric patterns or for creating icons.
- **Backgrounds:** You can use the Shape Builder tool to divide shapes into different parts, which can be useful for creating backgrounds with different textures or colors.

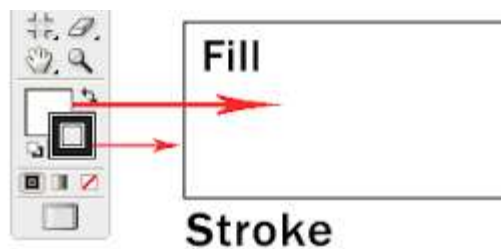
- **Transforming objects** involves changing their size, position, orientation, or shape. This can be done using a variety of tools and techniques, and it is an essential skill for any Illustrator user to know.

**The five basic types of transformations that can be applied to objects in Illustrator:**

- **Scaling:** Scaling an object changes its size. This can be done uniformly, or the object can be scaled disproportionately to create a stretched or squashed effect.
- **Rotating:** Rotating an object changes its orientation. This can be done around the object's center point, or the object can be rotated around an arbitrary point.
- **Reflecting:** Reflecting an object creates a mirror image of the object. This can be done along a horizontal or vertical axis, or the object can be reflected along an arbitrary line.
- **Distorting:** Distorting an object changes its shape. This can be done in a variety of ways, such as skewing, shearing, and bending the object.
- **Moving and duplicating:** Moving and duplicating objects are simple transformations that change the position or number of copies of an object.

- **Scaling Objects**

- **Fills and Strokes**



- **Fill:** refers to the color or pattern that is used to fill the interior of an object.
- **Stroke:** refers to the color or pattern that is used to outline the edges of an object.

**Fills and strokes** can be applied to any type of object in Illustrator, including lines, shapes, and text.

**They can be used to create a variety of different effects, such as:**

- Adding color and texture to objects
- Creating depth and shadows
- Creating borders and outlines
- Highlighting important elements in a design
- **Gradient fill:** Gradient fill is a type of fill that creates a gradual transition between two or more colours.



**Gradient fills can be used to create a variety of different effects, such as:**

- Creating realistic shadows and highlights
- Adding depth and dimension to objects
- Creating a sense of movement and dynamism
- Creating visually appealing and eye-catching graphics



### **Practical Activity 2.3.2: Draw of basic shapes**



#### **Task:**

- 1: Referring to the previous theoretical activity (2.3.1) you are requested to go to the computer lab use the computer which installed adobe Illustrator to draw basic shapes such as lines, curves, spirals, rectangles, ellipses, polygons, stars and use Pencil tool for freehand drawing. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to draw basic shapes.
- 4: Referring to the steps provided on task 3, draw basic shapes in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.3.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.3.



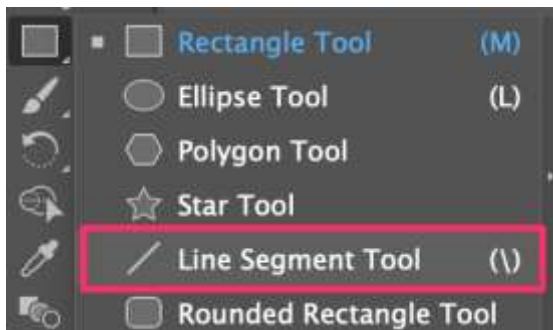
### Key readings 2.3.2: Draw of basic shapes

- **Design shapes**

To design lines, curves, spirals, rectangles, ellipses, polygons, and stars in Adobe Illustrator, you can use the following steps:

➤ **Lines:**

**Step 1:** Select the Line tool from the toolbar.

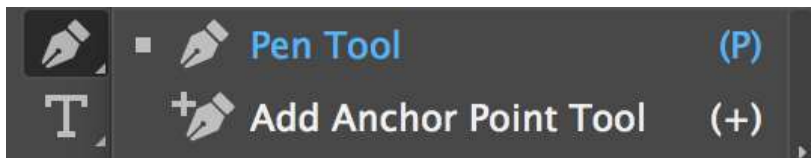


**Step 2:** Click and drag on the canvas to create a line.

**Step 3:** Release the mouse button when the line is the desired length and angle.

➤ **Curves:**

**Step 1:** Select the Pen tool from the toolbar.



**Step 2:** Click on the canvas to create an anchor point.

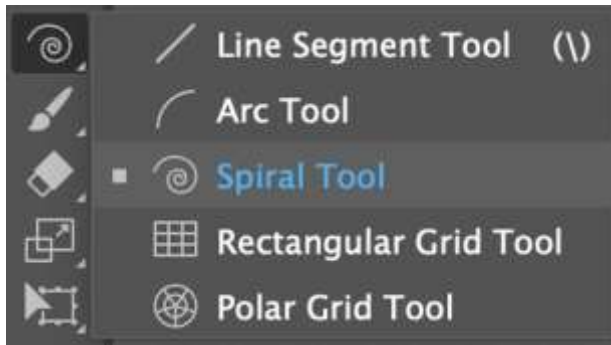
**Step 4:** and drag to create a curve.

**Step 5:** Release the mouse button when the curve is the desired shape.

**Step 6:** You can add more anchor points and drag them to edit the shape of the curve.

➤ **Spirals:**

**Step 1:** Select the Spiral tool from the toolbar.



**Step 2:** Click on the canvas to create the center point of the spiral.

**Step 3:** Drag to set the radius and angle of the spiral.

**Step 4:** Release the mouse button when the spiral is the desired size and shape.

➤ **Rectangles:**

**Step 1:** Select the Rectangle tool from the toolbar.



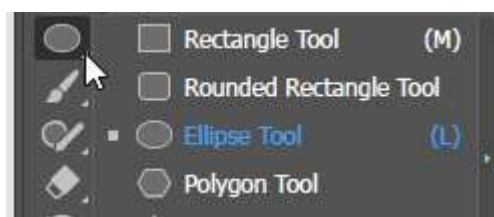
**Step 2:** Click and drag on the canvas to create a rectangle.

**Step 3:** Release the mouse button when the rectangle is the desired size and shape.

**Step 4:** You can hold down the Shift key to create a square.

➤ **Ellipses:**

**Step 1:** Select the Ellipse tool from the toolbar.



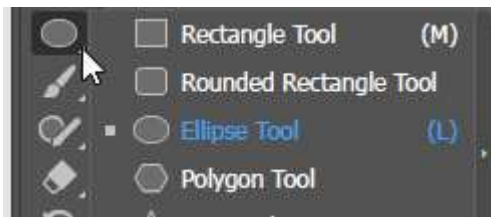
**Step 2:** Click and drag on the canvas to create an ellipse.

**Step 3:** Release the mouse button when the ellipse is the desired size and shape.

**Step 4:** You can hold down the Shift key to create a circle.

➤ **Polygons:**

**Step 1:** Select the Polygon tool from the toolbar.



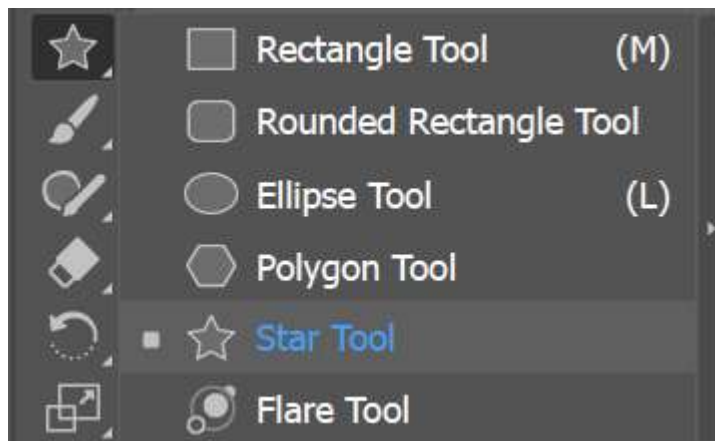
**Step 2:** Click and drag on the canvas to create a polygon.

**Step 3:** Release the mouse button when the polygon is the desired number of sides and size.

**Step 4:** You can hold down the Shift key to create a regular polygon.

➤ **Stars:**

**Step 1:** Select the Star tool from the toolbar.



**Step 2:** Click and drag on the canvas to create a star.

**Step 3:** Release the mouse button when the star is the desired number of points and size.

**Step 4:** You can hold down the Shift key to create a regular star.

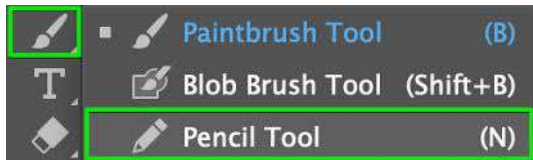
Once you have created a shape, you can use the following tools to edit it:

**Direct Selection tool:** This tool allows you to select and move individual anchor points.

➤ **Using Pencil tool for freehand drawing**

To use the Pencil tool in Adobe Illustrator, follow these steps:

**Step 1:** Select the Pencil tool from the toolbar (or press N).



**Step 2:** Click and drag on the canvas to draw a freehand path.

As you drag, Illustrator will automatically smooth out the path.

**Step 3:** To release the path, click or release the mouse button.

- **Modifying shapes and paths**

- **Drawing modes**

To apply drawing modes in Adobe Illustrator, follow these steps:

**Step 1:** Select the object or objects that you want to apply the drawing mode to.

**Step 2:** Click on the Drawing Modes button in the toolbar (or press Shift+D).

**Step 3:** Select the desired drawing mode from the menu. (Normal, Draw behind, Draw inside)

Examples of drawing modes in Adobe Illustrator:

- **Create depth:** You can use the Draw Behind mode to create depth in your illustrations by drawing objects in the background first and then drawing objects in the foreground on top of them.
- **Create masks:** You can use the Draw Inside mode to create masks that hide or reveal underlying artwork. For example, you could draw a mask over an image to reveal only certain parts of the image.
- **Create clipping paths:** You can use the Draw Inside mode to create clipping paths that restrict the area where other artwork is displayed. For example, you could draw a clipping path over a shape to fill the shape with a pattern.



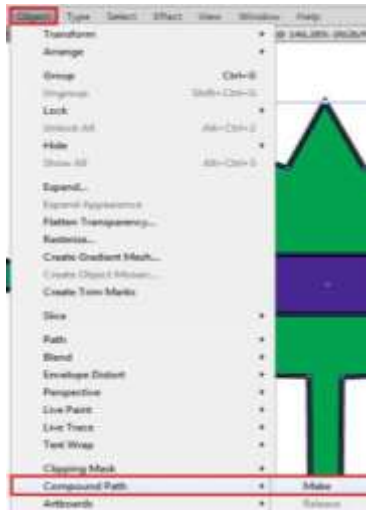
- **Creating compound paths and shapes**

**To create compound paths in Adobe Illustrator, follow these steps:**

**Step 1:** Draw the shapes that you want to combine into a compound path.

**Step 2:** Select all of the shapes that you want to combine.

**Step 3:** Go to Object > Compound Paths > Make.

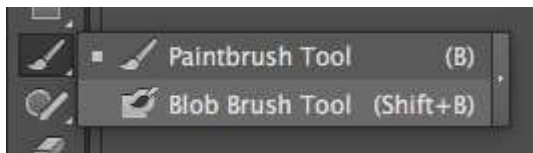


Illustrator will combine the shapes into a single object. You can now edit and manipulate the compound path as a single unit.

### ➤ Using the Brush tool

To use the brush tool, follow these steps:

**Step 1:** Select the brush tool from the toolbar.



**Step 2:** Choose a brush from the brush panel.

**Step 3:** Click and drag on the canvas to draw.

**Step 4:** Adjust the brush settings, such as size, opacity, and colour, as needed.

### **Guidelines for using the brush tool:**

- To draw a straight line, click and drag while holding down the Shift key.
- To draw a smooth curve, click and drag while holding down the Alt/Option key.
- To create a calligraphic effect, use a brush with a variable width.
- To add texture or pattern to a brush stroke, use a brush with a pattern fill.
- To add highlights and shadows to a brush stroke, use a brush with a gradient fill.

### ➤ Working with the Pathfinder panel

To use the Pathfinder panel, follow these steps:

**Step 1:** Select the shapes that you want to combine, subtract, or merge.

**Step 2:** Click on the Pathfinder panel in the toolbar (or press Shift+F9).

**Step 3:** Select the desired operation from the Pathfinder panel.

#### The Pathfinder operations:

- **Unite:** Combines the selected shapes into a single shape.
- **Minus Front:** Subtracts the front shape from the back shape.
- **Intersect:** Creates a new shape that is the intersection of the selected shapes.
- **Exclude:** Creates a new shape that is the area of the selected shapes that is not overlapped.
- **Divide:** Divides the selected shapes along their intersecting lines.

#### Examples of how to use the Pathfinder panel:

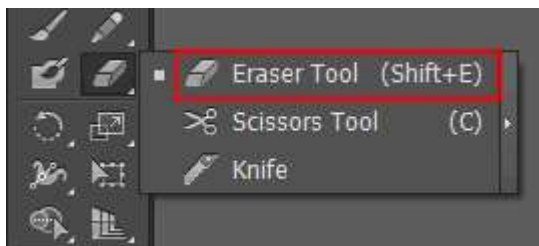
- Create a complex shape by combining multiple simpler shapes.
- Add a hole to a shape by drawing a smaller shape inside it and then using the Minus Front operation.
- Create an outline around a shape by drawing a larger shape around it and then using the Minus Front operation.
- Use the Intersect operation to create a new shape that is the intersection of two or more shapes.
- Use the Exclude operation to create a new shape that is the area of two or more shapes that is not overlapped.

Use the Divide operation to divide a shape into multiple pieces along its intersecting lines.

