Textbook of

Graphics Designing

Grade - X

NAVTTC

Textbook of

GRAPHICS DESIGNING

Grade – X

National Vocational and Technical Training Commission
H-9, Islamabad

PREFACE

This book has been written to fulfill the requirements of Matric-Tech course to prepare the students for the subjects of Graphics Designing in Grade 10. Matric-Tech in Graphics Designing and Media Production has been introduced first time in Pakistan. The main objective of starting this technical course is to produce technical workforce instead of teaching them conventional theoretical subjects. On accomplishment, students will be able to explore the job market easily as well as start their careers as freelancers. Efforts have been made to present graphics related training material in one book.

This book covers major topics to enrich students with the knowledge of Graphics Designing. Each subject/topic is clarified in a helpful manner for better understanding of Matric-Tech students. The book starts with the software programs which are being used in the field of graphics. We have explained all the major tools with their implementations on various objects for better understanding. Students must perform the activities and tasks to get hands on experience to learn Graphics Designing in a batter way. All sections incorporate evaluations in the form of MCQs, exercise short and long questions. Any enhancement/idea for the improvement of this book will be highly appreciated.

Executive Director
National Vocational & Technical Training Commission
(NAVTTC)

Instructions for Teacher

1. Cover the essentials of visual design, theory and practical examples described in the relevant chapters.
2. A great way of starting graphics design studies is to review the history of graphics design.
3. Give an overview of the most influential ideas within the world of design from the 19th and early 20th centuries, highlighting key ideas and providing valuable insights.
4. Go beyond theory and focuse on designers that shaped history, sharing their stories important work, development of design, mid-century design, corporate branding, typography, magazine design and
5. Create challenging design exercises in the classroom. Ask students to design creative things.
6. Have students to draw their name as supposed to write it. Teach them how to draw each letter separately describes iconic posters.make up his own cartoon character, first outlining and drawing it and then filling it in with color.and how to create shadow effects. Ask them to integrate a picture with his name that he feels best himself.
7. Ask studnets to choose the most suitable graphics software keeping in view the nature of job. Every software program is not designed to do all kinds of work. These are specific to tasks.
8. Tell students about different specification of different software e.g. Photoshop, Illustrator, InDesign, XD.
9. Freelancing & Enterpreneurship are now evolving business models in modern world.
10. Involve students in enterpreneurship & freelancing.

CONTENTS

Chapter 1:
Inpage

After completing this section, the students will be able to: -
- *define InPage*
- *describe purpose of InPage*
- *define Home Screen*
- *describe the menu bar, property bar, status bar*

1.1 Introduction

InPage is a word processor and page layout software for languages such as Urdu, Balochi, Persian, Pashto and Arabic under Windows and Mac which was first developed in 1994. It is primarily used for creating pages in the language of Urdu, using the Nasta`līq (نستعلیق) ('hanging' calligraphic) style of Arabic script.

InPage is a standard Urdu publishing tool and is widely used on PCs where the user wishes to create their documents in Urdu, using the authentic style of Nastaliq with a vast ligature library (more than 20,000), while keeping the display of characters on screen WYSIWYG (What-You-See-Is-What-You-Get). Overall, this makes the on-screen and printed results more 'faithful' to hand-written calligraphy than all or most other Urdu software on the market. This is achieved while keeping the operation easy, akin to that of earlier versions of standard English Desktop Publishing packages such as QuarkXPress and Adobe InDesign..

1.2 Interface

Homescreen

Homescreen in Inpage is something you will instantly see when you open the program. As can be seen in Figure 1.0, The homescreen of inpage is similar to many other graphics realted application where the user gets options to open an old file or create a new one.

> **Do you know ?**
>
> In 1994, an Indian software development team lead by Rarendra Singh and Vijay Gupta with the collaboration of a UK company called Multilingual solutions lead by Kamran Rouhi, developed Inpage urdu for Pakistani's newspaper industry.
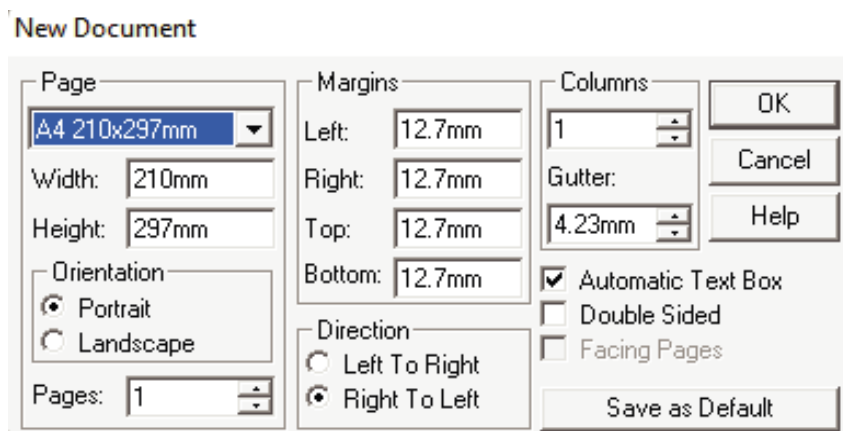

Figure 1.0

Menu Bar

It is always on the top of the window. As can be seen in (Figure 1.1), It provides a user with multiple options to interact. You can click on File,Edit, View, Format, Insert, Symbols, utilities, Language, Window, or Help and a dropdown menu will appear giving you options all relating to the menu name. For example, all the options in File have to do with your documents, such as opening, creating, saving, printing, and so forth.
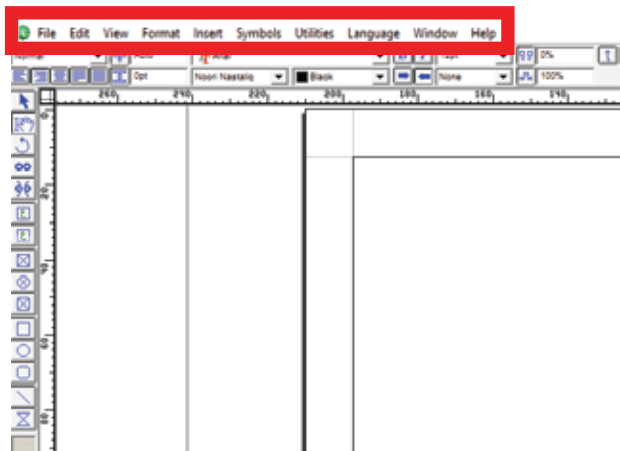
Figure 1.1

> **Do you know ?**
>
> Inpage launched it's version 3 at ITCN exhibition Asia in Karachi, Pakistan, held in August 2018. This version is unicode based supports more languages and other Nastaliq fonts.

Status Bar

Status bar is located on the botton left corner of Inpage, It shows the current opened page out of all the pages and a zoom bar which is used to zoom in or out of the page.
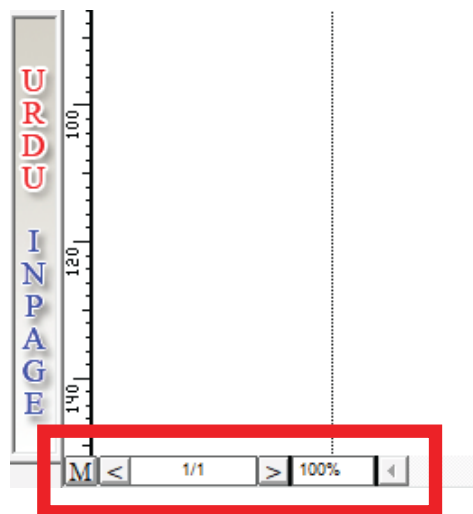
Figure 1.2

Property Bar

Property bar is located right below the Menu bar, it contains all the properties related to the content on the art board which includes Font name, size, color, outline, width and many other options to be explored as can be seen in figure.
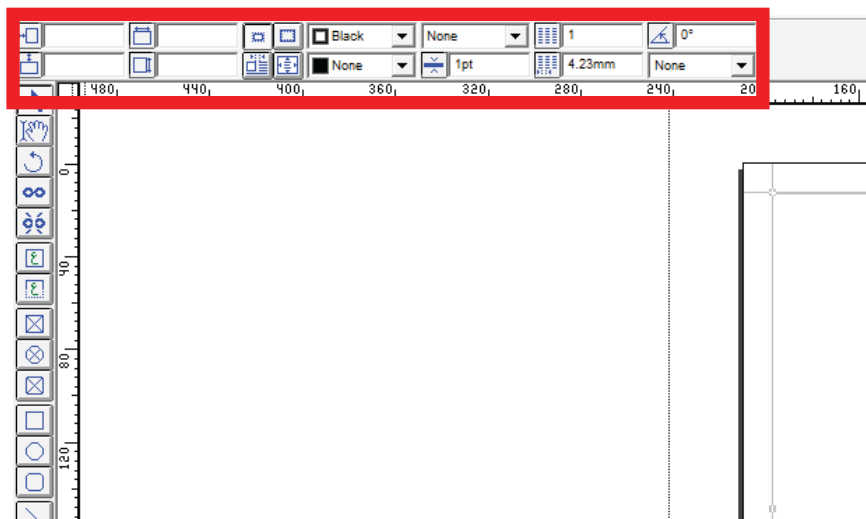
Figure 1.3

Section-II

After completing this section, the students will be able to: -

- *use of Nastaliq truetype font.*
- *use of arabic and decorative font*

- *knowing font sizes & text alignments*
- *understand mixing urdu, arabic, farsi, sindhi and english in the same document*
- *define typography and using type in in-page*
- *import & exports for different file extensions*

1.3 Using fonts in Inpage

In order to change the default font of a text, Just like other you'll have to select the text and click on font name in property bar. Then select the desired font and the text's font suppose we use Nastaliq font, and it will be changed as can be seen in figure.
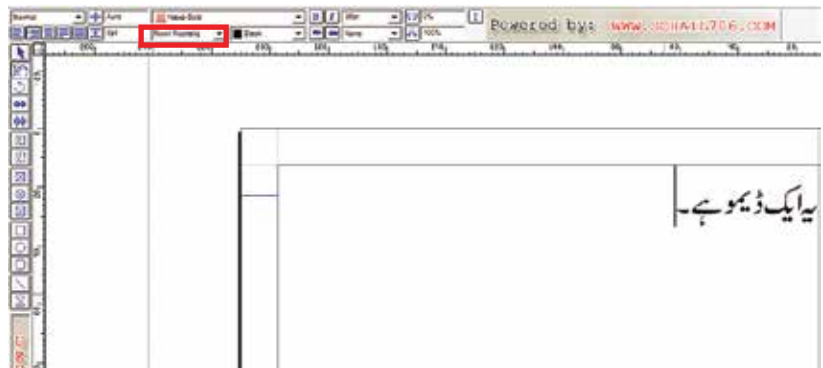
Figure 1.4

