ASSIGNMENT 1

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COMPUTER ILLUSTRATION

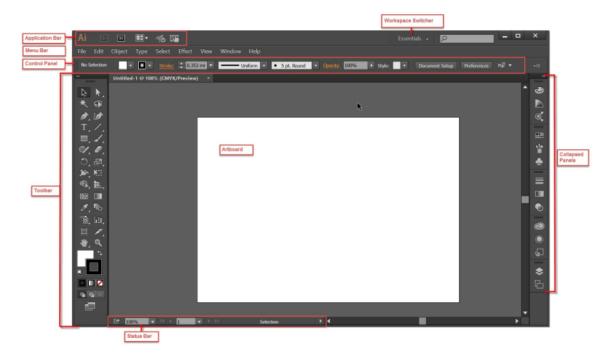
ADOBE ILLUSTRATOR:

It is the industry-standard vector graphics app that lets you create logos, icons, drawings, typography, and complex illustrations for any medium. Adobe Illustrator is the industry-standard design app that lets you capture your creative vision with shapes, colour, effects, and typography.

The Vector Image:

It is the raster image, which is made up of a mosaic of pixels, the vector image is based on curves generated by mathematical formulas.

Workspace:



- **MENU:** The main menu contains all the functions available in the software.
- **ARTBOARD:** Hardboard is the equivalent of the Photoshop canvas; this is where you do the work. The worktop can be resized as needed.
- <u>TOOLS:</u> This vertical space contains the various tools, the foreground and background colour selection ranges as well as various working and viewing modes.

- **TOOLS OPTIONS:** The content of this horizontal space varies depending on the tool selected. Various parameters allow us to adjust the specifics of the chosen tool.
- **PANNELS:** Panels will generally offer more tool adjustment possibilities in addition to providing some specialized functionality. To display them, use the WINDOWS menu.

CREATE A NEW DOCUMENT

- Choose from the FILE > NEW>DOCUMENT menu. It will display the new document window.
- Name: It allows you to name the file.
- **Profile:** It allows you to choose a predefined profile (printing, web, devices, video, and film, basic RGB, Flash builder).
- <u>Several boards:</u> It allows you to define the desired number of worktops as well as their arrangement.
- Size: The drop-down menu allows you to choose a predefined size.
- **Bleed:** It allows you to set a custom bleed.
- Mode: This menu allows us to choose the desired colour mode (CMYK or RGB).
- Preview mode: This menu allows us to choose the preview mode (pixel or overlay).
- Align new objects to the pixel grid: This menu allows us to choose to align the created objects on the pixel grid used for output in raster formats. This option is important for compositions intended for the web or multimedia.

OPEN A DOCUMENT: Choose from the **FILE / OPEN** menu. The Open window is displayed.

SAVE A DOCUMENT: Choose from the **FILE / SAVE (or SAVE_AS)** menu. The Save As (or save) window is displayed.

DIFFERENT FORMATS FOR SAVING OUR WORK:

- Adobe Illustrator (ai): It should be our source format.
- <u>Illustrator EPS (eps):</u> The EPS (Encapsulated PostScript) format is particularly useful for transferring vector designs from one application to another.
- Illustrator Template: The AIT format allows us to save a document as a template.
- Adobe PDF (pdf): It allows you to save a document in PDF format that can be viewed using Acrobat Reader, which is available free of charge.
- Adobe FXG (fxg): It allows us to save a document for later use in Adobe FLEX software or Flash.
- Compressed in SVG (svgz): It is a vector format producing high-quality interactive web images that are 50% to 80% lighter than SVG. In this format, transparency is not maintained, and images are saved in JPEG format. These files cannot be edited by a text editor.
- **SVG (SVG):** The format like SVGZ without the limitations specific to the compressed version. SVG consists of formatting using XML.

TOOLBARS:



LAYERS:

Layers, in Illustrator, are a bit like Photoshop folders. They allow multiple plots and groups of independent plots to be grouped. Layers and paths can be renamed, duplicated, reordered, or deleted easily. They can also be displayed or hidden using the eye positioned to the left of the elements. The circles positioned in the straight part of the layers and paths allow them to be selected or indicate that they are selected. The tool represented by a magnifying glass allows you to search for a specific element in the panel after selecting the shape on the artboard. This is very useful in compositions with a very large number of elements.