### ➤ Using the Eraser tool

To use the Eraser tool, follow these steps:

**Step 1:** Select the Eraser tool from the toolbar (or press Shift+E).



**Step 2:** Click and drag on the path or shape that you want to erase.

**Step 3:** Adjust the size and shape of the Eraser tool using the options in the Eraser panel.

**Step 4:** To erase all of the points on a path or shape, click on the Eraser tool and then click on the path or shape.

**Guidelines for using the Eraser tool:**

- You can use the eraser tool to erase anchor points on a path. To do this, hold down the Alt/Option key and then click on the anchor point.
- You can use the eraser tool to erase strokes and fills independently. To do this, select the Stroke or Fill option in the Eraser panel.
- You can use the eraser tool to erase only the visible parts of a path or shape. To do this, select the Visible Only option in the Eraser panel.

**The Use of anchor points**

**To use anchor points follow these steps:**

**Step 1:** Select the Direct Selection tool from the toolbar (or press A).

**Step 2:** Click on an anchor point to select it.

**Step 3:** To move an anchor point, drag it to its new location.

**Step 4:** To add an anchor point, click on the path with the Add Anchor Point tool (or press +).

**Step 5:** To delete an anchor point, click on it with the Delete Anchor Point tool (or press -).

**Guidelines for using anchor points in Adobe Illustrator:**

- You can hold down the Shift key to constrain the movement of an anchor point to horizontal or vertical.
- You can hold down the Alt/Option key to copy an anchor point.
- You can double-click on an anchor point to make it a smooth point.
- You can right-click on an anchor point to access a context menu with additional options.

**Examples of how to use anchor points in Adobe Illustrator:**

- Create a curve by dragging an anchor point.
- Add a corner to a shape by adding an anchor point.
- Smooth out a curve by double-clicking on an anchor point.
- Split a path into two segments by deleting an anchor point.
- Change the direction of a path by dragging an anchor point.

➤ **Using the Shape Builder tool**

To use the Shape Builder tool, follow these steps:

**Step 1:** Select the Shape Builder tool from the toolbar (or press Shift+M).



**Step 2:** Select the shapes that you want to combine, subtract, merge, or trim.

**Step 3:** Click and drag the Shape Builder tool over the selected shapes.

**The following effects will occur depending on how you drag the Shape Builder tool:**

- **Combine:** Dragging over two or more overlapping shapes will combine them into a single shape.
- **Subtract:** Dragging over a shape with the Alt/Option key pressed will subtract the shape from the underlying shapes.
- **Merge:** Dragging over two or more non-overlapping shapes will merge them into a single shape.
- **Trim:** Dragging over a shape with the Shift key pressed will trim the shape along the path of the Shape Builder tool.
- **Transforming objects**

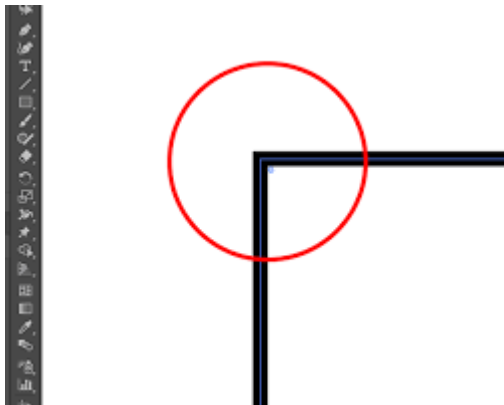
➤ **Scaling objects**

**Step 1:** Select the object you want to scale. You can do this by clicking on it with the Selection Tool (V).

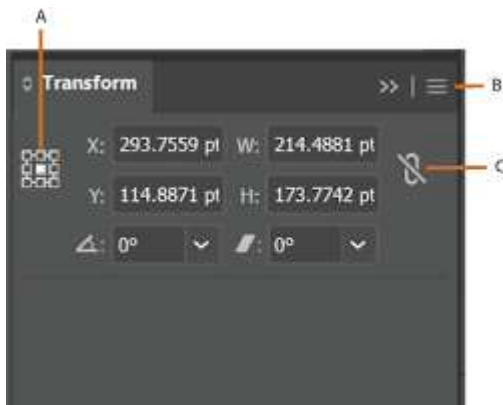
**Step 2:** Click and drag a corner handle to scale the object proportionally. Holding down the Shift key will constrain the proportions of the object.



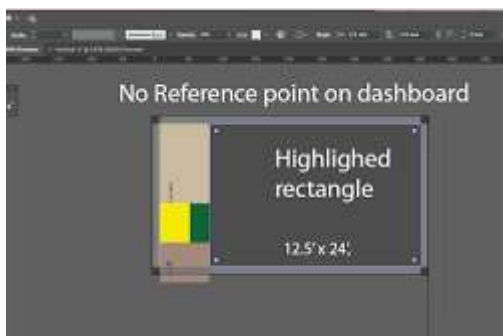
**Step 3:** Click and drag an edge handle to scale the object non-proportionally.



**Step 4:** You can also use the Transform panel to scale objects. To open the Transform panel, go to Window > Transform. In the Transform panel, enter the desired scale percentages in the Width and Height fields.



**Step 5:** If you want to scale an object from a specific point, click and drag the reference point locator. The reference point locator is the small circle that appears in the center of the object when you select it.



**Step 6:** To scale multiple objects at the same time, select the objects you want to scale and then follow the steps above.

**Additional guidelines for scaling objects in Adobe Illustrator:**

- You can use the keyboard shortcuts [ and ] to scale objects up and down 1% at a time.

- You can use the keyboard shortcuts ( **Shift + C** ) to scale objects up and down 10% at a time.
- If you want to scale an object to a specific size, use the Transform panel. In the Transform panel, enter the desired width and height in the Width and Height fields.
- You can also use the Free Transform tool to scale objects. To activate the Free Transform tool, double-click on the Scale tool in the Toolbar. The Free Transform tool allows you to scale, rotate, and shear objects.

- **Rotating objects**

**Two main ways to rotate objects in Adobe Illustrator:**

- using the Rotate tool
- using the Transform panel.

- **Using the Rotate tool**

**Step 1:** Select the object you want to rotate.

**Step 2:** Click on the Rotate tool in the Toolbar. The Rotate tool is the one that looks like a curved arrow.



**Step 3:** Click and drag anywhere on the artboard to rotate the object. As you drag, you will see a preview of the rotation.

**Step 4:** To rotate the object to a specific angle, enter the desired angle in the Rotate angle field. The Rotate angle field is located at the top of the artboard.

**Step 5:** To rotate the object from a specific point, click and drag the reference point locator. The reference point locator is the small circle that appears in the center of the object when you select it.

- **Using the Transform panel**

**Step 1:** Select the object you want to rotate.

**Step 2:** Go to Object > Transform > Rotate.

**Step 3:** In the Rotate dialog box, enter the desired angle in the Angle field.

**Step 4:** You can also click on the angle icon to rotate the object interactively.

**Step 5:** To rotate the object from a specific point, click on the Copy reference point checkbox. This will copy the reference point locator to the center of the object.

**Step 6:** Click on the OK button to apply the rotation.

➤ **Reflecting objects**

There are a few different ways to reflect objects in Adobe Illustrator.

**Two methods of using Reflect tool:**

▪ **Using the Reflect tool**

**Step 1:** Select the object you want to reflect.

**Step 2:** Click on the Reflect tool in the Toolbar.



**Step 3:** Adobe Illustrator Reflect tool Opens in a new window

**Step 4:** Click and drag the object to the desired location. The object will be reflected across the drag line.

**Step 5:** To reflect the object across a specific axis, click on the Axis drop-down menu and select the desired axis.

**Step 6:** To reflect the object multiple times, click on the Copies checkbox and enter the desired number of copies.

**Step 7:** Click on the OK button to apply the reflection.

▪ **Using the Transform panel**

**Step 1:** Select the object you want to reflect.

**Step 2:** Go to Object > Transform > Reflect.

**Step 3:** In the Reflect dialog box, select the desired axis and enter the desired number of copies.

**Step 4:** To reflect the object across a specific point, click on the Copy reference point checkbox.

**Step 5:** Click on the OK button to apply the reflection.

➤ **Distorting objects**

In Adobe Illustrator, you can distort objects using various tools and techniques.

**The methods of distorting objects:**

- **Using Free Transform Tool:**

**Step 1:** Select the object you want to distort.

**Step 2:** Press E to activate the Free Transform tool.

**Step 3:** Click and drag any of the corner handles while holding down the Shift key to maintain proportions.

You can also click and drag inside the object to rotate it.

- **Using Transform Panel:**

**Step 1:** Select the object.

**Step 2:** Go to Object > Transform > Transform Each to open the Transform Each dialog box.

**Step 3:** Enter values for scaling, rotating, and moving the object.

- **Using Distort & Transform Effects:**

**Step 1:** Select the object.

**Step 3:** Go to Effect > Distort & Transform to explore various distortion options like Zig Zag, Pucker & Bloat, etc.

**Step 4:** Adjust the settings in the dialog box that appears.

- **Using Warp Tools:**

**Step 1:** Select the object.

**Step 2:** Choose the "Warp" tool (Shift + R to cycle through tools) from the toolbar.

**Step 3:** Click and drag on the object to apply a warp effect.

- **Using Mesh Warp:**

**Step 1:** Select the object.

**Step 2:** Go to Object > Envelope Distort > Make with Mesh and set the number of rows and columns.

**Step 3:** Directly manipulate the anchor points created to distort the object.

➤ **Moving and duplicating objects**

➤ **Moving objects**

**The Methods for move objects:**

▪ **Using the Selection Tool:**

- When an object is selected, you can move it by dragging it with the Selection Tool (V). The object will move in the direction that you drag it. You can also use the arrow keys to move the object one pixel at a time.

▪ **Using the Artboard Tool:**

- You can move objects by dragging them with the Artboard Tool (Shift+O). The object will move within the boundaries of the artboard. You can also use the arrow keys to move the object one pixel at a time.

▪ **Using the Transform Panel:**

- You can move objects by using the Transform panel. To open the Transform panel, go to Window > Transform. In the Transform panel, enter the desired coordinates in the X and Y fields.

▪ **Using the Keyboard Shortcuts:**

You can use the keyboard shortcuts to move objects. The following keyboard shortcuts are available:

- **Up Arrow:** Moves the object one pixel up.
- **Down Arrow:** Moves the object one pixel down.
- **Left Arrow:** Moves the object one pixel to the left.
- **Right Arrow:** Moves the object one pixel to the right.
- **Shift+Up Arrow:** Moves the object ten pixels up.
- **Shift+Down Arrow:** Moves the object ten pixels down.
- **Shift+Left Arrow:** Moves the object ten pixels to the left.
- **Shift+Right Arrow:** Moves the object ten pixels to the right.

▪ **Using the Align and Distribute Panel**

You can use the Align and Distribute panel to align and distribute objects. To open the Align and Distribute panel, go to Window > Align and Distribute. In the Align and Distribute panel, select the desired alignment or distribution option.



### Practical Activity 2.3.3: Manipulation of colors and texts



#### Task:

- 1: Referring to the previous theoretical activities you are requested to go to the computer lab use the computer which installed adobe Illustrator to add fill color, create and use gradient, add strokes to objects, use swatches, color and character style panel, pick color, use type tools and type command, use opacity, type around objects, Type onto path and Convert text into path. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to manipulate colors and texts.
- 4: Referring to the steps provided on task 3, manipulate colors and texts in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.3.3 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.3.



### Key readings 2.3.3: Manipulation of colors and texts

#### ➤ Manipulating fills and strokes

#### ➤ Adding color fill

There are several ways to add fill color to an object in Adobe Illustrator.

#### The most common methods:

##### ▪ Using the Fill Tool

**Step 1:** Select the object you want to fill with color.

**Step 2:** Click on the Fill tool in the toolbar. It's the bucket icon.



**Step 3:** Choose a color from the color picker.

➤ **Using the Color Panel**

**Step 1:** Open the Color panel. Go to Window > Color.

**Step 2:** Select the object you want to fill with color.

**Step 3:** Choose a color from the Color panel.

➤ **Using the Swatches Panel**

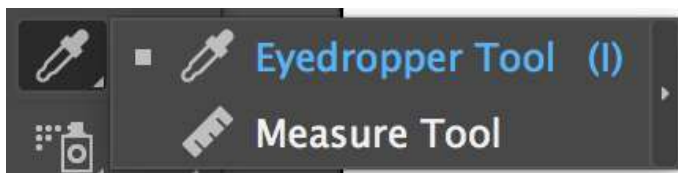
**Step 1:** Open the Swatches panel. Go to Window > Swatches.

**Step 2:** Select the object you want to fill with color.

**Step 3:** Click on a swatch in the Swatches panel to apply that color to the object.

▪ **Using the Eyedropper Tool**

**Step 1:** Select the Eyedropper tool from the toolbar. It's the eye icon.



**Step 2:** Click on an object that has the color you want to use.

The eyedropper will automatically fill the selected object with that color.