Similarly if you want to use any other font suppose arabic font the steps will be same, Select the text and the in property bar select the arabic font and it'll be changed as can be seen in figure.
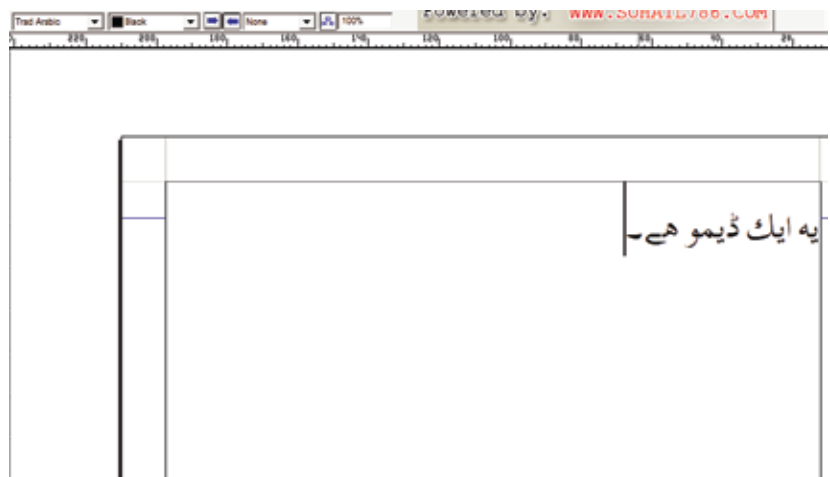
1.4 Font size and Alignment of text:

In order to change the font size of a text, Just like other apps you'll have to select the text and click on font number in property bar. Then select the desired number and the text's font size will be changed. As can be seen in figure.

Figure 1.5

Similarly to change the alignment of the text you'll have to select the text, then choose the desired
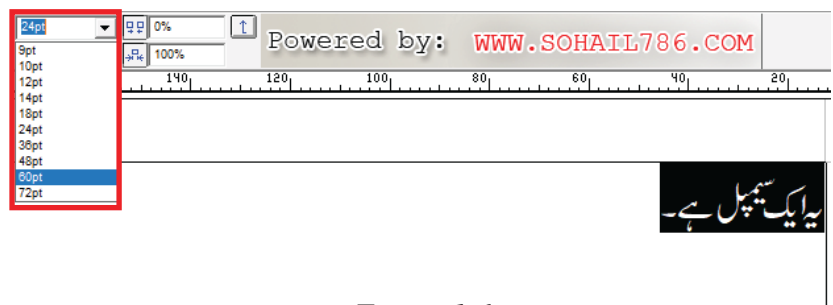
Figure 1.6

alignment available which is either centered, left, right, or justified, in property bar as shown in figure below.
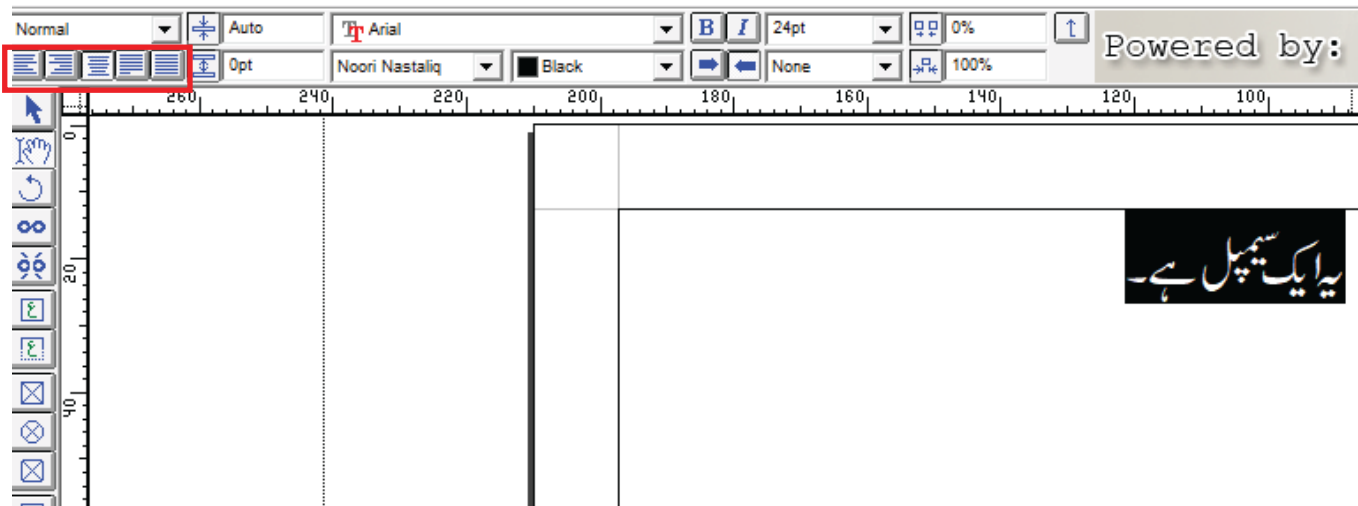
Figure 1.7

1.5 Mixing different fonts

Suppose if you want to mix different fonts in same document the steps are very simple, Select the part of the document you want to changethe font of, and change the font as explained above.

Example we have a text written in Urdu,
1- Select the first word from the text.
2- Change the font of the text document.
3- Select the 2nd word from the text and apply different Font for example Arabic.

To type English in Inpage press "Ctrl + Space-bar" in the bottom right corner you'll see a word "EN" written which allows you to type english freely.

Figure 1.8

Figure 1.9

1.6 Typography

Typography is the art and technique of arranging type to make written language legible, readable and appealing when displayed. The arrangement of type involves selecting typefaces, point sizes, line lengths, line-spacing, and letter-spacing, and adjusting the space between pairs of letters

1.7 Import and Export files

To import and export files in Inpage you'll have to click on Files in Menu Bar and then click on import or use the shortcut key for windows which is Ctrl+Y. as can be seen in figure below:

Figure 1.10

Similarly to export a file you need to save the file first then click on files in the Menu Bar and click on import or use the shortcut key for windows which is Ctrl+Shift+Y .

EXERCISE

Q#1 Select the most suitable option.

1. InPage is a word processor and page layout software for languages such as_____.
a) Urdu   b) Pashto   c) Balochi   d) All of these

2. Inpage is widely used on _____.
a) Mobile   b) Laptop   c) PC   d) Both b and c

3. Authentic style of Nastaliq with a vast ligature library are_____.
a) More than 20,000   b) More than 40,000   c) More than 50,000   d) None of these

4. Menu bar is located at the _____ of the window.
a) Top   b) Bottom   c) Left   d) Right

5. We can change the color, outline, size from _____.
a) Menu bar   b) Status bar   c) Property bar   d) Homescreen

6. To write english in Inpage you must press _____.
a) Alt + F4   b) Ctrl + Spacebar   c) Shift + Enter   d) Ctrl + Alt

7. Typography is the art and technique of _____ type.
a) writing   b) reading   c) arranging   d) typing

8. Shortcut key for import is _____.
a) Ctrl +I   b) Ctrl + E   c) Ctrl + Y   d) Ctrl + X

9.Shortcut key for export is _____.
a) Ctrl + alt + I   b) Ctrl + esc + E   c) Ctrl + Shift + Y   d) Ctrl + X

10. Which of the following is used to write urdu?
a) Calibri   b) Noor   c) Nastaliq   d) Arial

Q#2 Answer the following questions briefly.

1. Define Inpage and its usage.
2. What is homepage and menu bar of Inpage?
3. What is Status Bar and Property Bar of Inpage?
4. Define Property Bar of Inpage.
5. How do you select font in Inpage.
6. How do you align and change font on the Text in Inpage.
7. What is status bar view button in Inpage ?
8. How to export a file in Inpage also what is the shortcut for it.

Q#3 Write answers of the following questions in detail.

1. Explain the interface of Inpage.
2. Define typography and explain steps of applying different fonts on the same text.

ACTIVITIES

1. Write an application in urdu using Inpage.
2. Design a timetable for your class in tabular format.
3. Design a brochure of your college in Inpage.

Chapter 2:
Production and Printing

After completing this section, students will be able to: -

- *define production and printing*
- *understand printing requirements*
- *define how to prepare files for printing*
- *learn about resolution.*
- *describe color management setting, image proofing on screen*

2.1 Production and Printing

Production is the process of making, harvesting or creating something or the amount of somethingthat was made or harvested while Printing is a process for mass reproducing text and images using an image, copy or a template.There are two main things which are required for printing; 1- A Print-Ready file which is a term used to describe a file that has all the specifications necessaryto produce high-resolution printed output, without requiring any additional alteration or intervention.2- A printer which suits the print you want which can be either Black and White or Colored print.

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2.3 Preparing files for printing

1. Save files as PDF, TIF, JPG or EPS files.The preferred option is saving your file as a high quality PDF. This preset will ensure optimumsettings for color, fonts and resolution management. For EPS files, ensure all fonts and links are embedded. Fonts may be converted to outlines.When working with an image file, TIF or JPG files are good choices. TIF files can be saved withou tcompression for a slightly better resolution quality. JPG files are commonly used, but can producea slightly blurry proof due to pixel compression.
2.   Use CMYK instead of RGB. Professional presses produce full-color printing or CMYK (cyan, magenta, yellow, and black) color, but computers use RGB (red, green and blue) on-screen. This means that the colors on your screen will be RGB, but must be converted to CMYK beforeprinting on an offset printing press. Many times this will not cause issues, but sometimes, the twocolor systems will clash.We recommend starting off with a CMYK canvas to allow for the least amount to color shift from your original to your proof.If you can't do that, it is best to make the switch to CMYK before submitting your artwork. This way you can verify that the colors all transfer

accurately. You can switch to a CMYK palette quite easily in Photoshop by changing the "Color Mode" option to CMYK Color.

3.   The colors on your monitor will not match exactly. The colors on your printed piece may notexactly match the colors on your monitor. Color can vary for a number of reasons from monitor to monitor, and will therefore vary from the final printed colors.If a precise color is crucial to your final output, order a hard copy proof. This will not only put yourmind at ease, but also give you the opportunity to make any necessary changes before the final printing.

4.   Set the image resolution to 300 dots per inch. Your starting images should be 300 dpi at full size. Enlarging an image will reduce the resolution which will result in poor image quality.

2.4 Resolution

Resolution is a measure used to describe the sharpness and clarity of an image or picture. It is oftenused as a metric for judging the quality of monitors, printers, digital images and various other hardware and software technologies Image resolution is typically described in PPI, which refers to how many pixels are displayed per inch of an image. Higher resolutions mean that there are more pixels per inch (PPI), resulting in more pixel information and creating a high-quality, crisp image. Images with lower resolutions have fewer pixels, and if those few pixels are too large (usually when an image is stretched), they can become visible like the image below.