COLOURS:

The Color and Swatches panels allow us to choose or create new hues.

- <u>Color Panel:</u> It allows us to mix colours for the background and the outline. The sub-menu allows us to choose from different color modes.
- **Swatches panel:** The colour chart allows us to choose and create shades, gradients and, as we will see, patterns.

DRAWING TOOLS:

- <u>Crayon:</u> The pencil tool allows us to produce a path using an outline colour. Anchor points and curves are produced automatically, and tool options control the thickness and appearance of the line.
- <u>Eraser:</u> It is grouped in the same tool as the PencilTooll, the Eraser tool erases path segments located between two anchor points.
- Round: It is grouped in the same tool as the Pencil tool, the round tool rounds vertices to a point by simply drawing a curve over the vertices.

BRUSH TOOL:

The brush tool lets us use a preset or custom shape to draw a shape using an outline colour. Anchor points and curves are produced automatically, and tool options control the thickness and appearance of the line.

• <u>Contour shape:</u> It is possible to produce a custom shape from the drop-down_menu displaying the New Shape window then Plugin Options.

BLOB BRUSH:

Blob brush works much like a pencil, but rather than producing an outline, it produces a shape containing a fill.

Thus, the shape produced consists of two editable paths (internal and external) and a background. The tool options allow you to add an outline and modify the shape and appearance of the path.

PEN:

The Pen tool works here just like Photoshop's, by creating successive anchor points. we can adjust the curves using the handles, but also using the Direct Selection tool by moving a path segment between two anchor points.

THE TEXT TOOL:

Illustrator allows us to create free or captive texts. Illustrator's text looks much better, however, because

it is vector and noa t matrix. we will therefore gain by doing all the typographical work of our projects in software like this one, reserving Photoshop for image processing.

FREE TEXT:

To create free text, simply click on the **artboard** using **the Text tool** and **type** in the **desired text**. The created element is underlined with a path and surrounded by box-like shapes are drawn. It can be deformed or moved on the artboard using the Selection tool.

CHARACTER PANEL:

The Character panel allows us to choose the desired font and style. It also lets us choose body size and line spacing,

define the approach and kerning and perform vertical and horizontal scale variations. It is also possible to perform a vertical shift as well as a rotation of the characters.

PARAGRAPH PANEL:

The Paragraph panel is useful for captive text, that is, the text contained in a text box. To create captive text, draw a box using the Text tool, then type or paste our text into it. The created box can then be resized using the Selection tool without distorting the characters.

CAPTIVE TEXT TOOL:

The Captive Text tool transforms an existing path or shape into a text box. To turn a shape into a text box, simply select the Captive Text tool and click on the path of the shape you want to transform.

CURVILINEAR TEXT TOOL:

The Curvilinear Text tool aligns the baseline of typefaces on a path. This tool can be used both with paths produced with the pen tool and with shapes.

VERTICAL TOOLS:

The Vertical Text, Vertical Captive Text, and Vertical Curvilinear Text tools provide the same functionality as the normal tools but write characters on top of each other. These tools can also be used both with paths produced with the pen tool and with shapes.

DEFORMATION:

All elements produced in Illustrator can be distorted in a variety of ways, whether using tools, adjustments, or filters.

TEXT DISTORTION:

We can choose from the options of the **Create Envelope tool** (Create with Warp). This displays the Warp Options window. It allows us to choose the desired distortion style and to adjust the distortion and distortion. To preview the deformation, check the **Preview** box in the lower-left left corner of the window.

DEFORMATION TOOLS (MAJ-R):

This tool allows you to deform the path of a shape using a tool with options similar to those of the brush.