➤ **Creating and using gradient fills**

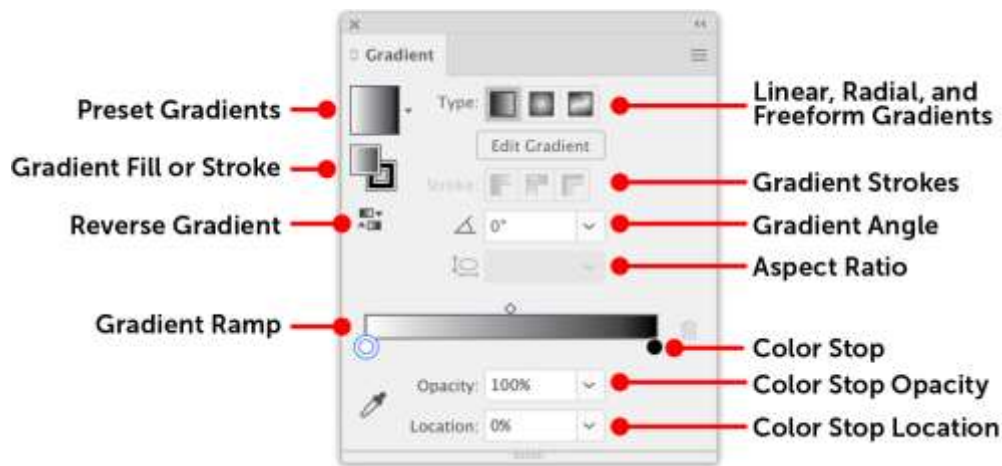
Creating a gradient fill in Adobe Illustrator is a simple process that can add visual interest and depth to your designs.

**Guidelines for creating a gradient fill in Adobe Illustrator:**

Select the object you want to apply the gradient to. Make sure the object is selected with the Selection Tool (V).

**Step 2:** Open the Gradient Panel. You can open the Gradient Panel by going to Window > Gradient.

**Step 3:** Choose a gradient type. In the Gradient Panel, you can choose between linear, radial, or freeform gradients. Linear gradients create a smooth transition of color from one end of the object to the other, radial gradients create a circular transition of color, and freeform gradients allow you to create more complex transitions of color.



**Step 4:** Define the gradient stops. Gradient stops are the points along the gradient where the color transitions from one color to another. To add a gradient stop, click on the Gradient Ramp in the Gradient Panel. To remove a gradient stop, click and drag it off the Gradient Ramp. You can also double-click on a gradient stop to edit its color and opacity.

**Step 5:** Adjust the color of the gradient stops. To adjust the color of a gradient stop, double-click on it. The Color Picker window will open. Choose the desired color for the gradient stop and click OK.

**Step 6:** Adjust the position of the gradient stops. To adjust the position of a gradient stop, click and drag it along the Gradient Ramp. You can also enter the desired position of the gradient stop in the Gradient Panel.

**Step 7:** Adjust the angle of the gradient (linear gradients only). For linear gradients, you can adjust the angle of the gradient by dragging the Angle slider in the Gradient Panel.

**Step 8:** Apply the gradient fill. Once you are satisfied with the appearance of the gradient, click on the Apply button in the Gradient Panel. The gradient fill will be applied to the selected object.

#### ➤ Adding strokes to objects



**Step 1: Select the object you want to apply the stroke to:** Make sure the object is selected with the Selection Tool (V).

**Step 2: Open the Stroke Panel:** You can open the Stroke Panel by going to Window > Stroke.



**Step 3: Choose a stroke style:** In the Stroke Panel, you can choose between solid, dashed, and dotted strokes. You can also adjust the stroke width, miter limit, corner join, and round join settings.

**Step 4: Choose a stroke color:** To choose a stroke color, click on the Stroke Color button in the Stroke Panel. The Color Picker window will open. Choose the desired color for the stroke and click OK.

**Step 5: Adjust the stroke weight:** To adjust the stroke weight, click on the Stroke Weight field in the Stroke Panel and enter the desired weight in points.

**Step 6: Adjust the miter limit:** The miter limit determines how sharp corners in the stroke are drawn. A higher miter limit will create sharper corners, while a lower miter limit will create clipped corners.

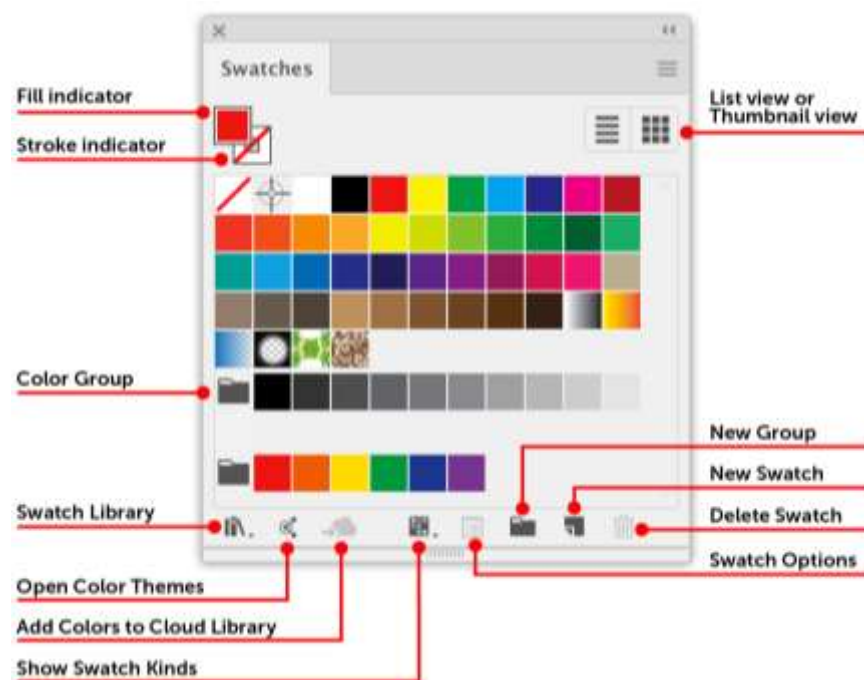
**Step 7: Adjust the corner join:** The corner join determines how corners in the stroke are joined. A round corner join will create smooth rounded corners, while a miter join will create sharp corners.

**Step 8: Adjust the round join:** The round join determines how curves in the stroke are joined. A higher round join will create smoother curves, while a lower round join will create more jagged curves.

**Step 9: Apply the stroke:** Once you are satisfied with the appearance of the stroke, click on the Apply button in the Stroke Panel. The stroke will be applied to the selected object.

**Additional guidelines for adding strokes to objects in Adobe Illustrator:**

- You can use the Stroke Slider in the toolbar to quickly adjust the stroke weight.
- You can use the Eyedropper Tool (I) to copy the stroke colour from another object.
- You can use the Stroke Panel to apply different stroke styles to different sides of an object.
- You can use the Stroke Panel to apply gradients and patterns to strokes.
- **Using the Swatches panel**



▪ **Creating a New Swatch**

**Step 1:** Create the color, gradient, or pattern you want to add to the Swatches panel.

**Step 2:** Click on the "Create New Swatch" button at the bottom of the Swatches panel.

**Step 3:** Enter a name for the swatch and click "OK".

- **Adding an Existing Swatch**

**Step 1:** Drag and drop a color, gradient, or pattern file onto the Swatches panel.

**Step 2:** Right-click in the Swatches panel and select "Add Swatch Library".

**Step 3:** Select the desired swatch library and click "Open".

- **Applying a Swatch**

**Step 1:** Select the object you want to apply the swatch to.

**Step 2:** Click on the desired swatch in the Swatches panel.

- **Editing a Swatch**

**Step 1:** Double-click on the desired swatch in the Swatches panel.

**Step 2:** The Color Picker window will open. Choose the desired color for the swatch and click OK.

**Step 3:** To edit the name of the swatch, right-click on the swatch and select "Rename Swatch".

- **Deleting a Swatch**

Right-click on the desired swatch and select "Delete Swatch".

- **Saving Swatches**

**Step 1:** To save your swatches as a swatch library, go to File > Save Swatch Library.

**Step 2:** Enter a name for the swatch library and click "Save".

- **Importing Swatches**

**Step 1:** To import swatches from another file, go to File > Open Swatch Library.

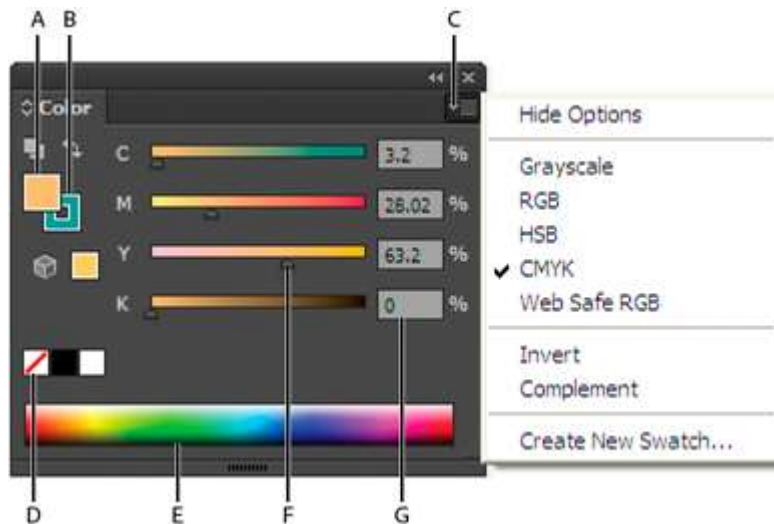
**Step 2:** Select the desired swatch library and click "Open".

- **Using the color panel**

**Step-by-step guide on how to use the Color panel in Adobe Illustrator:**

**Selecting Colors**

**Step 1: Click on the Color panel to open it:** The Color panel is typically located on the right side of the Illustrator window.



**A.** Fill color

**B.** Stroke color

**C.** panel menu

**D.** None box

**E.** Color spectrum bar

**F.** Color slider

**G.** Text box for a color component

**Step 2: Choose a color mode:** You can select from various color modes, including RGB, HSB, CMYK, and Grayscale. The default mode is RGB.

**Step 3: Select a color:** You can select a color using various methods:

**Step 4: Color Picker:** Click on the color picker square and drag the slider to select the desired color.

**Step 5: Color Sliders:** Adjust the sliders for red, green, and blue (RGB mode) or hue, saturation, and brightness (HSB mode) to select the desired color.

**Step 6: Color Field:** Enter the color values directly into the color field, using either hexadecimal codes or color names.

#### ▪ **Creating Colors**

**Step 1:** Click on the "Add New Color" button at the bottom of the Color panel.

**Step 2:** Enter a name for the color and click "OK".

**Step 4:** Adjust the sliders for red, green, and blue (RGB mode) or hue, saturation, and brightness (HSB mode) to create the desired color.

**Step 5:** Click on the "Add to Swatch Panel" button to add the newly created color to the Swatches panel.

- **Customising Colours**

**Step 1:** Double-click on the desired color in the Color panel.

The Color Picker window will open.

**Step 2:** Adjust the sliders to fine-tune the color.

**Step 3:** Click on the "Add to Swatch Panel" button to add the modified color to the Swatches panel.

- **Picking color from image**

**Steps on how to pick a color from an image in Adobe Illustrator:**

**Step 1:** Open the image you want to pick a color from in Adobe Illustrator.

**Step 2:** Select the Eyedropper tool from the Toolbar. The Eyedropper tool is located in the same section as the Fill and Stroke color pickers.

**Step 3:** Click on the area of the image you want to pick a color from. The color will be sampled and displayed in the Color panel.

**Step 4:** If you want to pick a color from a bitmapped image, hold down the Shift key while clicking on the image. This will prevent the Eyedropper tool from averaging the colors of multiple pixels.

**Step 5:** To save the color to your Swatches panel, double-click the color in the Color panel. **Step 6:** In the New Swatch dialog box, name the swatch and click OK.

To use the saved swatch, click on it in the Swatches panel.

- **Using opacity**

There are a few different ways to adjust the opacity of an object in Adobe Illustrator:

**Using the Opacity slider in the Properties panel**

**Step 1:** Select the object or group of objects you want to adjust.

**Step 2:** Open the Properties panel (Window > Properties).

**Step 3:** Locate the Opacity slider in the Appearance section.

**Step 4:** Drag the slider to the desired opacity level.

- **Using the Transparency panel**

**Step 1:** Select the object or group of objects you want to adjust.

**Step 2:** Open the Transparency panel (Window > Transparency).

**Step 3:** In the Opacity section, enter the desired opacity level in the Percentage field.

#### Using the Eyedropper tool

**Step 1:** Select the Eyedropper tool from the Toolbar (it looks like an eye dropper).

**Step 2:** Click on an object with the desired opacity.

**Step 3:** The opacity of the selected object will be applied to the objects you clicked on with the Eyedropper tool.

#### Using the Opacity Mask tool

**Step 1:** Select the object or group of objects you want to adjust.

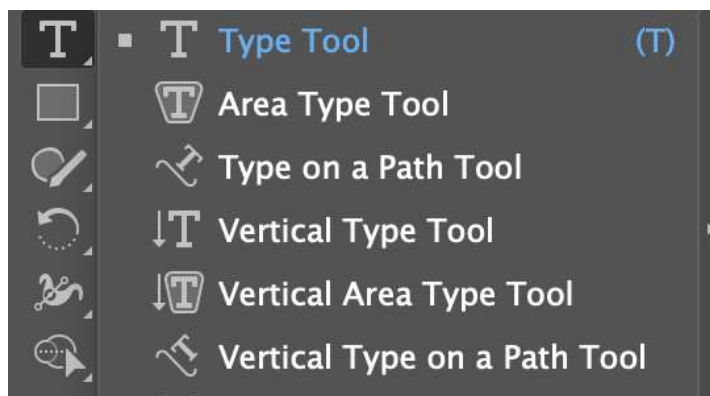
**Step 2:** Create an opacity mask by clicking on the Add Mask button in the Transparency panel.

**Step 3:** Select the Gradient tool (it looks like a black and white gradient) from the Toolbar.

**Step 4:** Drag the Gradient tool across the mask to create a gradient that controls the opacity of the object or group of objects.