> **Do you know ?**
>
> For small files always use higher resolution such as visiting cards, brochures, flyers etc. But when the file size is larger then we can use small resolution, it will not effect quality of the file.

2.5 Color Management

Working in prepress holds a unique challenge. Even if your color workflow is tight, everything can fall apart if the customer's file isn't color managed.

We've all seen it. You receive a file that the customer claims is ready to print, yet when you open it on your computer, the colors don't look right at all. You can't send it to print without knowing for sure, because you're the one who will take the hit for wasted time and materials if it's wrong.

Figure 2.1

How colors are managed

A color-managed workflow will help all of your devices speak the same color language so they can share accurate color information.Each device you use to capture and create digital images uses slightly different CMYK or RGB formulas to create the same color. Digital cameras, scanners and displays use the additive color model, rely on different gamuts,and vary between manufacturers. Printers can be RGB or CMYK and use a variety of different inks and papers. When you're using an application like AdobePhotoshop® or InDesign® to prepare images and files, you need to set them up to handle color management, too.
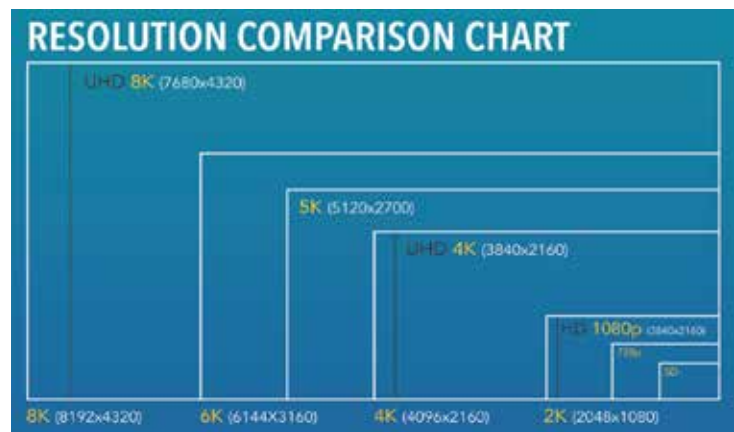
There are four key steps in setting up a color-managed workflow, which we call the four Cs of color management.

Step 1: Consistency First, you must ensure your devices are capable of producing consistent colors. If your monitor's color is brighter on the left side than the right, or your proofing printer can't produce consistent color from start to finish, then there's not much color management can do to help. You need a new one.

Step 2: Calibration Once you know your device is capable of reproducing consistent color, you need to bring it back into specification. Device color will drift over time, and calibration re-adjusts everything to achievethe best possible gamut.

Step 3: Characterization Next, you should use a color measurement instrument, such as a colormeter or spectrophotometerto determine the device's color reproduction characteristics. Even identical devices built on thesame day from the same manufacturer will have slight variations in color. Characterization will optimize the settings for the best image reproduction on that particular device.When characterizing a monitor, software flashes a series of known RGB values on screen, and thecolor measurement device measures them. To characterize a printer, print a test chart with anywherefrom a few to thousands of color samples and measure them with the color measurement device.

X-Rite printer profiling color management workflow Measuring a test chart to profile a printer with X-Rite's i1Pro 2.

The collected color data is compared with sample colors and used to create an ICC profile, which is basically a three-dimensional map, or color space, of all of the colors the device can capture display or print. It describes the specific characteristics of the device so that other devices know which color language it is speaking.

Step 4: Conversion is the process of moving color data from the color space of one device to the color space of another. These controlled conversions take place in a working space. Think of it like an airline hub – a common place to connect workflows.

2.6 Image proofing

Image proofing is the process of reviewing images to check their accuracy. It provides a simulation of the final print job so the color can be adjusted if necessary. There are two methods of proofing:

> **Do you know ?**
>
> JPEG is a standadised lossy compression mechanism for digital images. It is the most common file format for photo storage. It became popular as they save more storage compared to older formats such as Bitmap. It is easy to share.

Soft proof: it simulates the final print on a monitor, applying an ICC profile provided by the printing bureau. Ideally, the monitors used for the soft proofing must comply with ISO 12646 and be correctly calibrated. Also, the visualization environment must be lit according to ISO norm 3664

Hard proof: it consists of a test print, usually on the target format (size). This print is then visualized on a CIE Standard Illuminant cabin, which provides an even daylight equivalent light source.

After completing this section, Students will be able to: -

- *differentiate CMYK and RGB*
- *convert image to CMYK for commercial printing*
- *convert image to different formats*

2.7 RGB vs CMYK
What is RGB?

RGB is all about seeing the light.

Computer screens show color in images, text, and designs with different combinations of red, green, and blue light. This is where RGB comes from. Therefore, anything designed for a screen from smartwatches to a jumbotron should be designed in RGB color mode. Screens display images with hundreds of pixels. Each of those pixels has three sub-pixels: a red light, green light, and blue light These sub-pixels light up in different intensities based on the color the pixel ultimately displays to produce a result on a black monitor.

Pixels come together to display the words and images that you see.

RGB values are displayed in a range between 0 - 255, meaning that there are 256 levels of each of the three colors (red, green, and blue) that can be combined together to create a color on the spectrum between black and white. This means that there are over sixteen million possible colors in the RGB color mode. That's a lot of options.

For example, the RGB value for the color black is:
R:0 G: 0 B: 0

This means that there is 0% red light, 0% green light, and 0% blue light. In other words, there is a complete absence of light, resulting in black. To create white, a designer should input:
R:255 G: 255 B: 255

This is the highest possible value of each color, meaning that red, green, and blue lights are 100% bright, resulting in the maximum presence of light: white.

Figure 2.2:
RGB Values for Common Colors

What is CMYK?

Not everything we design can be put in front of bright lights. Therefore, designs that are intended for print should be designed in CMYK mode.

The name CMYK comes from the four colors that make up the model: cyan, magenta, yellow, and key. Key represents the color black. Since "B" is taken by "blue" in the RGB model, the last letter of the word "black" is used instead of the first.

Black is used in this color mode because even the purest combination of cyan, magenta, and yellow (all lighter colors) cannot create a fully black color.

CMYK uses subtractive colors, not additive. Adding colors together in CMYK mode has the opposite effect on the result as RGB does; the more color added, the darker the results. Therefore, colors are taken away, or subtracted, to create a light result.

This is because the CMYK colors absorb light, meaning that more ink results in less light.

Combining cyan, magenta, and yellow will create a deep brown.

It isn't until key (black) is added that color is removed completely.

The CMYK values are measured in percentages, referr to the image below. For example, to make the CMYK color white, the values should be entered into the design software as:

C: 100% M: 100% Y: 100% K: 100%

Figure 2.3:
CMYK Values for Common Colors

2.8 Converting an Image to CMYK

CMYK Printing is an additive color process utilizing ink or toner. RGB is a subtractive color process that is based on light. When you add physical layers of colored ink on top of each other, they mix one way. When you add layers of colored light together, they mix in a completely different way. For example in the image below you can see that when all of the RGB colors add together in the middle of the RGB diagram, white is created. When all of the CMYK colors add together, they create Key (Black).

Illustrator

You must ensure that you are setting the color mode to CMYK while creating a new document. To create a new document, navigate to File > New.

Before saving your PDF, download and install Printing Center USA's Color Profile and Adobe PDF Preset here. Instructions are included in the download. After doing this, navigate to File > Save As. In the Save As window, name your file and change the file type to PDF. Click Save. This will ensure that your PDF is coming with PrintingCenterUSA's specific G7-Certified ICC Profile, which is the most you can do to maintain color accuracy.
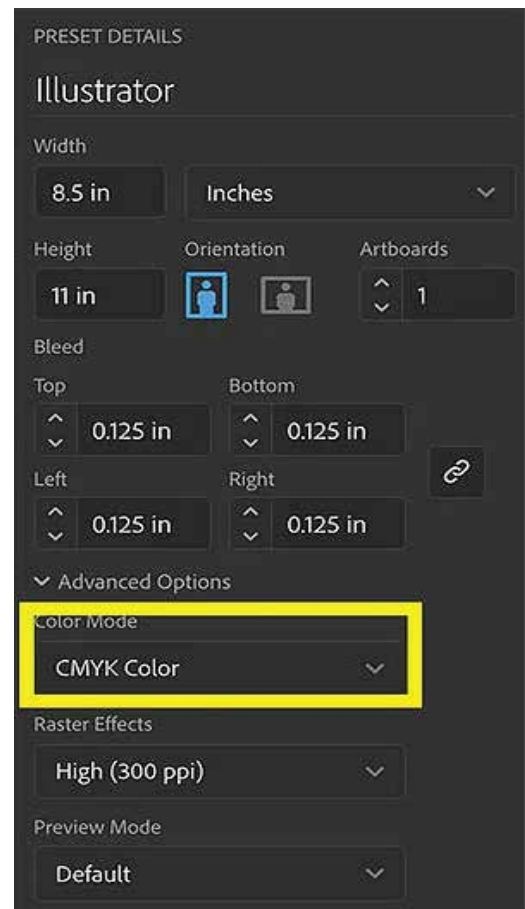
Figure 2.4

Photoshop
Photoshop is not only good for saving your PDF files in CMYK, but also for converting your images to CMYK. To create a new CMYK document in Photoshop, go to File > New. In the New Document window, simply switch the color mode to CMYK (Photoshop defaults to RGB). If you're wanting to convert an image from RGB to CMYK, then simply open the image in Photoshop. Then, navigate to Image > Mode > CMYK.