- **Swirl Tool:** This tool allows us to swirl the path of a shape using a tool with options similar to those of the brush.
- **Contraction Tool:** This tool lets us perform contractions in the path of a shape using a tool with options like those of the brush.
- **Expansion Tool:** This tool allows us to expand the path of a shape using a tool with options like those of the brush.
- Width Tool (MAJ-W): The Width tool allows you to vary the thickness of the outline between the anchor points simply by pushing or pulling with the mouse with the button pressed.
- **Scallop Tool:** This tool allows us to create scallop-like deformations from the path of a shape using a tool whose options are in many ways similar to those of the brush.
- <u>Crystallization Tool</u>: This tool allows you to create a crystallization effect from the path of a shape using a tool whose options are in many ways similar to those of the brush.
- <u>Crinkle Tool:</u> This tool lets you crinkle the path of a shape using a tool whose options are in many ways similar to those of the brush.

DISPLACEMENT:

Select the Object / Transformation / Displacement menu in the Displacement window. This transformation moves the shape outside of the element box.

ROTATION:

Select the Object / Transformation / Rotation menu in the Rotation window. This transformation allows the shape to be rotated without affecting the element box.

SCALE:

Select the Object / Transformation / Scale menu to perform custom scaling.

DEFORMATION:

Select the Object / Transformation / Deformation menu in the Deformation window. This transformation allows for vertical or horizontal rotations and transpositions.

DISTRIBUTED TRANSFORMATION:

Select the Object / Transformation / Distributed Transformation menu in the Distributed Transformation window. This transformation makes it possible to accumulate all the transformations grouped in the Deformation submenu.

DEFORMATION OF THE ENVELOPE:

An envelope distortion like that applied to text can be applied to a shape. To do this, select the Subject / Wrapping Envelope menu.

CONTRACTION AND DILATION:

Contractions and dilations involve bending the segments inward or outward in a shape. Choose in the menu Effect / Distortion and Transformation / Contraction and Dilatation. The window that appears allows you to adjust the expansion or distortion.

SKETCH:

Sketch distorts the fill and outline to create the impression of a drawing rendering. To apply this deformation, choose in the menu Effect / Distortion and Transformation / Sketch.

TWEAK:

To apply this deformation, choose the effect / Distortion and Transformation / Tweak.

TORSION:

To apply this deformation, choose in the menu Effect / Distortion and Transformation / Torsion.

ZIGZAG:

To apply this deformation, choose in the menu ect / Distortion and Transformation / Zigzag.

The blend tool allows you to create an interpolation between two objects of different shapes.

This could be done using the gradient option window.

The shape builder tool allows you to join multiple shapes into one.

The Pathfinder panel allows different types of merging of shapes between them. Some features are like the Shape Designer tool, to do so overlapping shapes, then select them. Then display the Pathfinder panel from the Window menu.

Although Illustrator is a vector-based application, we can still import raster images in it. The Paths submenu of the Object menu allows various actions that are sometimes very useful.

We have paths submenu like offset, outline stroke and simplify.

We can also add more anchor points and select them using the direct selection tool, and then they can be edited and deleted as per will.

Strokes in Illustrator can be worked more extensively on than photoshop with options like Width, Aspect, Angle, Alignment content, Dotted, Dashes and spaces, Arrows, scale, Alignment, and profile.

We also have a gradient tool that allows us to work on gradients, In the gradient panel, we have tools like gradient panels, pre-set gradients, Type, background and outline, Angle, gradient bar, opacity and add colours.

Illustrator offers several drawing modes: normal, back, and inside. The modes can be selected in the lower part of the toolbox or using the SHIFT-D shortcut.

We have already seen a few painting tools like the brush or the shape designer, but different modes and different approaches in Illustrator.

Fill and stroke in Illustrator, elements are created by setting an outline colour and a background colour which will both be used for the entire element. We need to duplicate the portion to change its colour. While an illustration is usually made up of a multitude of paths, elements, and layers, editing one element can force several others to adjust. However, it is possible to work as if all the paths came together- er, in a more natural way, using dynamic painting.

Tracing a picture without being an expert in drawing, it is possible to use a reference photographic image to trace the subject of the raster im- age and turn it into a vector image. We can trace general shapes, shadows and highlights