- **Using Type tools**

Adobe Illustrator offers a variety of type tools for creating and manipulating text, making it a versatile tool for graphic designers and illustrators. Here's a quick guide on how to use the type tools in Adobe Illustrator:



- **The Type Tool**

The Type Tool is the most basic tool for creating text in Illustrator. To use it, follow these steps:

**Step 1:** Select the Type Tool from the Toolbar (it looks like a capital "T").

**Step 2:** Click and drag on the artboard to create a text box.

**Step 3:** Start typing your text.

**Step 4:** To edit the text, click inside the text box and use the keyboard or the Character palette to format the text.

- **The Type on a Path Tool**

The Type on a Path Tool allows you to create text that follows a path. To use it, follow these steps:

**Step 1:** Select the Type on a Path Tool from the Toolbar (it looks like a capital "T" with a curved path).

**Step 2:** Click on the path you want the text to follow.

Start typing your text.

**Step 3:** To edit the text, click inside the text box and use the keyboard or the Character palette to format the text.

- **The Vertical Type Tool**

The Vertical Type Tool allows you to create vertical text, which is useful for languages like Japanese or Chinese. To use it, follow these steps:

**Step 1:** Select the Vertical Type Tool from the Toolbar (it looks like a capital "T" with a vertical line).

**Step 2:** Click and drag on the artboard to create a text box.

Start typing your text.

**Step 3:** To edit the text, click inside the text box and use the keyboard or the Character palette to format the text.

- **The Area Type Tool**

The Area Type Tool allows you to create text that fills an area. To use it, follow these steps:

**Step 1:** Select the Area Type Tool from the Toolbar (it looks like a capital "T" with a box around it).

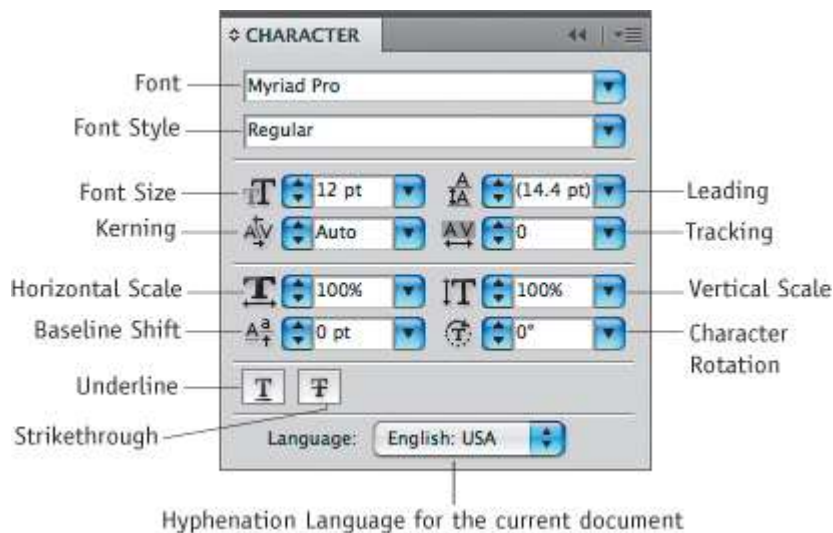
**Step 2:** Click and drag on the artboard to create a text box.

**Step 3:** Start typing your text.

**Step 4:** To edit the text, click inside the text box and use the keyboard or the Character palette to format the text.

- **Using the character style panel**

The Character Styles panel in Adobe Illustrator is a powerful tool for formatting text. It allows you to create, edit, and apply character styles, which are sets of formatting options that can be applied to text.



- **Creating a Character Style**

To create a character style, follow these steps:

**Step 1:** Select the text you want to format.

**Step 2:** Open the Character Styles panel (Window > Type > Character Styles).

**Step 3:** Click on the New Style button (+).

**Step 4:** In the New Style dialog box, enter a name for your style and then select the desired formatting options.

**Step 5:** Click OK.

- **Applying a Character Style**

To apply a character style to text, follow these steps:

**Step 1:** Select the text you want to format.

**Step 2:** In the Character Styles panel, click on the desired style.

- **Editing a Character Style**

To edit a character style, follow these steps:

**Step 1:** In the Character Styles panel, double-click on the desired style.

**Step 2:** In the Edit Style dialog box, make the desired changes.

**Step 3:** Click OK.

### ➤ **Deleting a Character Style**

To delete a character style, follow these steps:

**Step 1:** In the Character Styles panel, select the desired style.

**Step 2:** Click on the Delete button (-).

Using Character Styles in Conjunction with Paragraph Styles

You can use character styles in conjunction with paragraph styles to create complex text formatting. To do this, apply a paragraph style to a paragraph of text, and then apply a character style to specific characters within the paragraph.

### ➤ **Guidelines for Using the Character Styles Panel**

- Create a library of character styles to save time and ensure consistency.
- Use the Search field to quickly find the desired style.
- Use the Show All Styles option to view all styles, including those from other libraries.
- Use the New Style from Selection option to create a new style based on the current formatting of the selected text.
- Use the Apply Style to All Instances option to apply the selected style to all instances of the selected text in the document.

### • **Flowing type around objects**

There are two ways you can type around objects in Adobe Illustrator:

#### ▪ **Method 1: Using the Type on a Path Tool**

**Step 1:** Draw the object you want the text to flow around.

**Step 2:** Select the Type on a Path Tool from the Toolbar (it looks like a capital "T" with a curved path).

**Step 3:** Click on the path you want the text to follow.

**Step 4:** Start typing your text.

**Step 5:** To edit the text, click inside the text box and use the keyboard or the Character palette to format the text.

#### ▪ **Method 2: Creating an Area Type Object**

**Step 1:** Draw the object you want the text to flow around.

**Step 2:** Select the Area Type Tool from the Toolbar (it looks like a capital "T" with a box around it).

**Step 3:** Click and drag on the artboard to create a text box around the object.

**Step 4:** Start typing your text.

To edit the text, click inside the text box and use the keyboard or the Character palette to format the text.

- **Converting text into path**

**Step 1. Select the Text:** Start by selecting the text object or text box that you want to convert into a path. You can do this using the Selection Tool (V).

**Step 2. Open the Create Outlines Dialog Box:** Once the text is selected, navigate to the "Object" menu in the top menu bar and choose "Create Outlines." Alternatively, you can use the keyboard shortcut Shift + Ctrl + O (Windows) or Shift + Cmd + O (Mac).



**Step 3. Expand the Text Object (Optional):** If you want to ungroup the text into individual letter paths, you can expand the text object. To do this, select the text object and then click on the "Expand" button in the Properties panel or use the keyboard shortcut Shift + Ctrl + G (Windows) or Shift + Cmd + G (Mac).

**Step 4. Manipulate the Text as a Path:** After converting the text to paths, you can now manipulate it like any other vector shape in Adobe Illustrator. You can resize, rotate, distort, and apply various effects to the individual letter paths.

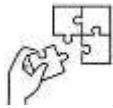
**Step 5. Edit the Text (Optional):** If you need to edit the text content after converting it to paths, you can do so by double-clicking on the text object and entering the desired changes



#### **Points to Remember**

- Basic shapes in Adobe Illustrator are fundamental building blocks for creating various designs and illustrations. There are common basic shapes available in Illustrator like: lines, curves, spirals, rectangles, ellipses, polygons, and stars.

- **To draw a line:** Select the Line tool>Click and drag on the canvas>Release the mouse button.
- **To draw curves:** Select the Pen tool>Click to create anchor points>Drag to create curves> Release the mouse button.
- **To draw spiral:** Select the Spiral tool>Click to set the center point>Drag to set the radius and angle> Release the mouse button.
- **To add color fill:** Select the object>choose the desired color>apply the fill.
- **To create and use gradient fills:** Select the object>open the Gradient Panel>choose a gradient type>define gradient stops>adjust color and position of gradient stops>apply the gradient fill.
- **To add strokes to objects:** Select the object>open the Stroke Panel>choose a stroke style>adjust stroke weight, miter limit, corner join, and round join,>choose a stroke color>apply the stroke.



### Application of learning 2.3.

You are a graphic designer working on a project to create a series of icons for a mobile app. The client has provided you with a list of icons they need, ranging from basic geometric shapes to more intricate symbols representing specific actions and functions within the app. To tackle this task efficiently, you decide to leverage Adobe Illustrator's shape tools and design capabilities.

**The Icon will be like this**





## Indicative content 2.4.: Description of Brand Identity



Duration: 8 hrs



### Theoretical Activity 2.4.1: Description of brand identity



#### Tasks:

1: You are requested to answer the following questions related to the brand identity in adobe Illustrator:

- i. What do you understand about?
  - a) Brand
  - b) Brand identity
  - c) Brand icon
  - d) Logo
- ii. Can you provide an explanation of brand identity guidelines?

2: Provide the answer for the asked questions and write them on papers.

3: Present the findings/answers to the whole class

4: For more clarification, read the key readings 2.4.1. In addition, ask questions where necessary.



### Key readings 2.4.1: Description of brand identity

- **Description of brand identity**

- **Brand**

**Brand** refers to a combination of visual and non-visual elements that help to identify and distinguish a company or product from its competitors. It encompasses the overall image of a brand, including its logo, color palette, typography, messaging, and personality. A strong brand identity in graphic design is essential for creating a cohesive and recognizable visual representation of a company or product. It can help to build brand awareness, create trust and loyalty with customers, and differentiate a brand from the competition.



#### **Visual Elements of Brand in Graphic Design:**

- **Logo:** The logo is the most recognizable visual element of a brand. It should be simple, memorable, and scalable to different sizes and applications.
- **Color Palette:** The color palette is a set of colors that are used consistently to represent a brand. The colors should be chosen to reflect the brand's personality and values.
- **Typography:** The typography is the style of font that is used to represent a brand. The typography should be chosen to be legible, consistent, and reflective of the brand's personality.
- **Imagery:** The imagery used to represent a brand should be consistent with the brand's overall style and personality.

#### **Non-Visual Elements of Brand in Graphic Design:**

- **Messaging:** The messaging is the way that a brand communicates with its customers. It should be clear, consistent, and on-brand.
- **Personality:** The personality of a brand is the overall impression that it makes on its customers. It should be consistent across all touchpoints, including marketing, advertising, and customer service.

#### **Importance of Brand in Graphic Design:**

- **Brand Recognition:** A strong brand identity can help to make a brand more recognizable to consumers.
- **Brand Awareness:** A consistent visual representation of a brand can help to increase brand awareness.
- **Brand Loyalty:** A strong brand identity can create a sense of connection between a brand and its customers, which can lead to long-term loyalty.
- **Brand Differentiation:** A unique brand identity can help to distinguish a brand from its competitors and make it more memorable.
- **Brand Storytelling:** A well-designed brand identity can help to tell a brand's story and create a lasting impression on consumers.

- **Brand identity**

**Brand identity** is the unique personality of a brand that distinguishes it from its competitors. It encompasses the brand's values, mission, and vision, as well as its visual elements such as logo, color palette, and typography. A strong brand identity helps to create a positive and memorable impression in the minds of consumers.

**The elements of brand identity:**

- **Brand values:** These are the core principles that guide a brand's behavior and decision-making. For example, a brand might have values such as innovation, quality, or customer service.
  - **Brand mission:** This is a statement of purpose that explains what the brand hopes to achieve. For example, a brand might have a mission to provide the best possible products and services to its customers.
  - **Brand vision:** This is a description of the brand's desired future state. For example, a brand might have a vision to be the world's leading provider of a particular type of product or service.
  - **Visual elements:** These are the physical components that make up a brand's identity, such as its logo, color palette, and typography. Visual elements should be consistent and memorable, and they should reflect the brand's personality.
- **Brand icon**

A **brand icon** is a visual symbol that represents a brand. It is typically a simplified version of the brand's logo, and it is used to identify the brand in a variety of contexts, such as websites, social media, and marketing materials.

- **Brand identity guidelines**

**Brand identity guidelines** are a set of standards and rules that a company or organisation uses to maintain consistent branding across all touchpoints. These guidelines define the visual, verbal, and written communication elements that represent the brand, ensuring that it is presented in a cohesive and recognizable manner.

**The purpose of brand identity guidelines is to:**

- **Maintain brand consistency:** Brand identity guidelines help to ensure that all uses of the brand's visual and verbal elements are consistent, regardless of the medium or channel. This consistency helps to create a strong and unified brand image.
- **Protect the brand:** Brand identity guidelines help to protect the brand from unauthorised or inappropriate use. By clearly defining the acceptable uses of the

brand, these guidelines can help to prevent brand dilution and maintain the brand's integrity.

- **Educate employees and stakeholders:** Brand identity guidelines provide a clear and concise reference point for employees, contractors, and other stakeholders who need to use the brand. This can help to save time and ensure that the brand is used correctly.

#### **Elements of Brand Identity Guidelines:**

Brand identity guidelines typically include the following elements:

- **Logo usage:** Guidelines for using the brand's logo, including proper placement, sizing, and color variations.
- **Color palette:** A definition of the brand's color palette, including specific color codes and guidelines for usage.
- **Typography:** Guidelines for using the brand's approved fonts, including font weights, styles, and sizes.
- **Imagery:** Guidelines for using brand-approved imagery, including style, tone, and subject matter.
- **Voice and tone:** Guidelines for the brand's voice and tone in written communication, including style, formality, and messaging.
- **Brand messaging:** Guidelines for communicating the brand's core messages and values consistently across all channels.