2.9 Converting Image to different formats
To convert a file in different formats you need to open the file in any graphics software e.g illustrator,
 then: -
1- Click Save As…. The Save Image window will pop up.
2- In the name field, change the file extension to the file format you want to convert your image to The file extension is the part of the file name after the period.
For example, to convert a JPEG (.jpg) file into a Bitmap file (.bmp):
original file: image.jpg
new file: image.bmp

Figure 2.5

3- Click Save, and a new file will be saved in the new format. The old file (in the old format) will remain where it was, and will not be deleted.
The image viewer tries to guess which file format to save a picture in based on the file extension you
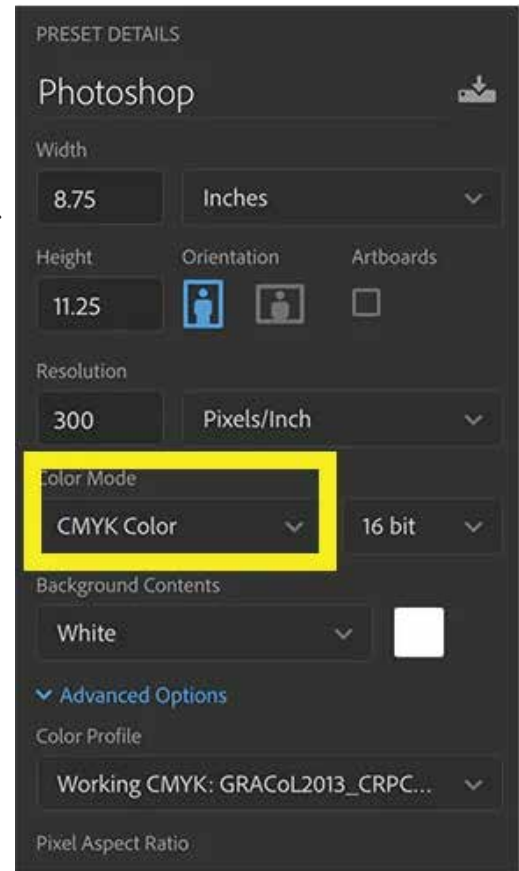
Section-III

After completing this section, Students will be able to: -

• *define types of papers.*
• *size of paper for different print media.*
• *learn about paper weightage used for different print media.*
• *learn about color printing papers (matte, glossy).*

2.10 Types of Paper

Paper, the types, sizes, thickness and finish; it can all become a little complicated.

Deciding on the paper type can sometimes be the hardest choice for this whole process, so to help you we've provided a list of types along with a description of each.

Bond paper

This type of paper is stronger and more durable than the average sheet of paper. Instead of being made from low grade wood pulp, it is mostly made up of rag pulp. It's perfect for letter heads, typed reports and envelopes As can be seen in figure.

Figure 2.6

Gloss coated | paper

Gloss paper is typically used for flyers and brochures as it has a high shine. As the ink dries well there is no need for a seal varnish as the ink does not rub off, As shown in figure.

Matt coated paper

Matt paper is the opposite to gloss – it is coated with a matt finish to produce a paper that isn't shiny, preventing glare. This type of paper is perfect for reports, flyers and leaflets. As can be seen in figure.

Figure 2.7

Figure 2.8

Do you know ?

Pen ink will not smear on matte coating, which makes the ideal choice for journels and calenders. Matte sheets are good for enhancing visual designs.

Recycled paper

Made from re-used paper products, recycled paper is perfect for those who are trying to reduce their environmental impact. It can be used for most documents including reports, memo paper and forms. As can be seen in Figure 2.9
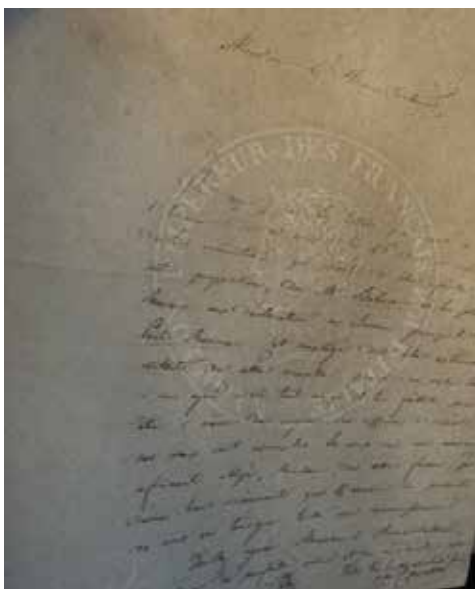
Figure 2.9

Watermarked paper

Used in high quality paper watermarked paper give a feel of luxury and high quality. To create its desired effect an impression is pressed into the paper by attaching a wire pattern. This type of paper is commonly used as a security feature for important documents, including exam certificates, refer to the figure.

Figure 2.10

2.11 Sizes of Paper

The table below provides the dimensions of each paper size. So whether you just need to know the size, name or measurements, use the below chart for a quick reference.

Table of Paper Sizes from A0 to A10

Size	Width x Height (mm)	Width x Height (in)
A0	841 x 1189 mm	33.1 x 46.8 in
A1	594 x 841 mm	23.4 x 33.1 in
A2	420 x 594 mm	16.5 x 23.4 in
A3	297 x 420 mm	11.7 x 16.5 in
A4	210 x 297 mm	8.3 x 11.7 in
A5	148 x 210 mm	5.8 x 8.3 in
A6	105 x 148 mm	4.1 5.8 in
A7	74 x 105 mm	2.9 x 4.1 in
A8	52 x 74 mm	2.0 x 2.9 in
A9	37 x 52 mm	1.5 x 2.0 in
A10	26 x 37 mm	1.0 x 1.5 in

Table 1.0

Finally once you've decided on the type and size of paper, the thickness is the final stage. Weight value of paper is measured in gsm (grams per square metre). The higher the gsm the better quality and feel of the paper.

2.12 Paper Weight Descriptions

Standard paper weights are between 75gsm and 100gsm for common business applications; photo paper is much higher and goes up to 280gsm in weight.

Weight	Feels Similar to:
35-55 gsm	Most newspapers
90 gsm	Mid-market magazine inner pages
130-250 gsm	A good quality promotional poster
180-250 gsm	Mid-market magazine cover
350 gsm	Most reasonable quality business cards

Table 1.1

Section-IV

After completing this section, Students will be able to: -

- *learn about portfolio*
- *learn about branding*

2.13 Portfolio

A portfolio is a purposeful collection of a person work that exhibits a person's effort, progress, achievements and competencies.

- A portfolio may include a reflective account of a practice placement, presentation, learning experience or group experience. The person is able to:
- Accumulate and store evidence (in one central online area) of the many transferable skills persons develop.
- Self assess and monitor their own learning and development.
- Develop and present a portfolio of work or reflective account on an aspect of person's learning as part of course assessment.

Figure 2.11

- Build a resume for employment applications and as evidence of learning achievements for a professional body.
- Apply for jobs by showing evidence of relevant work experience and suitable 21st century skills.
  We can referr the below figure as an example of portfolio:

2.14 Branding

According to American Marketing Association, Brand is a name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers.

To illustrate the definition of a product and the role it occupies in defining branding, we will use the example of water:

Water is a free resource that every human being needs to live and survive. Yet it became a product the day humans and

Figure 2.12

companies started to commercialize it, for example by selling mineral water in glass and plastic bottles as can be seen in figure.

But water always looks the same, isn't it? It is liquid and transparent. So, how can different companies sell the same product but still convince people to purchase their bottled water instead of the one from the competitor.

The answer is: by creating a brand.

Let's illustrate this again with our water example. The products being sold is water, but in order to convince people to purchase a particular water, companies developed different water brands.

And each one of these brands provides a different meaning to the product water:

1– Evian makes you feel young
2– Perrier is refreshing, bubbling
3– Fiji Water is pure, healthy and natural

Figure 2.13

EXERCISE

Select the most suitable option.

1. What is the preferred file extension to prepare a file for printing
a) TIF   b) JPG   c) ESP   d) PDF

2. _____ file ensure all fonts and links are embedded
a) TIF   b) JPG   c) ESP   d) none

3. professional presses produce file in
a) RGB   b) CMYK   c) Gradient   d) none

4. A starting image resolution should be _____ dots per inch
a) 100   b) 200   c) 300   d) 400

5. Image resolution typically described in
a) DPI   b) PPI   c) Pixels   d) sharpness

6. Resolution is used to describe the _____ of an image
a) Sharpness   b) Clarity   c) Size   d) none

7. image with lower resolution have
a) Fewer pixels   b) Crispiness   c) Low quality   d) none

8. Black color RGB Value is
a) 0, 0, 0   b)255, 255, 255   c) 150, 150 ,150   d)100, 100, 100

9. CMYK uses _____colors
a) Additive   b) Subtractive   c) Multiplicative   d) none

10. What is the best paper for letterheads and typed reports ?
a) Bond paper   b)Matt coated paper   c) Gloss CoatedPaper   d) Watermarked Paper

11. What is the preferred file extension to prepare a file for printing ?
a) TIF   b) JPG   c) ESP   d) PDF

12. According to American Marketing Association, brand identifies _____.
a) service   b)seller   c) price   d) both a and c

13. Water becomes a product when companies_____ it.
a) waste   b) drink   c) sell   d)commercialize

14. Portfolio includes reflective amount of _____.
a) purchases   b)skills   c) practice   d) both b and c

15. Portfolio is a purposeful collection of a person's _____.
a) food   b) work   c) profile   d) purachses

Answer the following questions briefly.
1. Why is resolution important?
2. Describe image spoofing with its types.
3. What are it's uses of watermarked paper.
4. Write down atleast 4 types of paper sizes along with their measurments?
5. What is Bond paper, for what purpose it is used ?
6. Define portfolio.7. Define matte coated paper.

Write answers of the following questions in detail.
1. What is meant by Production and Printing ? also describe how to prepare a file for printing.
2. What is color management and how do you manage the colors.
3. Differentiate the RGB and CMYK in detail.
4. What are different types of papers?
5. Describe Portfolio.
6. Describe Branding.

ACTIVITIES

1. Prepare a brochure for printing using CMYK mode.
2. Design a letterhead for a company.
3. Prepare PS file for printing and for uploading on social media as per required color mode..

Chapter 3:
Adobe Photoshop-II

After completing this section, Students will be able to: -

• *understand working with masks and channels*

• *understand quick mask*

• *define manipulation of images with puppet warp, vanishing point*

• *define alpha channel to create a shadow*

3.1 How to Create a Channel and Mask

To create a new alpha channel, Go to channels panel by clicking on the tab to the right of the Layers tab. If you're following along and don't see this tab, you can go up to the Window > Channels menu item and click. After selecting that item, the New Channel dialog will appear. Inside this dialog. Keep things the way they are and click the OK button to move forward.
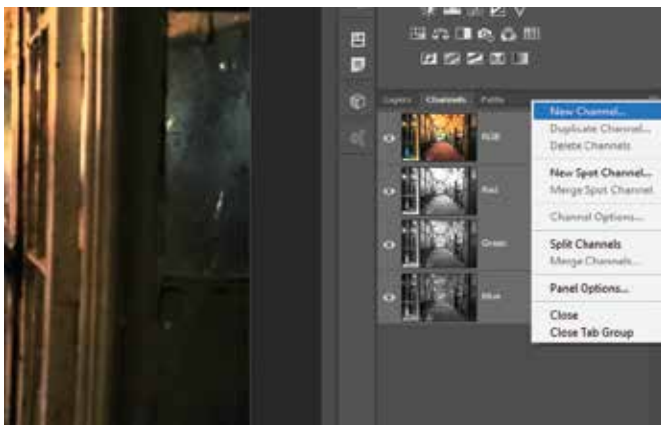
Figure 3.0

Figure 3.1

After clicking the OK button, the dialog box will disappear and I'll left with a new element in the Channels panel. The thumbnail will be black and it'll be located directly below the other channels. Also, the visibility will be turned off by default.
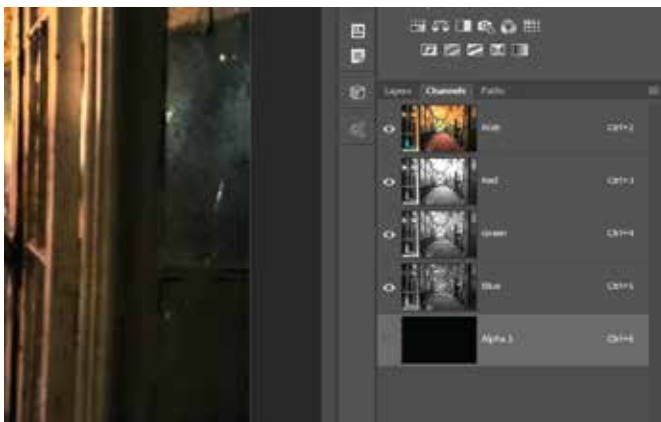
Figure 3.2

Figure 3.3

To turn the visibility for this channel ON and OFF, In the dialog box come alive and then disappear again. In this case, since the overlay value was red and 50%, see a semi-transparent red overlay.

If this image was to be saved out as a JPEG file or something else, there would be no evidence of this maskat all. Think these things as tools for use inside of Photoshop. In the sections below, what they can do .Use brush Tool to draw a squiggly line in white right on the image.Right on top of this alpha channel.

That looks like what happens when you draw on a mask in white. That's because it is. To prove it, View the alpha channel thumbnail. It's black with a white line drawn on it.

Figure 3.4
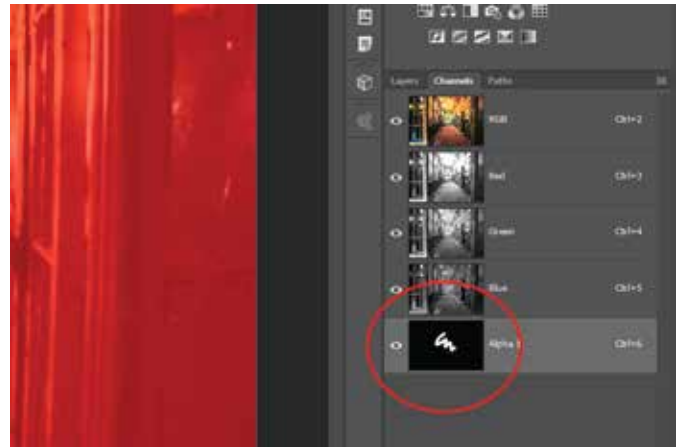
Figure 3.5

3.2 Quick Mask

To use Quick Mask mode to create and edit selections quickly, start with a selection and then add to or subtract from it to make the mask. You can also create the mask entirely in Quick Mask mode. Color differentiates the protected and unprotected areas. When you leave Quick Mask mode, the unprotected areas become a selection.

1- Using any selection tool, select the part of the image you want to change.

Click the Quick Mask mode button in the toolbox.

2- A color overlay (similar to a rubylith) covers and protects the area outside the selection. Selected areas are left unprotected by this mask. By default, Quick Mask mode colors the protected area using a red, 50% opaque overlay. (Referrence in figure 3.6)
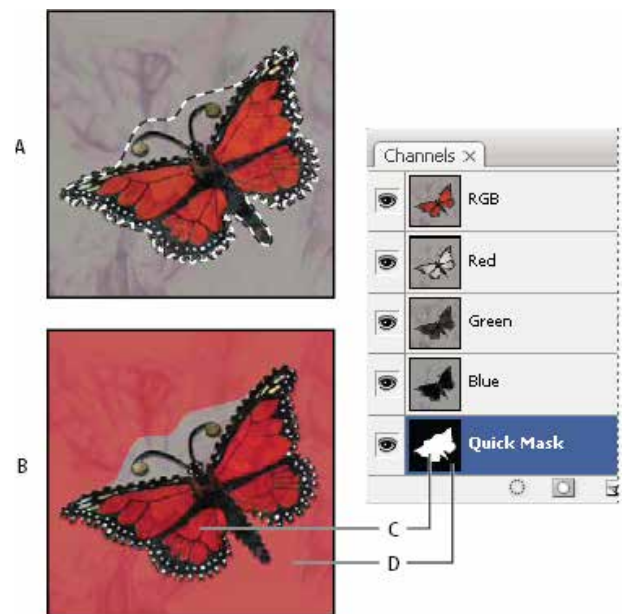
Figure 3.6: A. Standard mode B. Quick Mask mode C. Selected pixels appearas white in channel thumbnail D. Rubylith overlay protects area outsideselection, and unselected pixels appear as black in channel thumbnail.

3- To edit the mask, select a painting tool from the toolbox. The swatches in the toolbox automatically become black and white.

4- Paint with white to select more of an image (the color overlay is removed from areas painted with white) To deselect areas, paint over them with black (the color overlay covers areas painted with black). Painting with gray or another color creates a semitransparent area, useful for feathering or anti-aliased effects.

Figure 3.7: A. Original selection and Quick Mask mode with green chosen asmask color B. Painting with white in Quick Mask mode adds to the selection

5- Click the Standard Mode button in the toolbox to turn off the quick mask and return to your original image.A selection border now surrounds the unprotected area of the quick mask.

6-If a feathered mask is converted to a selection, the boundary line runs halfway between the black pixels and the white pixels of the mask gradient. The selection boundary indicates the transition between pixels that are less than 50% selected and those that are more than 50% selected.

7-Apply the desired changes to the image. Changes affect only the selected area.Choose Select > Deselect to deselect the selection.
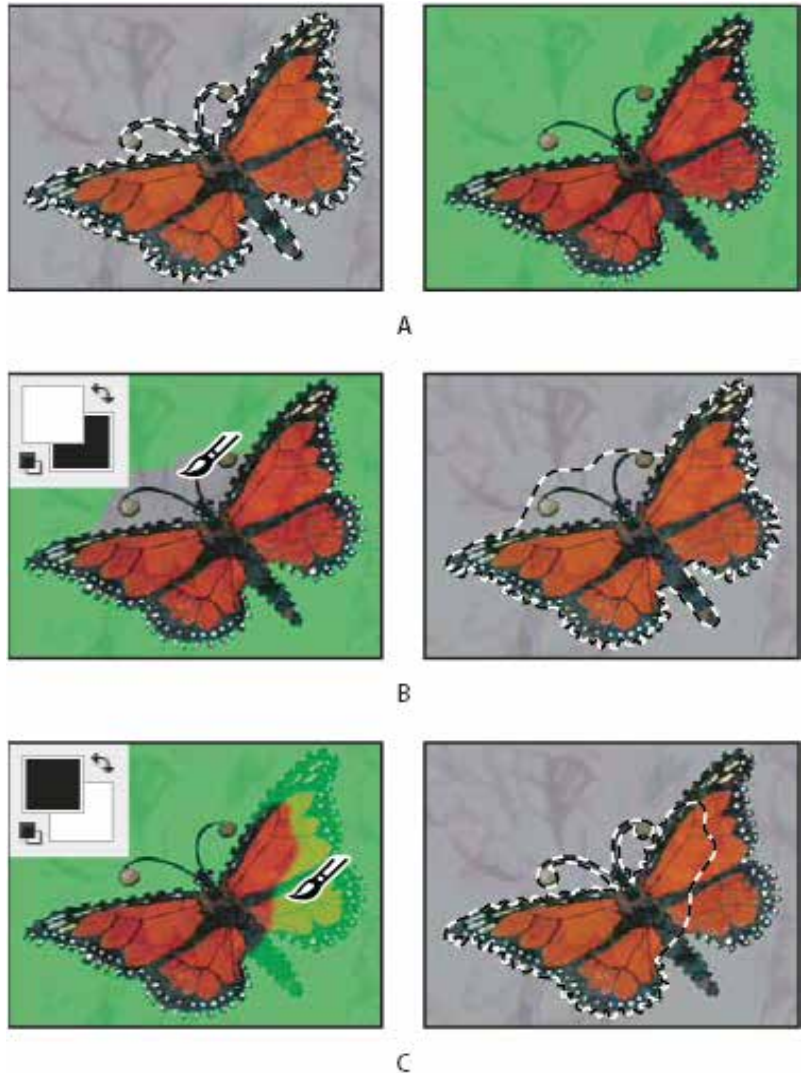
3.3 Manipulating Images

Puppet Warp

1-Select your desired layer in the Layers panel.

2-Choose Edit Puppet Warp.

3-On the Options bar, specify your desired settings:

4-On your image, click to add a pin to an area you want to distort or anchor.

5-Drag a selected pin to warp the mesh as can be seen in figure 3.8.

6- After you warp to your desired result, press Enter (Return on the Mac) or click the check icon on the Options bar.
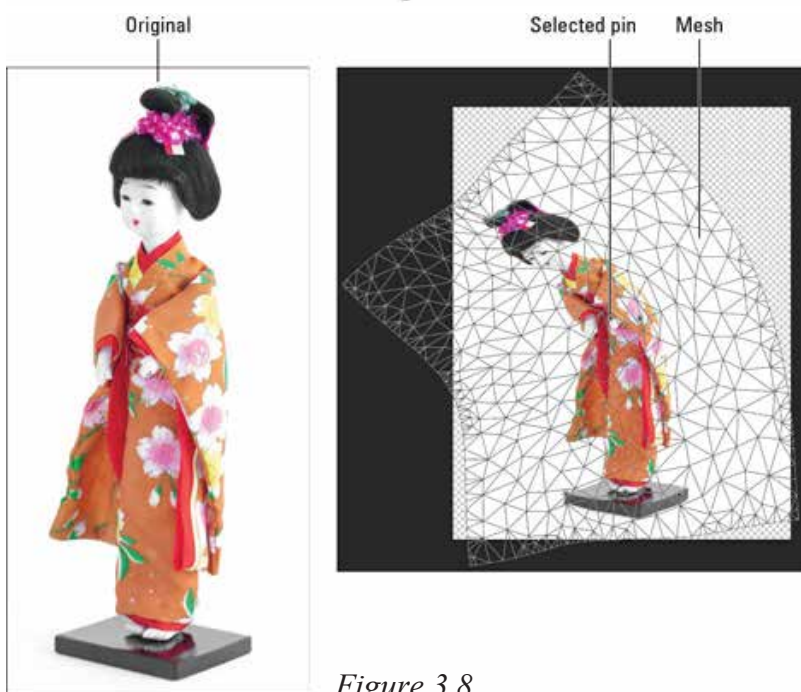
3.4 Vanishing Point

Vanishing Point simplifies perspective-correct editing in images that contain perspective planes for example,the sides of a building, walls, floors, or any rectangular object. In Vanishing Point,

A

B

C

Original   Selected pin   Mesh

Figure 3.8

you specify the planes in an image, and then apply edits such as painting, cloning, copying or pasting, and transforming. All youredits honor the perspective of the plane you're working in. When you retouch, add, or remove content inan image, the results are more realistic because the edits are properly oriented and scaled to the perspectiveplanes. After you finish working in Vanishing Point, you can continue editing the image in Photoshop. Topreserve the perspective plane information in an image, save your document in PSD, TIFF, or JPEG format.