#### **Benefits of Brand Identity Guidelines:**

Implementing brand identity guidelines can provide several benefits, including:

- **Stronger brand recognition:** Consistent use of brand elements across all touchpoints increases brand recognition and recall.
- **Enhanced brand perception:** A well-defined brand identity conveys professionalism and credibility, enhancing brand perception among consumers and stakeholders.
- **Streamlined brand management:** Clear guidelines simplify brand management and reduce the risk of inconsistencies.
- **Improved brand protection:** Clear guidelines help protect the brand from unauthorized or inappropriate use.
- **Cost savings:** Consistent brand usage can reduce the need for costly rework or corrections.

- **Logo**

**Logo** is a visual symbol that represents a company, product, service, or organisation. It is typically a stylized version of the brand's name or an iconic image that is easily recognizable and memorable. Logos play a crucial role in brand

identity, as they help to establish a distinct visual representation of the brand and differentiate it from competitors.

#### **Purposes and Functions of a Logo:**

- **Brand Identification:** A logo serves as the primary visual identifier for a brand, allowing consumers to quickly recognize and distinguish the brand from its competitors.
- **Brand Representation:** A logo encapsulates the essence and core values of a brand, conveying its personality, message, and overall identity.
- **Brand Memory:** A well-designed logo is memorable and leaves a lasting impression on consumers, making it easier for them to recall the brand in the future.
- **Brand Trust and Credibility:** A consistent and professional logo instills trust and credibility in consumers, establishing the brand as a reliable and reputable entity.
- **Brand Differentiation:** A unique and distinctive logo helps a brand stand out from the crowd, creating a distinct visual identity that sets it apart from competitors.
- **Brand Marketing and Advertising:** Logos play a central role in marketing and advertising campaigns, appearing on websites, social media, print materials, and merchandise.
- **Brand Emotional Connection:** Logos can evoke emotional responses in consumers, associating the brand with specific feelings, attitudes, or aspirations.
- **Brand Evolution and Adaptability:** Logos can evolve over time to reflect changes in the brand's identity or market trends, while maintaining a recognizable core design.

#### **Essential Characteristics of an Effective Logo:**

- **Simplicity:** A logo should be simple and easy to understand, making it recognizable at various sizes and in different contexts.
- **Memorability:** A logo should be memorable and leave a lasting impression on consumers, allowing them to easily recall the brand.
- **Versatility:** A logo should be versatile and adaptable to various applications, including print, digital, and merchandise.
- **Timelessness:** A logo should have a timeless quality, remaining relevant and effective over time, even as trends change.
- **Distinctiveness:** A logo should be distinctive and unique, standing out from competitors and making a strong visual impact.
- **Appropriateness:** A logo should be appropriate for the brand's target audience and industry, reflecting its values and personality.
- **Scalability:** A logo should be scalable and maintain its integrity when displayed at various sizes, from small icons to large billboards.
- **Cultural Sensitivity:** A logo should be culturally sensitive, avoiding any unintended negative connotations or misinterpretations in different cultures.



### **Points to Remember**

- In Adobe Illustrator, designers can create and manipulate various visual elements to build a brand identity. There are key elements of brand identity that can be developed using Adobe Illustrator like: Brand, values, Brand mission, Brand vision, Visual elements.



## Indicative content 2.5. Design Infographics



Duration: 8 hrs



### Theoretical Activity 2.5.1: Description of infographics



#### Tasks:

1: You are requested to answer the following questions related to the infographics in Adobe Illustrator:

- I. what do you understand about infographics?
- II. Can you provide an explanation of?
  - a) Icon
  - b) Logo
  - c) Web banners
  - d) Flyer
- III. Could you provide a description of design principles?

2: Provide the answer for the asked questions and write them on papers.

3: Present the findings/answers to the whole class

4: For more clarification, read the key readings 2.5.1. In addition, ask questions where necessary.



#### Key readings 2.5.1: Description of infographics

- **Design infographic**

**An infographic** is a visual representation of information or data that uses graphics, such as charts, diagrams, and illustrations, to convey complex information quickly and easily. Infographics can be used to explain a wide range of topics, from scientific concepts to business trends to current events.



### Purposes and Benefits of Infographics:

- **Simplify Complex Information:** Infographics can effectively break down complex information into digestible chunks, making it easier for the audience to understand.
- **Enhance Visual Appeal:** Infographics transform data and text into engaging visual elements, making information more appealing and memorable.
- **Improve Information Retention:** The combination of visuals and text in infographics enhances information retention, allowing the audience to grasp key points more effectively.
- **Promote Understanding and Engagement:** Infographics can foster understanding and engagement among readers, encouraging them to explore the presented information further.
- **Increase Sharing and Reach:** Infographics are often shared on social media and other online platforms, expanding their reach and potential impact.

### Essential Elements of Effective Infographics:

- **Clear Focus and Purpose:** Infographics should have a clear focus and purpose, conveying a specific message or story.
- **Visual Hierarchy:** Visual elements should be organized in a way that guides the viewer's attention, emphasizing key points and creating a cohesive narrative.
- **Effective Use of Color:** Color should be used strategically to enhance clarity, differentiate elements, and evoke emotions aligned with the infographic's message.
- **Appropriate Data Visualization:** Data should be presented using appropriate visualization techniques, such as charts, graphs, and diagrams, that are easily understandable.

- **Concise and Relevant Text:** Text should be concise, relevant, and complementary to the visuals, providing context and additional information without overwhelming the viewer.
- **Consistency with Brand Identity:** Infographics should be consistent with the brand's overall visual identity, reflecting its personality, colors, and typography.
- **Accessibility and Adaptability:** Infographics should be accessible to a wide audience, considering color blindness, language barriers, and different viewing devices.

#### **Applications and Usage of Infographics:**

- **Education and Training:** Infographics can effectively explain complex concepts and procedures in education and training materials.
- **Business Communication:** Infographics can summarise business data, present marketing strategies, and illustrate financial performance.
- **Scientific Research and Data Visualization:** Infographics can communicate scientific findings, visualise research data, and showcase trends and patterns.
- **News and Current Events:** Infographics can break down complex news stories, illustrate global issues, and present data-driven insights.
- **Social media and Online Sharing:** Infographics are widely shared on social media platforms, increasing their reach and engagement potential.
- **Marketing and Advertising:** Infographics can be used to promote products, highlight brand differentiators, and engage with target audiences.

#### • **Icon**

**An icon** is a simplified and recognizable image that visually represents a brand. It is often a stylized version of the brand's logo or an iconic symbol that is easily identifiable and associated with the brand.

#### **The important of Brand icons including:**

- **Brand Recognition:** Brand icons help to make a brand more recognizable to consumers. A well-designed brand icon can be instantly recognized, even when it is seen at a small size or in a low-resolution format.
- **Brand Recall:** Brand icons help to remind consumers of a brand. Even if a consumer doesn't see a brand name, they may be able to recall the brand by seeing its icon.
- **Brand Emotion:** Brand icons can evoke certain emotions in consumers. For example, a bright and colorful icon might evoke feelings of happiness and joy, while a more muted and sophisticated icon might evoke feelings of luxury and prestige.
- **Brand Consistency:** Brand icons help to maintain consistency across a brand's various touchpoints. This can help to create a sense of unity and coherence for the brand.

- **Brand Versatility:** Brand icons should be versatile and adaptable to various applications, including print, digital, and merchandise.
- **Brand Differentiation:** A unique brand icon can help to distinguish a brand from its competitors and make it more memorable.
- **Brand Storytelling:** A well-designed brand icon can help to tell a brand's story and create a lasting impression on consumers.

**Examples of iconic brand icons:**

- **Apple:** The Apple icon is a simple and recognizable silhouette of an apple with a bite taken out of it.



- **Nike:** The Nike icon, also known as the "Swoosh," is a simple and elegant checkmark.

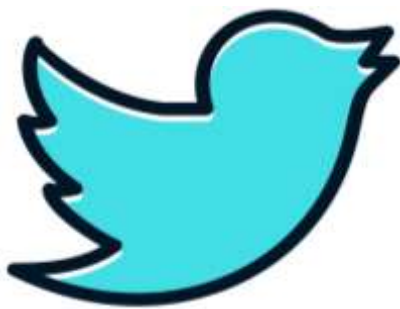
Coca-Cola: The Coca-Cola icon is a distinctive script logo that is instantly recognizable.



- **McDonald's:** The McDonald's icon is a golden M that is a symbol of fast food and convenience.



- **Twitter:** The Twitter icon is a simple bluebird that is a symbol of social media and communication.



- **Logo**

**Logo** is a visual symbol that represents a company, product, service, or organisation. It is typically a stylized version of the brand's name or an iconic image that is easily recognizable and memorable. Logos play a crucial role in brand identity, as they help to establish a distinct visual representation of the brand and differentiate it from competitors.

**Purposes and Functions of a Logo:**

- **Brand Identification:** A logo serves as the primary visual identifier for a brand, allowing consumers to quickly recognize and distinguish the brand from its competitors.
- **Brand Representation:** A logo encapsulates the essence and core values of a brand, conveying its personality, message, and overall identity.
- **Brand Memory:** A well-designed logo is memorable and leaves a lasting impression on consumers, making it easier for them to recall the brand in the future.
- **Brand Trust and Credibility:** A consistent and professional logo instills trust and credibility in consumers, establishing the brand as a reliable and reputable entity.
- **Brand Differentiation:** A unique and distinctive logo helps a brand stand out from the crowd, creating a distinct visual identity that sets it apart from competitors.

- **Brand Marketing and Advertising:** Logos play a central role in marketing and advertising campaigns, appearing on websites, social media, print materials, and merchandise.
- **Brand Emotional Connection:** Logos can evoke emotional responses in consumers, associating the brand with specific feelings, attitudes, or aspirations.
- **Brand Evolution and Adaptability:** Logos can evolve over time to reflect changes in the brand's identity or market trends, while maintaining a recognizable core design.

#### **Essential Characteristics of an Effective Logo:**

- **Simplicity:** A logo should be simple and easy to understand, making it recognizable at various sizes and in different contexts.
- **Memorability:** A logo should be memorable and leave a lasting impression on consumers, allowing them to easily recall the brand.
- **Versatility:** A logo should be versatile and adaptable to various applications, including print, digital, and merchandise.
- **Timelessness:** A logo should have a timeless quality, remaining relevant and effective over time, even as trends change.
- **Distinctiveness:** A logo should be distinctive and unique, standing out from competitors and making a strong visual impact.
- **Appropriateness:** A logo should be appropriate for the brand's target audience and industry, reflecting its values and personality.
- **Scalability:** A logo should be scalable and maintain its integrity when displayed at various sizes, from small icons to large billboards.
- **Cultural Sensitivity:** A logo should be culturally sensitive, avoiding any unintended negative connotations or misinterpretations in different cultures.

#### • **Web banners**

**Web banners**, also known as display banner ads or display ads, are rectangular clickable images or animations that are embedded into websites to promote a product, service, or brand. They are a form of online advertising that utilizes visual elements and concise messaging to attract attention and drive traffic to the advertiser's website or landing page.

#### **Purpose and Function of Web Banners:**

- **Promote Products and Services:** Web banners serve as a primary tool for promoting products, services, and brands to a wide online audience.
- **Drive Traffic and Lead Generation:** Web banners aim to entice viewers to click on them, leading them to the advertiser's website or landing page to learn more about the product or service.

- **Increase Brand Awareness and Visibility:** Web banners help to increase brand recognition and awareness by consistently displaying the brand's logo and messaging across different websites.
- **Targeted Advertising:** Web banners can be targeted to specific audiences based on demographics, interests, and online behavior, ensuring that ads are seen by the most relevant users.

#### Types of Web Banners:



- **Static Banners:** Static banners are non-animated images that remain fixed on the webpage.
- **Animated Banners:** Animated banners use GIF or Flash technology to display moving images or videos, capturing attention and conveying more complex messages.
- **Rich Media Banners:** Rich media banners incorporate interactive elements, such as audio, video, or interactive components, creating a more immersive and engaging experience.

#### Key Elements of Effective Web Banners:

- **Clear Call-to-Action:** A clear and compelling call-to-action (CTA) instructs viewers on what to do next, such as "Click here" or "Learn more."
- **High-Impact Visuals:** Eye-catching and relevant visuals, such as images or videos, grab attention and convey the essence of the ad.
- **Concise Messaging:** Concise and persuasive messaging clearly communicates the product or service's benefits and value proposition.
- **Effective Targeting:** Targeting the ad to the right audience based on demographics, interests, and online behavior increases its relevance and impact.

#### Placement of Web Banners:

- **Above the Fold:** Banners placed at the top of a webpage, above the fold, have a higher chance of being seen immediately by visitors.
- **Sidebars:** Banners placed in sidebars or vertical columns along the sides of a webpage provide continuous visibility without disrupting the main content.

- **In-Content:** Banners embedded within the content of a webpage, such as between paragraphs, can be effective for capturing attention and conveying relevant information.

- **Flyer**

A **flyer** is a form of paper advertisement intended for wide distribution and typically posted or distributed in a public place, handed out to individuals, or sent through the mail. Flyers are also known as "handbills" or "leaflets".



Flyers are typically printed on one side of a single sheet of paper and may include images, text, and graphics. They are often used to advertise events, products, or services. Flyers can be printed in color or black and white.

Flyers are a versatile and cost-effective way to reach a large audience.

**They can be distributed in a variety of ways, such as:**

- **Handing them out in person:** This is a great way to target a specific audience, such as people who are attending an event or who live in a particular area.
- **Posting them in public places:** This can be a good way to reach a larger audience, such as people who are walking down the street or who are visiting a public library.
- **Mailing them:** This can be a good way to reach people who are not in your immediate area.