3.5 Vanishing Point dialogue overview

The Vanishing Point dialog box (Filter > Vanishing Point) contains tools for defining the perspective planes, tools for editing the image, a measure tool, and an image preview. The Vanishing Point tools (Marquee,Stamp, Brush, and others) behave similarly to their counterparts in the main Photoshop toolbox. You canuse the same keyboard shortcuts to set the tool options. Opening the Vanishing Point menu displaysadditional tool settings and commands.

1-Choose Filter > Vanishing Point.

2-Define the four corner nodes of the plane surface.

By default, the Create Plane tool is selected. Click in the preview image to

Figure 3.9: A. Vanishing Point menu B. Options C. Toolbox D. Preview of vanishing point session E. Zoom options

define the corner nodes. Try to use a rectangle object in the image as a guide when creating the plane.

To tear off additional planes, use the Create Plane tool and Ctrl-drag (Windows) or Command-drag (Mac OS) an edge node.
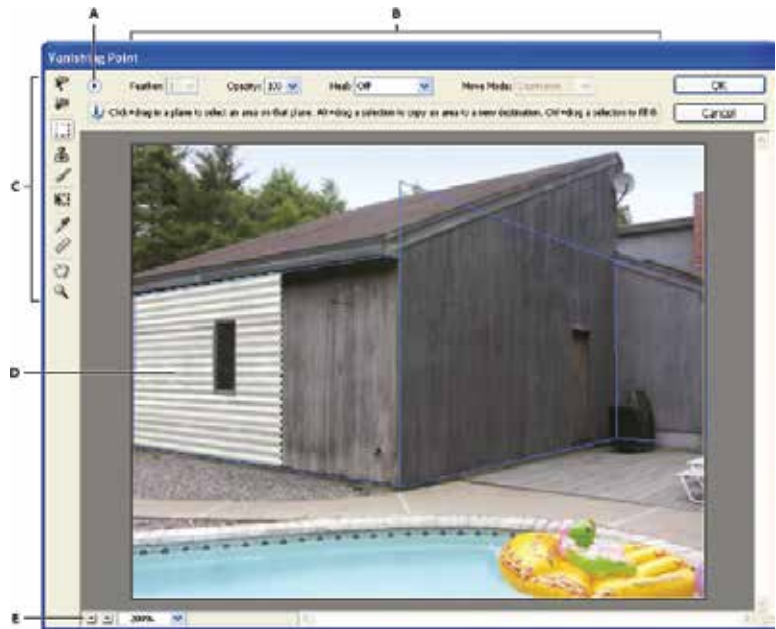

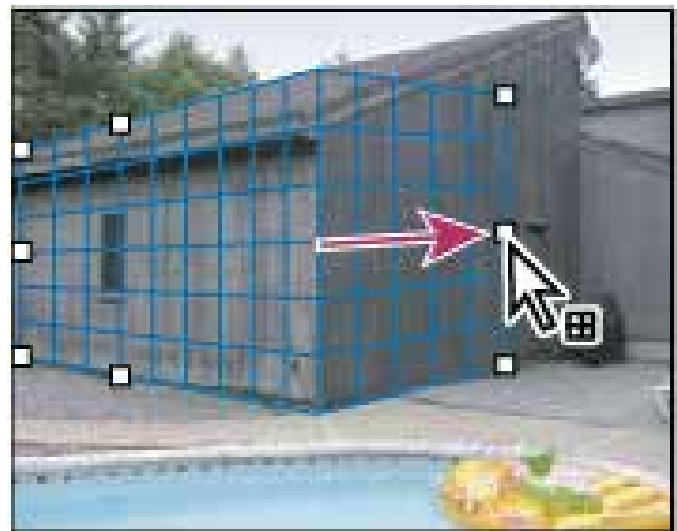*Figure 4.3: Defining the four corner nodes with the create plane tool*

Figure 3.12: Ctrl-drag (Windows) or Command-drag (Mac OS) an edge node to tear off plane

3- Edit the image.

Do any of the following:

Make a selection. Once drawn, a selection can be cloned, moved, rotated, scaled, filled, or transformed.

Paste an item from the clipboard. The pasted item becomes a floating selection, which conforms to the perspective of any plane that it's moved into.

Paint with a color in Vanishing Point or Paint with sampled pixels in Vanishing Point.

Scale, rotate, flip, flop, or move a floating selection. Measure an item in a plane.

Measurements can be rendered in Photoshop by choosing Render Measurements

To Photoshop from the Vanishing Point menu.

4- Export 3D information and measurements to DXF or 3DS format.

3.6 Alpha channel to create a shadow

To create a shadow, you want to essentially duplicate that mask and then shift it. You'll use an alpha channel to make that possible.

1- In the Layers panel, Ctrl-click (Windows) or Command-click (Mac OS) the layer icon in the Model layer. The masked area is selected.

2-Choose Select > Save Selection. In the Save Selection dialog box, make sure New is chosen in the Channel menu. Then name the channel Model Outline, and click OK.

Nothing changes in the Layers panel or in the image window. However, a new channel named Model Outline has been added to the Channels panel.

Figure 3.11

4-With the Shadow layer selected, choose Select > Refine Edge. In the Refine Edge dialog box, move the Shift Edge slider to +36%. Then click OK.

5-Choose Edit > Fill. In the Fill dialog box, choose Black from the Use menu, and then click OK.

The Shadow layer displays a filled-in black outline of the model. Shadows aren't usually as dark as the person that casts them. You'll reduce the layer opacity.

6-In the Layers panel, change the layer opacity to 30%.

The shadow is in exactly the same position as the model, where it can't be seen. You'll shift it.

7-Choose Select > Deselect to remove the selection.

8-Choose Edit > Transform > Skew. Rotate the shadow by hand, or enter -15° in the Rotate field in the options bar. Then drag the shadow to the left, or enter 845 in the X field in the options bar. Click the Commit Transform button (Image) in the options bar, or press Enter or Return, to accept the transformation.

9-Choose File > Save to save your work so far.

Figure 3.12

Figure 3.13

Section-II

After completing this section, Students will be able to: -

• *define primary, secondary, and tertiary colors*
• *understand color harmony*
• *understand color combinations and meaning of colors*
• *understand RGB vs CMYK*

3.7 What are primary, secondary and tertiary colors?

Red, blue and yellow are the primary colors, and they are the base of every other color. They cannot be created by mixing other colors together.

Secondary colors result when two primary colors are mixed together; they include orange, green and purple.

Tertiary colors are created when a primary color is mixed with a secondary color. Examples of tertiary colors are blue-green, red-orange and yellow-green.

White and black are not technically colors, but they can be used to create lighter or darker (tints or shades) colors. For example, combining white and red makes pink, and blending black with orange makes brown.

Do you know ?

Sir Issac Newtom invented/ established color theory when he invented color wheel in 1666.

Color Harmony

In color theory, color harmony refers to the property that certain aesthetically pleasing color combinations have. These combinations create pleasing contrasts and consonances that are said to be harmonious. These combinations can be of complementary colors, split-complementary colors, color triads, or analogous colors. Color harmony has been a topic of extensive study throughout history, but only since the Renaissance and the Scientific Revolution has it seen extensive codification. Artists and designers make use of these harmonies in order to achieve certain moods or aesthetics. Color Harmony examples are discussed below: (Referr to figure 3.14)
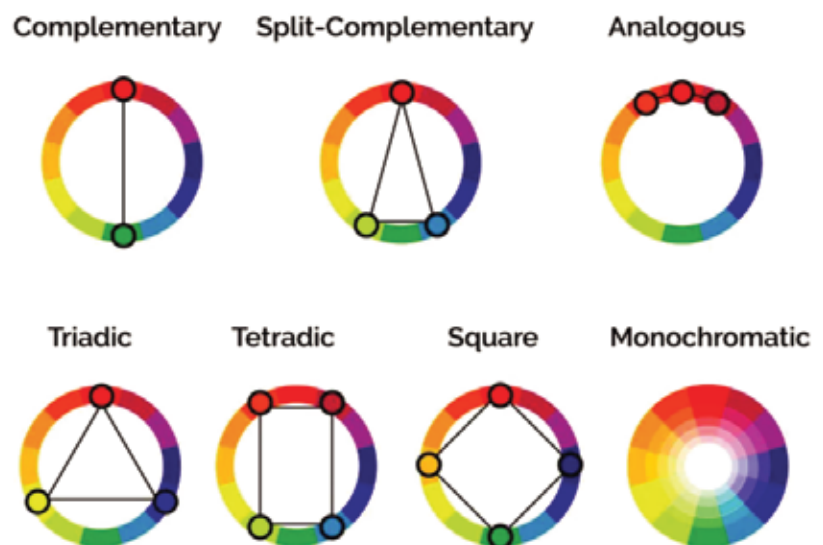

Figure 3.14

Complementary

Complementary color schemes are the most basic of all harmonies. They're often used in the world of design because of their simplicity.

Put simply, complementary pairs are colors positioned on opposite ends of the color wheel (or color circle), and they can be either primary, secondary, or tertiary colors.

These harmonious color combinations create vibrant color palettes with high contrast. While that's desirable.

For instance, text and background in complementary colors are tough to read, so steer away from that.

Further out, these color schemes are ideal for making something stand out and create eye-catching elements.

Split complementary

Split complementary colors are slightly more complex than complementary colors because they have three hues.

The simplest split complementary color schemes have one key color and two colors adjacent to that key color's complement. Because of that, this color harmony has a vibrant contrast that is generally easy to use. Beginner artists and graphic designers often gravitate toward these types of combinations as they start to branch out into more complex color schemes since they're approachable and intuitive.

Beyond that, split complements work exceptionally well with artwork since it gives you enough colors to work with.

Also, it's easy to understand how to use them: use the two base colors for most of the artwork and the accent color for – you guessed it – accents.

Analogous color

Analogous color schemes consist of three hues, all positioned next to each other on the color wheel.

They usually consist of one dominant color, then a supporting color. The third color can be

Figure 3.15

Do you know ?

Color wheel is divided into warm colors and cool colors. Warm colors include red, orange and yellow along with it's variations. Whereas cool colors include green,blue and purple along with it's variations. Each color has separate meaning.

Figure 3.16

Figure 3.17

the first two colors blended together or an accent color that pops.