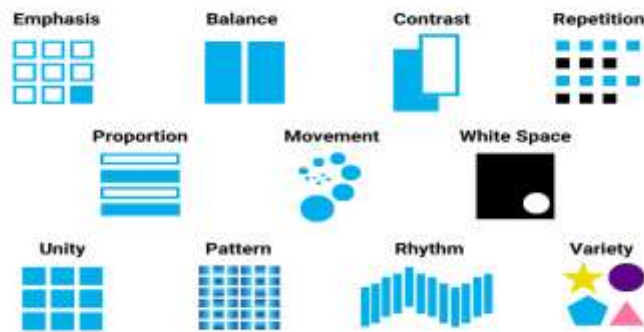
Flyers can be an effective way to promote your business or event. However, it is important to make sure that your flyers are well-designed and that they contain all of the information that your target audience needs.

- **Description of design principles**

**Design principles** are fundamental guidelines or rules that serve as a foundation for creating effective and aesthetically pleasing designs. They provide a framework for designers to make informed decisions about the visual elements, organisation, and

overall structure of their work. These principles are not rigid rules but rather flexible guidelines that can be adapted and interpreted to suit the specific needs and goals of each design project.

**Key design principles:**



- **Balance:** refers to the distribution of visual elements in a design, ensuring that the composition feels stable and harmonious. There are different types of balance, such as symmetrical balance, asymmetrical balance, and radial balance.
- **Contrast:** is the difference between visual elements, such as size, color, or shape, which creates visual interest and helps to guide the viewer's eye. Effective use of contrast can make important elements stand out and create a sense of hierarchy.
- **Emphasis:** involves using various techniques to draw attention to the most important elements in a design. This can be achieved through size, color, placement, contrast, or other visual cues.
- **Proportion:** refers to the relationship between the sizes of different elements in a design. It ensures that the elements are visually harmonious and contribute to the overall balance of the composition.
- **Hierarchy:** Establishes a visual order among different elements, guiding the viewer's eye through the design and making it clear which elements are more important. This is often achieved through size, color, placement, or contrast.
- **Repetition:** Involves using similar or identical elements throughout a design to create a sense of unity and rhythm. It can be used to reinforce a pattern, emphasize a concept, or create a visually appealing rhythm.
- **Movement:** Involves creating a sense of visual flow or direction in a design. This can be achieved through the use of lines, shapes, colors, or other visual elements that guide the viewer's eye through the composition.
- **Pattern:** Involve using repeated elements or motifs to create a sense of visual interest and unity in a design. Patterns can be created with shapes, colors, lines, or other visual elements.

- **White Space:** Also known as negative space, refers to the empty areas around and between visual elements in a design. It is important for balance, readability, and creating a sense of visual clarity.
- **Unity:** Involves bringing together all the different elements in a design to create a cohesive and harmonious whole. It is achieved through the effective use of the other design principles, ensuring that all the elements work together to convey a consistent message.



### Practical Activity 2.5.2: Create a brand identity and icons



#### Task:

- 1: Referring to the previous theoretical activity (2.4.1) you are requested to go to the computer lab use the computer which installed adobe Illustrator to Create a Brand Identity Guideline, create Icons, add Shine Effect, add Gloss, add Texture, add Beveled Edges. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to create a brand identity guideline and icons
- 4: Referring to the steps provided on task 3, create a brand identity guideline and icons in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.5.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.5.



### Practical Activity 2.5.3: Create a logo



#### Task:

1: Referring to the previous theoretical activities you are requested to go to the computer lab use the computer which installed adobe Illustrator to Use design considerations, select types, use basic shapes, select a logo motif, apply effects and vectors, use black and white alterations. This task should be done individually. **Like this**



2: Apply safety precautions.

3: Present out the steps to create a logo.

4: Referring to the steps provided on task 3, create a logo in adobe Illustrator.

5: Present your work to the trainer and whole class

6: Read key reading 2.5.3 and ask clarification where necessary

7: Perform the task provided in application of learning 2.5.



### Key readings 2.5.3: Create a logo

- **Create Logo**

Creating a logo in Adobe Illustrator is a great way to create a professional and memorable logo for your business or brand.

#### **The process of creating the logo:**

**Step 1: Open Adobe Illustrator and create a new document:** The size of the document will depend on the size of the logo you want to create. A good starting point is 800x600 pixels.

**Step 2: Choose a tool to create your logo:** You can use the Pen Tool, the Shape Tool, or the **Step 3: Brush Tool to create your logo:** The Pen Tool is a good choice for

creating precise shapes, while the Shape Tool is a good choice for creating simple shapes. The Brush Tool is a good choice for creating organic shapes.

**Step 4: Draw your logo:** Once you have chosen a tool, you can start drawing your logo. If you are not sure what to draw, you can do a quick Google search for "logo inspiration" to get some ideas.

**Step 5: Fill your logo with color:** You can fill your logo with color using the Fill Tool or the Gradient Tool. The Fill Tool is a good choice for filling your logo with a solid color, while the Gradient Tool is a good choice for creating a gradient effect.

**Step 6: Add text to your logo:** You can add text to your logo using the Text Tool. The Text Tool is a good choice for adding simple text, while the Type Tool is a good choice for adding more complex text.

**Step 7: Save your logo:** Once you are happy with your logo, you can save it as a PNG or JPEG file.

The guidelines for creating a logo in Adobe Illustrator:

- **Use a grid:** A grid can help you to create a logo that is balanced and proportional.
- Use a limited number of colors. Too many colors can make your logo look cluttered and unprofessional.
- **Use a consistent font:** Using a consistent font throughout your logo will help to create a cohesive look.
- **Make sure your logo is scalable:** Your logo should be able to be scaled to different sizes without losing its quality.
- **Get feedback from others:** Once you have created a logo, it is a good idea to get feedback from others to see if they think it is effective.



#### Practical Activity 2.5.4: Create a web banner



##### Task:

1: Referring to the previous theoretical activities you are requested to go to the computer lab use the computer which installed adobe illustrator to apply web-based types, Sketch blueprints, select formats, Select sizes. This task should be done individually.



- 2: Apply safety precautions.
- 3: Present out the steps to create a web banner.
- 4: Referring to the steps provided on task 3, to create a web banner in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.5.3 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.5.



#### **Key readings 2.5.4: Create a web banner**

**web based banner:** is a digital advertisement displayed on a website. It typically appears as an image or graphic with embedded link and can also include animation or interactive elements.

**The purpose of web-based banners** is to promote products, services, or event and to drive traffic to the advertiser's website.

#### **The steps for creating a web-based banner in Adobe Illustrator:**

**Step 1:** Open Adobe Illustrator and create a new document

**Step 2:** Set the document size to the desired size of your banner: For example, if you want to create a banner that is 728 pixels wide by 90 pixels tall, you would set the document size to those dimensions.

**Step 3:** Choose a background color or image for your banner. You can use the Fill Tool or the Gradient Tool to fill the background with color, or you can import an image using the File > Place command.

**Step 5:** Add text to your banner using the Text Tool. You can choose from a variety of fonts and colors for your text, and you can also format the text to make it bold, italic, or underlined.

**Step 6:** Add images to your banner using the File > Place command. You can resize and position images as needed, and you can also apply effects to them using the Effects panel.

**Step 7:** Save your banner as a JPEG or PNG file. Make sure to save your banner in a format that is compatible with the web browser that you will be using to display it.

#### **Additional tips for creating a web-based banner in Adobe Illustrator:**

- **Use a grid to help you lay out your banner:** A grid can help you to ensure that your banner is balanced and proportional.

- **Use a limited number of colors in your banner:** Too many colors can make your banner look cluttered and unprofessional.
- **Use a consistent font throughout your banner:** This will help to create a cohesive look.
- **Make sure your banner is scalable:** Your banner should be able to be scaled to different sizes without losing its quality.
- **Get feedback from others once you have created your banner:** This will help you to identify any areas that need improvement.



### Practical Activity 2.5.5: Create flyer



#### Task:

- 1: Referring to the previous theoretical activities you are requested to go to the computer lab use the computer which installed adobe Illustrator. As a graphic designer, you are asked to make the flyer to be used for advertising the computers by selecting types, select elements, apply graphics and typography, and set standard sizes in adobe illustrator. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to create a flyer.
- 4: Referring to the steps provided on task 3, Create a flyer in adobe Illustrator.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 2.5.5 and ask clarification where necessary
- 7: Perform the task provided in application of learning 2.5.



### Key readings 2.5.5: Create flyer

**Flyer:** is type of printed or digital promotional material used to advertise events, services, products or Business.

**The importance of flyers:**

- Cost-effective marketing
- Targeted distribution
- Brand awareness

- Immediate information
- Versatility

#### **The phases to follow when creating a flyer in adobe illustrator:**

**Step 1:** Open Adobe Illustrator and create a new document. The size of the document will depend on the size of the flyer you want to create. A good starting point is 8.5x11 inches.

**Step 2:** Choose a background color or image for your flyer. You can use the Fill Tool or the Gradient Tool to fill the background with color, or you can import an image using the File > Place command.

**Step 3:** Add text to your flyer using the Text Tool. You can choose from a variety of fonts and colors for your text, and you can also format the text to make it bold, italic, or underlined.

**Step 4:** Add images to your flyer using the File > Place command. You can resize and position images as needed, and you can also apply effects to them using the Effects panel.

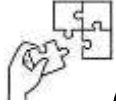
**Step 5:** Add shapes to your flyer using the Shape Tool. You can choose from a variety of shapes, such as rectangles, circles, and triangles. You can also use the Shape Tool to create custom shapes.

**Step 5:** Add lines to your flyer using the Line Tool. You can use the Line Tool to create straight lines, curved lines, and dotted lines.

**Step 6:** Save your flyer. Make sure to save your flyer in a format that is compatible with the printer that you will be using to print it.

#### **Additional guidelines for creating a flyer in Adobe Illustrator:**

- **Use a grid to help you layout your flyer:** A grid can help you to ensure that your flyer is balanced and proportional.
- **Use a limited number of colors in your flyer:** Too many colors can make your flyer look cluttered and unprofessional.
- **Use a consistent font throughout your flyer:** This will help to create a cohesive look.
- **Make sure your flyer is easy to read:** Use a font that is large enough to be read easily, and make sure that there is enough contrast between the text and the background.
- **Proofread your flyer carefully before printing it:** Make sure that there are no typos or grammatical errors.



### **Application of learning 2.5.**

You are a graphic designer working on a project to create a series of icons for a mobile app, logo, web banner and flyers. The client has provided you with a list of icons, logo, web banner and flyers they needs, ranging from basic geometric shapes to more intricate symbols representing specific actions and functions within the app. To tackle this task efficiently, you decide to leverage Adobe Illustrator's shape tools and design capabilities.



## Learning outcome 2 end assessment

### Theoretical assessment

#### Q1. Choose the right answer

**1. Which panel in Adobe Illustrator allows you to manage and organize layers in your document?**

A) Swatches Panel

B) Layers Panel

C) Brushes Panel

D) Artboards Panel

**2. What is the primary function of the Toolbar in Adobe Illustrator?**

A) To provide access to different panels

B) To display the color options for the document

C) To offer various tools for creating and editing artwork

D) To control the zoom level of the Document Window

**3. Which element in Adobe Illustrator is used to define the boundaries and layout of your design?**

A) Document Window

B) Artboard

C) Control Panel

D) Tools Panel

**4. The Control Panel in Adobe Illustrator primarily displays:**

A) The color options for your design

- B) The tools available for editing paths
- C) Contextual options for the selected tool or object
- D) The different layers in your document

**5. Which panel would you use to change the color fills and strokes of your objects in Adobe Illustrator?**

- A) Layers Panel
- B) Color Panel
- C) Pathfinder Panel
- D) Symbols Panel

**Q2. Answer True or False**

- a) The Layers Panel in Adobe Illustrator allows you to manage and organize different layers of your artwork.
- b) The Toolbar in Adobe Illustrator provides access to a wide range of tools used for editing and creating artwork.
- c) The Artboard in Adobe Illustrator acts as a placeholder for your artwork, defining the printable area of your design.
- d) The Control Panel in Adobe Illustrator displays all the available tools and panels in the workspace.
- e) The Color Panel in Adobe Illustrator is used to manage the layers and their visibility.

**Practical assessment**

An urban garden initiative aimed at promoting sustainable living lacks a cohesive brand identity. The initiative needs a graphic designer to create a comprehensive brand identity that includes infographics, icons, a logo, web banners, and flyers. The challenge is to visually communicate the essence of the initiative – sustainable urban gardening – and inspire community participation. Your task is to create a comprehensive brand identity that includes infographics, icons, a logo, web banners, and flyers. The goal is to communicate the brand's values and encourage the community to adopt a more sustainable lifestyle.

**END**



## References

(2022, June 4). Retrieved from <https://www.linkedin.com>

Burkus, S. (2010). *The Adobe Photoshop CS5 Book Professional + Web Design*. United States.

Evening, M. (2013). The Complete Guide for Photographers. In M. Evening, *The Adobe Photoshop Lightroom 5 Book*. United Kingdom: Pearson Education.

Geisen, N. (2016). *Photoshop for Beginners - Learn the Basics of Photoshop in Under 10 Hours!*. . United States:: CreateSpace Independent Publishing Platform.

Kelby, S. (2023). The Adobe Photoshop Book for Digital Photographers. In S. Kelby, *The Adobe Photoshop Book for Digital Photographers*. United Kingdom: Pearson Education.

O'Reilly. ((2005)). *A Designer's Notebook. Illustrations with Photoshop*.

PATTINSON, R. (2018). *A Beginners Guide for Adobe Photoshop , Adobe Illustrator , Adobe In-Design Basics. (n.p.)*:. Amazon Digital Services LLC - KDP Print US. .

## Learning Outcome 3: Export File



**Indicative contents**

**3.1. Selection of file format**

**3.2. Selection of file format**

**3.3. Export artwork**

**Key Competencies for Learning Outcome 3: Export File**

<b>Knowledge</b>	<b>Skills</b>	<b>Attitudes</b>
<ul style="list-style-type: none"><li>● Description of file format</li><li>● Description of image quality</li><li>● Explanation of artwork exportation</li></ul>	<ul style="list-style-type: none"><li>● Selection of file format</li><li>● Setting of image quality</li><li>● Exporting of artwork</li></ul>	<ul style="list-style-type: none"><li>● Having Creativity</li><li>● Being a Problem solver</li><li>● Having Curiosity</li><li>● Being Patient</li><li>● Being</li><li>● Being collaborate</li><li>● Having Critical thinking</li></ul>



**Duration: 15 hrs**

**Learning outcome 3 objectives:**



By the end of the learning outcome, the trainees will be able to:

1. Describe properly the types of file format in graphic design based on file usage.
2. Explain clearly image quality as found in graphic design based on its usage
3. Explain clearly artwork exportation in graphic design based on its usage.
4. Manipulate effectively image quality in graphic design based on its usage.
5. Export effectively artwork as done in graphic design based on its usage.



**Resources**

Equipment	Tools	Materials
<ul style="list-style-type: none"><li>• Computer</li><li>• Projector</li></ul>	<ul style="list-style-type: none"><li>• Adobe Photoshop</li><li>• Adobe Illustrator</li></ul>	<ul style="list-style-type: none"><li>• N/A</li></ul>



## Indicative content 3.1: Selection of File Format



Duration: 5 hrs



### Theoretical Activity 3.1.1: Description of file format



#### Tasks:

- 1: You are requested to answer the following questions related to the file formats:
  - I. What do you understand about image file format?
  - II. What are the various types of image file formats?
  - III. What are the different purposes or applications of image file formats?
- 2: Participate in group formulation.
- 3: Present the findings/answers to the whole class
- 4: For more clarification, read the key readings 3.1.1. In addition, ask questions where necessary.



### Key readings 3.1.1.: Description of file format

- **File Format**

**A file format** is a standardized way of organizing and storing data in a computer file. It defines the structure and encoding of the data within the file, allowing software programs to interpret and manipulate the information contained in the file. File formats can be specific to different types of data, such as text, images, audio, video, or executable code, and they play a crucial role in determining how data is stored, accessed, and shared across different systems and applications. Each file format has its own specifications, rules, and conventions for representing and storing data, making it possible for files to be created, read, and processed consistently by different software programs and devices.

The selection of an appropriate file format is a crucial aspect of digital content creation and management. A suitable file format ensures compatibility, preservation, and efficient utilization of the data it encapsulates.

**When choosing a file format, it is essential to consider the following factors:**

- **Purpose and Usage:** Determine the primary purpose of the file, whether it's for editing, sharing, archiving, or distribution. This will guide the selection of a format that aligns with the intended use.
- **Compatibility:** Ensure the file format is compatible with the software applications and devices that will be used to access and process the data. Avoid proprietary formats that may limit accessibility.
- **File Size and Compression:** Consider the file size and compression capabilities of the format. Optimize file size for efficient storage and transfer, while maintaining data integrity and quality.
- **Data Preservation:** Select a format that supports long-term data preservation, ensuring the file remains accessible and usable over time. Avoid obsolete or unsupported formats that may deteriorate or become incompatible.

### **Description of File Formats**

**File formats** are standardised structures for organising and storing digital information. They define the way data is encoded, interpreted, and processed by software applications and devices. Different file formats cater to specific file types and data types, such as documents, images, audio, video, and executable code.

### **Types and usage of file formats:**

Different image file formats cater to specific image types and compression levels, offering varying degrees of image quality, file size, and compatibility.

- **Raster Image Formats:** Also known as bitmap formats, represent images as a grid of pixels, each assigned a color value. These formats are suitable for photographs, illustrations, and graphics with intricate details.  
Common raster image formats include:
  - **JPEG (Joint Photographic Experts Group):** Widely used for compressing photographs, but can introduce some loss of image quality.
  - **PNG (Portable Network Graphics):** Supports lossless compression, preserving image quality, but may result in larger file sizes.
  - **GIF (Graphics Interchange Format):** Limited to 256 colors, but allows for animations and transparency.
  - **BMP (Bitmap):** Uncompressed format resulting in large file sizes, but preserves the original image data without loss.
- **Vector Image Formats:** Vector image formats, also known as object-oriented formats, represent images mathematically as a collection of shapes, lines, and curves. These formats are suitable for logos, icons, and illustrations with sharp edges and scalability.

Common vector image formats include:

- **SVG (Scalable Vector Graphics):** An open standard format that can be scaled to any size without losing quality.
  - **EPS (Encapsulated PostScript):** A high-quality format commonly used in professional printing and graphic design.
  - **AI (Adobe Illustrator Document):** A proprietary format developed by Adobe for use in Adobe Illustrator software.
- **Raw Image Formats:** Raw image formats, also known as unprocessed image formats, store uncompressed image data directly from the camera sensor. These formats preserve all the original image data without any loss, but result in large file sizes.

Common raw image formats include:

- CR2 (Canon Raw Image Format)
- NEF (Nikon Electronic Format)
- RAW (Generic Raw Image Format)



### Practical Activity 3.1.2: Arrange artwork according to the size requirements



#### Task:

- 1: Referring to the previous theoretical activity (3.1.1) you are requested to go to the computer lab use the computer which installed adobe Illustrator to use the previous task to Arrange artwork according to the size and save as type file formats. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to arrange artwork according to the size requirements and saving different types of file formats.
- 4: Referring to the steps provided on task 3, arrange artwork according to the size requirements and save different types of file formats.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 3.1.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 3.1.



### **Key readings 3.1.2: Arrange artwork according to the size requirements**

**Arranging artwork according to size requirements** is an essential skill for creating visually appealing and professional-looking designs.

The step-by-step guide on how to arranging artwork:

#### **Step 1: Define the Size Requirements**

Before you start arranging your artwork, it's crucial to understand the specific size requirements for your project. This could be the final dimensions of a printed document, the size of a digital display, or the constraints of a web page. Having these dimensions clearly defined will guide your layout decisions.

#### **Step 2: Set the Artboard Size**

In Adobe Illustrator, the artboard represents the printable area of your document. To ensure your artwork fits within the specified size requirements, adjust the artboard dimensions accordingly. Go to File > Document Setup, and enter the desired width and height values.

#### **Step 3: Measure and Position Artwork**

Use the Ruler tool (Ctrl+R or Cmd+R) to measure the dimensions of your artwork elements. This will help you align and position them accurately within the artboard. Use the Selection tool (A) to drag and drop your artwork elements into place.

#### **Step 4: Utilize Alignment Tools**

Adobe Illustrator provides various alignment tools to help you arrange your artwork precisely. The Align panel (Window > Align) offers options for aligning objects horizontally, vertically, or to the center. The Distribute panel (Window > Distribute) allows you to evenly distribute objects horizontally or vertically within a specified space.

#### **Step 5: Use Guides and Grids**

Guides and grids can serve as visual references to help you align and position your artwork accurately. To create a guide, simply click and drag from a ruler onto the artboard. To create a grid, go to View > Show Grid.s You can customise the grid spacing and subdivisions to match your specific needs.

#### **Step 6: Preview and Adjust**

As you arrange your artwork, regularly preview your design using the Preview mode (Ctrl+Y or Cmd+Y). This will display your artwork at the actual size and resolution, allowing you to identify any alignment or spacing issues.



#### **Points to Remember**

- There are various file formats to save and export images in different ways. These types of file formats are including: PNG (Portable Network Graphics), TIFF (Tagged Image File Format), GIF (Graphics Interchange Format).
- **Arrange artwork according to size requirements:**
  - ✓ Define the size requirements
  - ✓ Set the artboard size
  - ✓ Measure and position artwork
  - ✓ Utilize alignment tools
  - ✓ Use guides and grids
  - ✓ Preview and adjust



#### **Application of learning 3.1.**

You work as a graphic designer for a society tasked with digitizing and archiving a collection of important historical documents dating back several centuries. Your goal is to select file formats that will ensure the long-term preservation and accessibility of these documents for future generations.



## Indicative content 3.2: Set Image Quality



Duration: 5 hrs



### Theoretical Activity 3.2.1: Description of image quality



#### Tasks:

- 1: You are requested to answer the following questions related to the image quality:
  - I. What do you understand in image compression?
  - II. What are the various types of image compression?
  - III. What are the different techniques of image optimization?
- 2: Participate in group formulation.
- 3: Present the findings/answers to the whole class
- 4: For more clarification, read the key readings 3.2.1. In addition, ask questions where necessary.



#### Key readings 3.1.1.:

**Image optimization** is the process of modifying digital images to improve their appearance, reduce their file size, and ensure their compatibility with various platforms and devices. It involves a range of techniques that aim to balance image quality, file size, and user experience while maintaining the visual integrity of the original image.

#### Types of Image Optimization Tools

- **Online Image Optimization Tools:** These tools are accessible through web browsers and allow users to optimize images directly from their computers. Examples include TinyPNG, Kraken.io, and Optimizilla.
- **Desktop Image Optimization Tools:** These tools are installed on local computers and provide more advanced features and control over the optimization process.

#### Techniques for Image Optimization:

- **Image Format Selection:** Choose the appropriate image format based on the image type and intended use. For instance, JPEG is suitable for photographs, while PNG is preferred for graphics with sharp edges and transparency.

- **Image Resizing:** Resize images to fit the intended display dimensions without compromising image quality. Avoid scaling images beyond their original resolution, as this can lead to pixelation and loss of detail.
- **Image Compression:** Employ compression techniques to reduce file size while maintaining acceptable image quality. JPEG and PNG offer varying levels of compression, allowing for a balance between file size and visual fidelity.
- **Image Optimization Tools:** Utilize image optimization tools and software to automate the process of resizing, compressing, and optimizing images for various purposes.
- **Metadata Removal:** Remove unnecessary metadata from images, such as camera settings, location information, and copyright notices, to further reduce file size without affecting image quality.

#### **Benefits of Image Optimization:**

- **Improved Website Performance:** Optimized images contribute to faster website loading times, enhancing user experience and search engine rankings.
- **Reduced Bandwidth Consumption:** Smaller image file sizes minimize bandwidth usage, lowering hosting costs and improving overall website efficiency.
- **Enhanced User Engagement:** High-quality, visually appealing images can attract and retain user attention, leading to increased engagement and conversion rates.

#### **Resizing image to scale**

**Resizing an image to scale** refers to the process of adjusting the dimensions of an image while maintaining its original aspect ratio. This means that the height and width of the image are changed proportionally, ensuring that the image does not become distorted or stretched.

#### **Purpose of Resizing Images to Scale**

**Resizing images to scale** is a common practice in various digital applications, including web development, graphic design, and photo editing.

#### **The purposes of resizing Images to scale:**

- **Maintaining Image Quality:** Resizing an image to scale ensures that the image retains its original proportions and avoids pixelation or distortion.
- **Adapting Images for Different Displays:** Images are often resized to fit different screen sizes and resolutions, ensuring optimal viewing on devices ranging from smartphones to large monitors.

- **Reducing Image File Size:** Resizing an image to a smaller dimension reduces its file size, making it more efficient for web pages, emails, and other digital platforms.
- **Enhancing Visual Appeal:** Resizing images to specific dimensions can enhance their visual appeal and ensure they align with the desired layout or context.

#### **Methods for Resizing Images to Scale**

- **Image Editing Software:** Dedicated image editing software like Adobe Photoshop, GIMP, and Paint.NET offer precise control over image resizing and provide various interpolation algorithms to maintain image quality.
- **Online Image Resizers:** Online tools like TinyPNG, Kraken.io, and Optimizilla offer a convenient way to resize images in a web browser, but may lack some advanced features found in desktop software.
- **Content Management Systems (CMS):** CMS platforms like WordPress and Drupal often have built-in image resizing capabilities, allowing users to resize images directly within the CMS interface.
- **Image Resizing Libraries:** Developers can utilize image resizing libraries like Pillow (Python) and ImageMagick (C++) to resize images programmatically within web applications or scripts.

#### **The factors Considerations When Resizing Images to Scale**

- **Image Resolution:** Resizing images with high resolutions may require more attention to interpolation to maintain image quality, while low-resolution images may be more susceptible to pixelation.
- **Interpolation Algorithm:** Interpolation algorithms determine how new pixels are created when resizing an image. Different algorithms have varying strengths and weaknesses, and the choice depends on the desired outcome.
- **Image Type:** Different image formats, such as JPEG, PNG, and GIF, respond differently to resizing. JPEGs are generally more forgiving of resizing, while PNGs may exhibit more visible artifacts.
- **Intended Use:** The intended use of the resized image should be considered. For instance, resizing for web display may prioritize file size reduction, while resizing for print may prioritize image quality.

- **Image compression**

**Image compression** is a process of reducing the size of an image file without significantly affecting its quality. This is done by removing redundant or unnecessary data from the image file.

**There are two main types of image compression:**

**Lossy compression** is a type of compression that discards some of the data in an image, resulting in a smaller file size, but also a slight decrease in quality. The amount

of data that is discarded can be adjusted, allowing for a trade-off between file size and quality. Lossy compression is commonly used for images that will be viewed on a screen, such as web images and photographs.