Analogous color schemes are widespread in decorating and interior design. These color harmonies tend to be eye-soothing and have a sense of visual cohesion without being too flat, overwhelming, or monochromatic.

Triadic color

Triadic color combinations consist of three colors evenly spaced on the color wheel. They are very versatile and more often than not, they create a vibrant, bold color palette.

Similar to complementary color schemes, triadic color schemes offer strong contrast.

Figure 3.18

Still, they tend to be easier on the eye than a simple complementary pair, making them a pretty safe bet if you want more than one hue to play with, but don't want to make quite as much of a splash as a complementary pair would.

Tetradic color

Tetradic color schemes have four individual colors: a key color and three more colors, all equidistant from the key color on the color wheel.

This color harmony can also be referred to as a "double-complementary color scheme" because it consists of two complementary color pairs.

Like any complementary scheme with a wide range of colors, the result is a vibrant palette rich with contrast.

In fact, tetradic colors are some of the boldest, most vibrant color schemes in the designers' toolkit. While that's a great thing, it also means they should be used judiciously and with caution.

Figure 3.19

Square color

Square color schemes consist of four colors spaced evenly around the color wheel. To create a square color palette, pick the key color to start with. Then identify the other colors that are equidistant from that color. You'll basically end up with two complementary pairs.

This color harmony is very similar to the tetrad above, however, instead of a rectangular color scheme, it is a square color scheme.

Beyond that, square color schemes are less common than some of the other color combination options which can provide an opportunity to utilize one and set your design, product, website, or piece of artwork apart from the pack.

Monochromatic color

Monochromatic color schemes use a single base hue and extend the color scheme by using different shades, tones, and tints of that color family.

The result is a complex and rich design very different from the common misconception that monochromatic color harmonies are dull and lifeless.

When choosing your color schemes, make sure to add enough contrast in the shades to create visual interest. Also, don't shine away from patterns and texture–they will add depth to your design.

This color harmony is vibrant and eye-pleasing, so be sure to make the most of it.

Figure 3.20

Figure 3.21

Do you know ?

1- Hue stands for original color example red, blue etc.

2- Shade: when we mix black color with original color, it results in shade example: red + black= Mehroon.

3- Tint is a mixture of white color with original color for example: red + white= Pink.

4- Tone is a mixture of grey with originl color.

Section-III

After completing this section, Students will be able to: -

• *understand bitmap image and vector graphics*
• *define path and pen tool*
• *understand use of custom shapes and importing a smart object.*
• *understand color and depth to a shape using layer style*

3.8 Bitmap vs Vector

Bitmap is mostly used to represent real life, where vector is generally used for more abstract images such as logos. The two formats are very different but the end results can, at times, be made to look similar; an abstract bitmap or a realistic looking vector is not uncommon. We have dicussed both Bitmap and Vector below:

Bitmap Images

Bitmap images are what most people think of when they think of a digital image. They are made up of a collection of bits that make up an image. If you have ever zoomed in on a photo to the point where it looks like a bunch of squares then you have seen a bitmap image. Below is a bitmap image with a magnified section to show what we mean.

Bitmaps are larger than their vector counterparts, which along with the loss of image stability when zooming in are two of their main disadvantages. They are however a much simpler output and easier to create for the most part.

Typical file formats of bitmaps include: bmp (outdated), eps, gif, jpg, pdf, psd, tiff, and png.
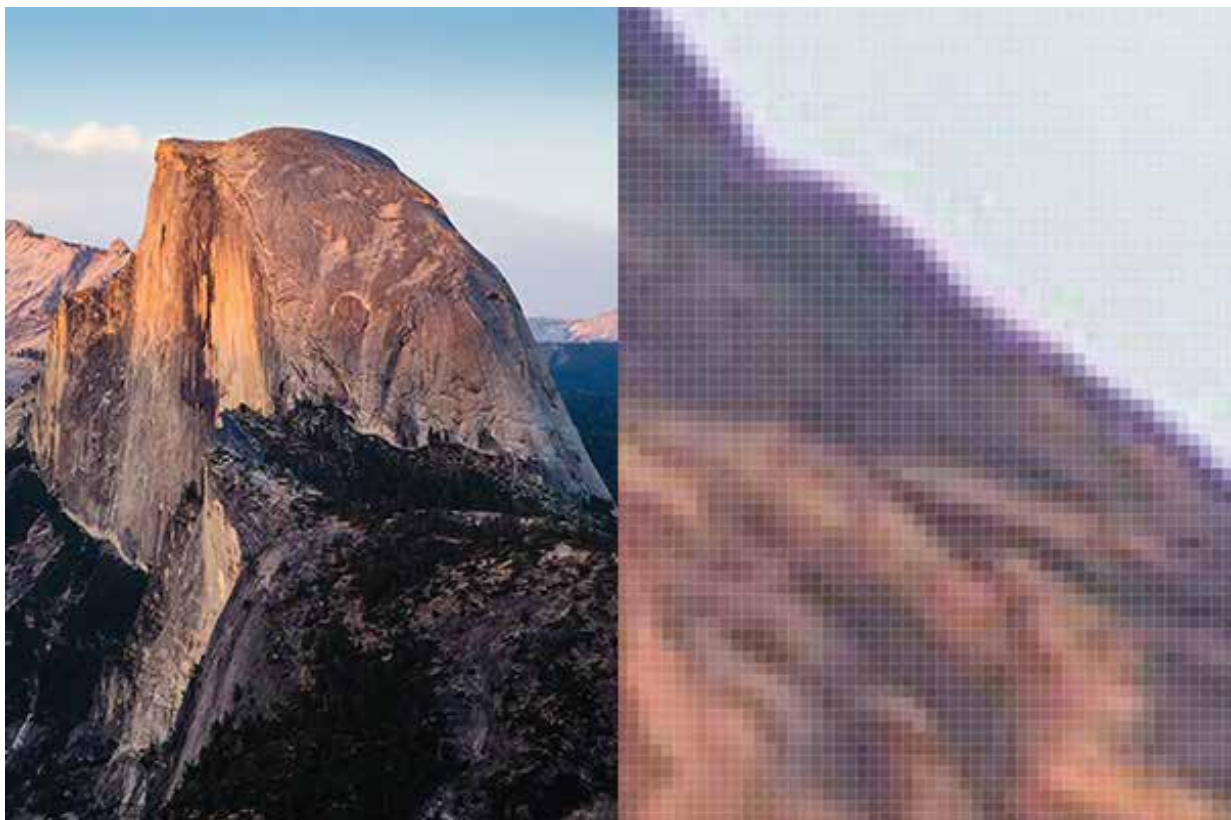
Figure 3.22

Vector Graphics

Vector Graphics are completely made up of mathematically defined points and interactions. Each line is made of either a collection of points with lines connecting all of the points, or a few control points connected by Bezier Curves. Most vectors use the latter method as it creates smaller file types and smoother looking images. Below is a vector image with the lines that make up the image beside it.

Vector drawings are generally smaller files because they only contain data and not full images. Vector drawings can also be scaled without losing any quality, which makes

Figure 3.23

them ideal for company logos or other objects that need frequent resizing. They are much more difficult to output especially if you have many small objects included in your drawing.

3.9 Path in Photoshop

While working in Photoshop, you can create paths from existing selections. You probably won't use this option nearly as often as you use the option to turn a path into a selection, but the option is available.

To create a path from a selection, follow these steps:

1- Select the desired element in your image.

2- With the selection marquee active, select Make Work Path from the Paths panel pop-up menu.

You can also create a path from a selection by holding down Alt (Option on the Mac) and clicking the Make Work Path from Selection icon in the Paths panel. If you just click the icon without holding down Alt (Option on the Mac), you also make a path, but you bypass the dialog box.

3- In the dialog box that appears, enter a Tolerance value.

The Tolerance value controls how sensitive Photoshop is to the nooks and crannies in the selection when it creates the path:

* The lower the value, the more sensitive it is, and the more closely the selection follows your path.

* Too low a value, such as 0.5, may create too many anchor points.

* Too high a value, such as 10 (the max), rounds out your path too much. Start with the default setting of 2.0 You can always tweak the path later.

4- If the path is still showing, simply click in the gray area below the path names in the Paths panel. This action deselects the path.

5- Select the work path in the Paths panel and select Save Path from the Paths panel pop-up menu. Name the path and click OK.

3.10 Pen Tool

The Pen Tool is located just above the Text Tool on the main Photoshop toolbar. As you can see from the fly-out menu, there are five features (options) to the Pen Tool. Directly below the Text Tool, you will see a White Arrow, this is the Direct Selection Tool (and if you hold down your mouse the Black Arrow appears which is the Path Selection Tool).

Photoshop is a pixel image editor. The Pen Tool creates an outline or path (vector shape) by using anchor points. These paths can be opened or closed and can be viewed in the Paths panel (which similar to the Layers panel) where each path can have its own layer. You can then make a selection from a path.

This means that you are working non-destructively on your image which is always a good thing. These paths can be saved and re-edited over and over. So the time spent on a selection can be saved for future use or further refined at a later date.
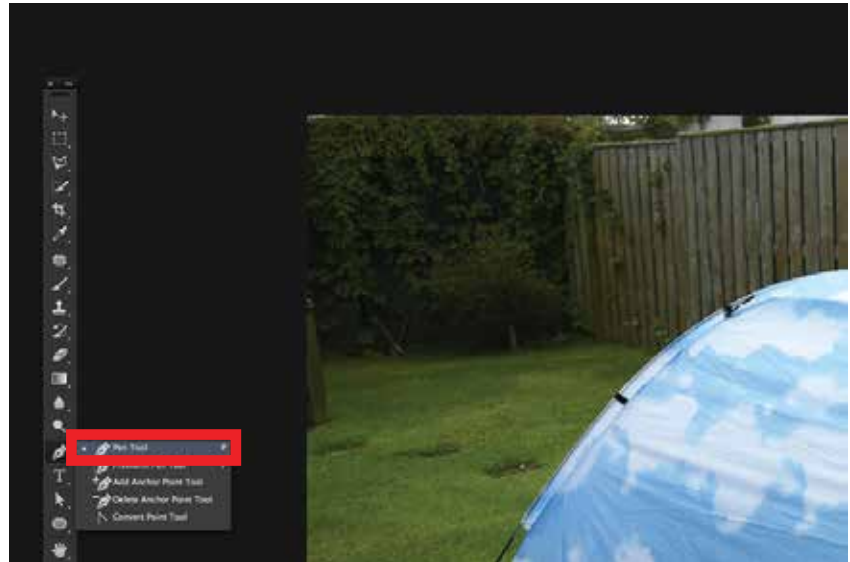
Figure 3.24

3.11 Custom Shapes

1- Select a shape tool

From the toolbar, click and hold the Shape tool () group icon to bring up the various shape tool options — Rectangle, Ellipse, Triangle, Polygon, Line, and Custom Shape. Select a tool for the shape you want to draw.