**Lossless compression** is a type of compression that does not discard any data in an image, which means that the original image can be perfectly reconstructed from the compressed file. However, lossless compression typically results in a smaller file size than the original image, so it is not as effective as lossy compression for reducing file size. Lossless compression is commonly used for images that need to be preserved in their original form, such as scanned documents and medical images.

- **Set image quality in adobe Photoshop**

**Setting image quality in adobe Photoshop** involves adjusting the compression level of the image file. This process determines how much the image is compressed and how much detail is preserved. Higher compression levels result in smaller file sizes but also lower image quality, while lower compression levels result in larger file sizes but retain more image detail.

**The process of setting image quality in Adobe Photoshop:**

- **Save the image in your desired format:** Open the image you want to save in Adobe Photoshop. Then, go to the File menu and select Save As. Choose the desired format for your image, such as JPEG or PNG.
- **Access the Save As Options:** In the Save As dialog box, click on the Options button. A new window will open with various image quality settings.
- **Adjust the JPEG Quality slider:** For JPEG images, the most significant factor affecting image quality is the JPEG Quality slider. This slider ranges from 0 to 100, with 0 being the lowest quality and highest compression, and 100 being the highest quality and lowest compression.
- **Preview the image quality:** As you adjust the JPEG Quality slider, Photoshop will display a preview of the image quality in the preview area. This allows you to see how the compression level affects the image's appearance.
- **Find the optimal balance:** Choose a JPEG Quality setting that provides a balance between file size and image quality. Higher quality settings will result in larger file

sizes but retain more image detail. Lower quality settings will produce smaller file sizes but may introduce noticeable artifacts.

- **Apply the settings and save the image:** Once you are satisfied with the image quality, click the OK button to apply the settings. Then, click the Save button to save the image with the adjusted quality.

- **Set image size in adobe illustrator**

Setting image quality in Adobe Illustrator involves adjusting the image's resolution and compression level. Resolution determines the number of pixels per inch (PPI) in the image, while compression level determines how much the image is compressed to reduce its file size.

**Process of setting image quality in Adobe Illustrator:**

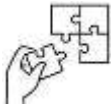
- **Place or embed the image:** Open the image you want to adjust in Adobe Illustrator. You can either place the image directly into your Illustrator document or embed it. Embedding will make the image become part of the Illustrator file, while placing will keep the image as a separate file.
- **Select the image:** Click on the image to select it. You can also use the Selection Tool (A) to select the image.
- **Open the Image Size dialog box:** Go to the Object menu, select Raster, and then choose Image Size. This will open the Image Size dialog box.
- **Adjust the resolution:** In the Image Size dialog box, check the Resample checkbox. Enter the desired resolution in the Width and Height fields. Higher resolution values will result in sharper images but larger file sizes.
- **Adjust the compression level:** For JPEG, PNG, or GIF images, you can adjust the compression level by using the Quality slider. This slider ranges from 0 to 100, with 0 being the lowest quality and highest compression, and 100 being the highest quality and lowest compression.
- **Preview the image quality:** As you adjust the resolution or compression level, Illustrator will display a preview of the image quality in the preview area. This allows you to see how the changes affect the image's appearance.

**Apply the settings and close the dialog box:** Once you are satisfied with the image quality, click the OK button to apply the settings. This will apply the changes to the image in your Illustrator document.



#### Points to Remember

- **Image compression** is essential for reducing the file size of images without significantly compromising their quality.
- **The types of image compression commonly used like:** Online Image Optimization Tools, desktop Image Optimization Tools
- To set image quality follow these steps:
- **Step 1:** Open the image.
- **Step 2:** Select the image.
- **Step 3:** Go to Object > Raster > Image Size.
- **Step 4:** Adjust the compression level>Preview the image quality.
- **Step 5:** Click OK to apply the settings.



#### Application of learning 3.2.

You work as a web developer for an e-commerce company that specializes in selling high-end cameras and photography equipment. One of the key factors that affect customer satisfaction and sales is the quality of product images displayed on the website. Your task is to optimize the image quality to provide customers with the best possible viewing experience.



### Indicative content 3.3. Export Artwork



Duration: 5 hrs



#### Theoretical Activity 3.3.1: Explanation of artwork export



#### Tasks:

- 1: You are requested to answer the following questions related to the artwork export:
  - i. Could you provide an explanation of an artwork?
- 2: Provide the answer for the asked questions and write them on papers.
- 3: Present the findings/answers to the whole class
- 4: For more clarification, read the key readings 3.3.1. In addition, ask questions where necessary.



#### Key readings 3.3.1: Explanation of artwork export

- **Export artwork**

**An artwork** refers to a digital creation or design produced using the software's tools and features. It encompasses any visual composition, illustration, graphic, or design project created within the Illustrator workspace. Artworks in Adobe Illustrator can range from simple logos, icons, and illustrations to complex vector graphics, infographics, and digital artwork. Artists and designers use Illustrator's powerful tools to create scalable and editable artwork that can be used for various purposes, such as print materials, web graphics, branding, and more. Adobe Illustrator enables users to manipulate shapes, colors, typography, and other elements to bring their creative vision to life in a digital format.

In graphic design, **artwork export** refers to the process of saving a design file in a specific format for use in a particular application or environment. The choice of file format depends on the intended use of the artwork, such as print, web, or mobile.

**Common file formats for artwork export include:**

- **PNG (Portable Network Graphics):** A raster image format that supports transparency, making it ideal for logos, icons, and web graphics.
- **JPEG (Joint Photographic Experts Group):** A raster image format that is known for its high compression ratio, making it suitable for photos and images with complex details.

- **TIFF (Tagged Image File Format):** A raster image format that is widely used in print applications due to its ability to preserve image quality and support a wide range of color spaces.
- **SVG (Scalable Vector Graphics):** A vector image format that is resolution-independent, meaning it can be scaled to any size without losing quality. SVG files are commonly used for logos, icons, and illustrations.
- **PDF (Portable Document Format):** A versatile file format that can contain both raster and vector graphics, as well as text and other elements. PDFs are widely used for sharing documents, including brochures, presentations, and ebooks.

#### **Factors to consider when exporting artwork:**

- **Intended use:** Determine where the artwork will be used, such as print, web, or mobile. This will help you choose the most appropriate file format.
- **Image quality:** Consider the level of detail and color accuracy required for the artwork. Higher image quality will result in larger file sizes.
- **File size:** Be mindful of the file size limitations of the application or platform where the artwork will be used. Large file sizes can slow down websites and mobile apps.
- **Transparency:** If the artwork needs to have transparent areas, choose a file format that supports transparency, such as PNG or TIFF.
- **Color space:** Choose a color space that is compatible with the application or platform where the artwork will be used. Common color spaces include RGB (red, green, blue) for web and CMYK (cyan, magenta, yellow, black) for print.



### **Practical Activity 3.3. 2: Export artworks**

#### **Task:**

- 1: Referring to the previous theoretical activity (3.3.1) you are requested to go to the computer lab to export artworks which was created in Activities 2.2.1. This task should be done individually.
- 2: Apply safety precautions.
- 3: Present out the steps to export artworks.
- 4: Referring to the steps provided on task 3, export artworks.
- 5: Present your work to the trainer and whole class
- 6: Read key reading 3.3.2 and ask clarification where necessary
- 7: Perform the task provided in application of learning 3.3.



### Key readings 3.3.2: Export artworks

- **To export artwork in adobe photoshop**

- **Paths to Illustrator**

- **Create a Path:** Select the Path tool from the toolbar and draw a path around the artwork you want to export.
- **Save the Path:** Go to File > Export > Paths to Illustrator. A dialog box will appear.
- Export Paths to Illustrator dialog box in Adobe Photoshop Opens in a new window
- [helpx.adobe.com](https://helpx.adobe.com)
- **Choose a File Name:** Enter a file name for the Illustrator file in the dialog box.
- **Click OK:** Click the OK button to export the path to Illustrator.

- **Zoomify**

- **Export Zoomify:** Go to File > Export > Zoomify. A dialog box will appear.
- **Choose a File Name:** Enter a file name for the Zoomify file in the dialog box.
- **Click OK:** Click the OK button to export the Zoomify file.

- **Save for Web**

- **Go to Save for Web:** Go to File > Save for Web (Legacy).
- **Select a Format:** Choose the appropriate format for the intended use from the Format dropdown menu.
- **Adjust Quality:** Adjust the quality settings using the sliders and options in the right panel.
- **Preview:** Preview the artwork at different file sizes and quality levels.
- **Click Save:** Click the Save button to save the artwork in the chosen format.

- **To export artwork in adobe illustrator**

The process for exporting artwork in Adobe Illustrator through Export for Screens, Export As, and Save for Web:

- **Export for Screens**

- Choose the Export for Screens option: Select File > Export for Screens.
- Select the desired artboards: Choose the artboards you want to export in the Export for Screens window.
- Adjust the format and settings: Choose the appropriate format (PNG, JPEG, SVG, or GIF) for your intended use. Adjust the quality settings and other options as needed.
- Click Export: Click the Export button to save the artwork in the chosen format.

- **Export As**

- **Choose the Export as option:** Select File > Export As.
- **Select the desired format:** Choose the appropriate format (AI, PSD, EPS, PDF, SVG,

or other) for your intended use.

- **Adjust the format options:** Adjust the format-specific options as needed, such as color space, resolution, and layers.
- **Click Export:** Click the Export button to save the artwork in the chosen format.

➤ **Save for Web (Legacy)**

- **Choose the Save for Web (Legacy) option:** Select File > Save for Web (Legacy).
- **Select the desired format:** Choose the appropriate format (JPEG, GIF, PNG, or BMP) for your intended use.
- **Adjust the image options:** Adjust the image settings, such as quality, compression, and color space.
- **Preview the image:** Preview the image at different file sizes and quality levels.
- **Click Save:** Click the Save button to save the artwork in the chosen format.

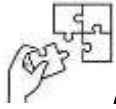
**Additional advices:**

- **Use the correct format for the intended use:** Choose the appropriate format based on whether you need a raster image, vector image, or format for specific platforms like web or mobile.
- **Consider file size:** Adjust the quality settings to balance file size and image quality.
- **Preview the image:** Preview the image at different file sizes and quality levels to ensure it looks as intended.



**Points to Remember**

- Artworks refer to digital creations and designs made using the software's tools and features.
- There are commonly formats used which are including: PDF, SVG, TIFF, JPEG and PNG for logos and icons.
- **To export Artwork in Adobe Illustrator**
- **Adobe Illustrator** offers three primary methods for exporting artwork: Export for Screens, Export As, and Save for Web (Legacy).
- **Export for Screens:**
- Select Export for Screens: Navigate to File > Export for Screens>Choose Artboards>Adjust Format and Settings>Click Export
- **Export As:**
- Select Export As: Choose File > Export As>Choose Format>Adjust Format Options>Click Export
- **Save for Web (Legacy):**
- Select Save for Web (Legacy): Navigate to File > Save for Web (Legacy)>Choose Format>Adjust Image.



### **Application of learning 3.3.**

You are a graphic designer working on a brochure design project for a client's upcoming event. After completing the brochure layout in Adobe Illustrator, your next task is to export the file in various formats for printing and digital distribution.



### Learning outcome 3 end assessment

#### Theoretical assessment

1) Answer true or False

- a. The PNG format uses lossy compression. **False**
- b. JPEG is ideal for images with sharp edges and text. **False**
- c. GIF supports transparency but only in a Single color. **True**
- d. BMP files generally have smaller file sizes compared to JPEG files. **False**
- e. TIFF files are commonly used in professional printing due to their high quality.

**True**

2) Which factors primarily effects the sharpness of an image?

- a. File format
- b. Resolution
- c. Compression ratio
- d. Color depth

**Answer: B**

3) What type of compression reduces file size by discarding reduces file size by discarding some image data?

- a.
- b. Lossless compression
- c. Lossy compression
- d. Uncompressed
- e. Vector compression

**Answer: B**

4) Which file format is known for preserving image quality with no loss data?

- a. JPEG
- b. GIF
- c. PNG
- d. BMP

**Answer: C**

5) What is the effect of increasing an image's DPI (dots per inch) setting?

- a. It decreases the image size on screen
- b. It reduces the image's sharpness.
- c. It improves the image quality in print.
- d. It increases the file size without changing the quality.

**Answer: C**

## **Practical assessment**

As a skilled graphic designer, you are faced with the intricate challenge of crafting vector illustrations for a comprehensive multi-platform marketing campaign. The campaign's primary goal is to promote a revolutionary line of eco-friendly tech products, demanding not only creative prowess but also technical finesse. Your assigned role necessitates utilizing Adobe Illustrator to design artwork that is not only versatile and visually appealing but also scalable for seamless integration across diverse platforms such as social media, the company's website and print materials.



## References

(2022, June 4). Retrieved from <https://www.linkedin.com>

Burkus, S. (2010). The Adobe Photoshop CS5 Book Professional + Web Design. United States.

Evening, M. (2013). The Complete Guide for Photographers. In M. Evening, The Adobe Photoshop Lightroom 5 Book. United Kingdom: Pearson Education.

Geisen, N. (2016). Photoshop for Beginners - Learn the Basics of Photoshop in Under 10 Hours!. . United States:: CreateSpace Independent Publishing Platform.

Kelby, S. (2023). The Adobe Photoshop Book for Digital Photographers. In S. Kelby, The Adobe Photoshop Book for Digital Photographers. United Kingdom: Pearson Education.

O'Reilly. ((2005)). A Designer's Notebook. Illustrations with Photoshop:.

PATTINSON, R. (2018). A Beginners Guide for Adobe Photoshop , Adobe Illustrator , Adobe In-Design Basics. (n.p.):. Amazon Digital Services LLC - KDP Print US. .



October 2024