- Draw a shape
- Click and drag on the canvas with your selected shape tool to draw a shape. This automatically creates a new shape layer in the Layers panel.
- Hold the Shift key while drawing to make your shapes proportional.
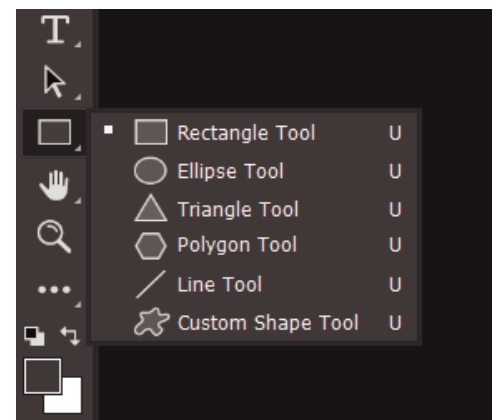
Figure 3.25

With your shape layer selected, use the Move tool to move your shape around and reposition on the canvas. To easily scale, transform, or rotate your shape, choose Edit > Free Transform or press Control+T (Win)/ Command+T (Mac).

3.12 Importing Shapes

1- If you don't find a desired shape, click the gear icon in the Custom Shape picker panel and select Import Shapes option to import a desired shape from your saved files. You can also create and save a custom shape in your library.

2- You can easily edit your Custom Shape Tool properties directly from Shape Properties under the Properties panel. You can also use on-canvas Transform controls to transform a custom shape while keeping intact its shape properties.

3- Click and drag anywhere in the canvas to draw your custom shape as can be seen in figure.
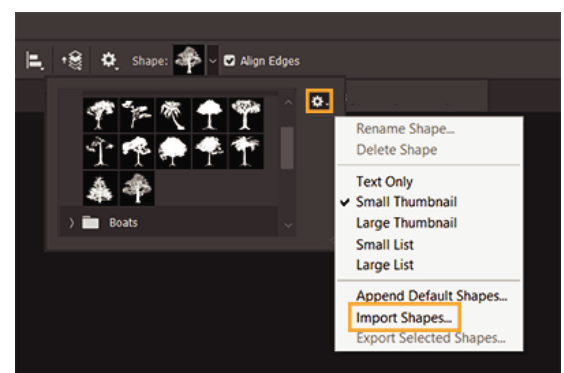
Figure 3.26

Figure 3.27

Color and Depth to a shape using Layers

You can edit styles applied to a layer or create new styles using the Layer Style dialog box.
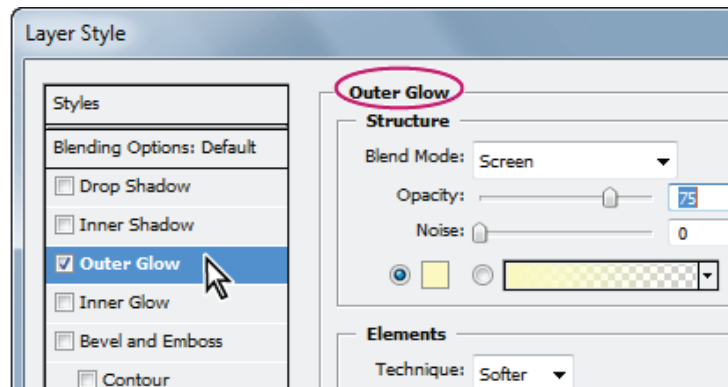
Figure 3.28

You can create custom styles using one or more of the following effects:

- Drop Shadow: Adds a shadow that falls behind the contents on the layer.
- Inner Shadow: Adds a shadow that falls just inside the edges of the layer's content, giving the layer a recessed appearance.
- Outer Glow and Inner Glow: Add glows that emanate from the outside or inside edges of the layer's content.
- Bevel and Emboss: Add various combinations of highlights and shadows to a layer.
- Satin: Applies interior shading that creates a satiny finish.
- Color, Gradient, and Pattern Overlay: Fills the layer's content with a color, gradient, or pattern.
- Stroke: Outlines the object on the current layer using color, a gradient, or a pattern. It is particularly useful on hard-edged shapes such as type.

Section-IV

After completing this section, Students will be able to: -

• *know Game, mobile, and website UI designing*
• *understand Different side scrolling parallax images*
• *understand 2D game art and icons.*
• *understand website navigation bar, slider sizes, and product images etc. creation*

3.13 Game Designing:

Photoshop can be used in field of gaming. For example: Character designing, UI design, Scene design.

We'll design a character now step by step for a better idea.

Step 1

Sketching the head then try this few different options and choose this style.

Step 2

To turn the bunny into pixels, I started drawing the eyes directly in Adobe Photoshop. The sketch wasn't used much other than for defining the style.

If you've never done pixel art, you'll want to create a New File in Photoshop and not make it very large—it can be 400 px by 400 px. You'll want to work with a lot of zoom (like 700%) and use the Pencil Tool to draw one pixel at a time. recommend keeping a second window of the same file open at 100% or 200% zoom so you can cycle between the windows and you can check on progress without the zoom.

Make the character about as small as it can be while maintaining it's main features. That's why the eyes are a good starting point.

The eyes will simply be two lines, next to each other. Each eye is 3 px tall by 1 px across, and nearly black in color.

Step 3

With the eyes done, you can proceed with the nose of the bunny plus a few other details. It's ok if the lines are simple for now.

Step 4

Now we can soften some of those lines. Also adding some teeth in front of the mouth, because bunnies have big front teeth.

Step 5

Let's give the mouth a smile.

Step 6

And let's add ears. Right now they're pointing straight up, and that could work also for this character, but we'll bend them a bit.

The ears are about as thin as possible, with just 1px for the inside and then the outline pixels on the sides.

Step 7

Now, to finish the head, we'll give the bunny a relatively big puffy cheek.

Figure 3.29

Figure 3.30   *Figure 3.31*

Figure 3.32   *Figure 3.33*
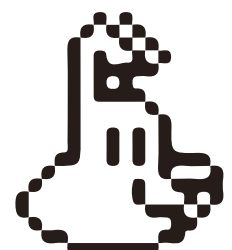
Figure 3.34   *Figure 3.35*

3.14 Web UI Design

Photoshop has been around for a very long time and many designers use it and know it well. That's why they turn to it for creating designs and graphics. Photoshop has gained many web and UI design features over the past years, including artboards, paragraph/character styles, and improved web export options. Photoshop's popularity is why you'll continue seeing designers using this app for quite some time, even though there are other options such as Sketch and XD.

Because Photoshop is a photo editor that has gained web/UI design features, it's not as intuitive and easy to design with as Sketch and Adobe XD. Those apps are more targetted for design, and therefore are easier to use. Once you know how to use Photoshop though, it is a very powerful app.

Photoshop does not have features such as symbols (for reusing design components) or prototyping. While you can turn your Photoshop file into a clickable prototype with InVision, it's not as easy to do as the integrated prototyping features found in Sketch and XD. We doubt Photoshop will add these features, especially now that they are focusing so heavily on Adobe XD.

Of these three apps, Photoshop offers the best export options for pixel-based graphics. If you really need to control the quality and filesize of graphics, Photoshop is the best choice.

Photoshop has integrated tools for creating animated GIFs, which you can't do with either Sketch or XD.

3.15 Parallax Images

The idea of parallax design is simply an awareness of movement. More specifically, the word 'parallax' is used to describe the perception of distance between objects while moving along a line of sight. For example the objects nearest to you in space will seem to move quicker and more dynamically than "background" objects So parallax is just a measurement of the difference in position between 2 points from the viewer's perspective. Since the objects aren't really moving it's just a type of illusion like 2D animation.

Building onto this concept we now have a wide variety of design trends meant to replicate parallax movement

One of the simplest ways to understand design is through example. Let's take a glimpse into specific trends used to create parallax design features in website layouts.

Great Examples of Parallax Scrolling

Let's start by covering a few good & bad examples and then delve into more specific techniques of parallax design. Generally speaking, a great parallax layout should tell a story. This doesn't need to be in "once upona time" formatting but it should clearly illustrate the point you're trying to make.
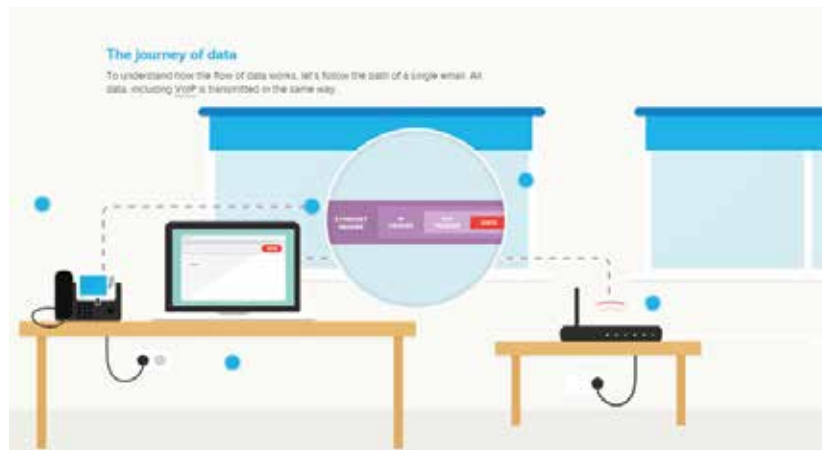

Figure 3.36

3.16 Website Navigation bar

The navigation bar, or nav bar, is a crucial element of web design, as it literally lets the user navigate through your site. It's perhaps the most important item in terms of UI/UX design, as a badly designed nav bar makes the experience of using your website clumsy and disengaging. Rather than just a map, you should think of your navbar as part of your overall web design and make sure it's not only at its best for functionality, but also display.

Slider Bar

Sliders in web design are one of the most controversial user interface units. Some people love them; some people hate them. The same goes to web developers: some developers cannot imagine a website without them; others never use them.

The main reason for such disagreement is that while websites sliders are great instruments for displaying lots of information within small space, at the same time, they can be SEO-killers, user experience blunders, and destroyers of marketing strategies. Therefore, with such strong arguments for and against, using sliders in web design is always a case of personal preferences.

In Photoshop, create a new document (Ctrl+N or Cmd+N on Mac OS) with a canvas size of 550x400px.

If it's locked, unlock the default Background layer so we can fill it with a color. Here's how you do that: Double-click on the Background layer, which will open the New Layer dialog window. Just press the OK button to unlock the Background layer.

Afterwards, fill the Background layer with a very light gray color (#ececec).

Double-click on the Background layer to open the Layer Style window. In the Layer Style window, give our Background layer a Gradient Overlay layer effect using the image below as a guide for the effect's settings.

Figure 3.37
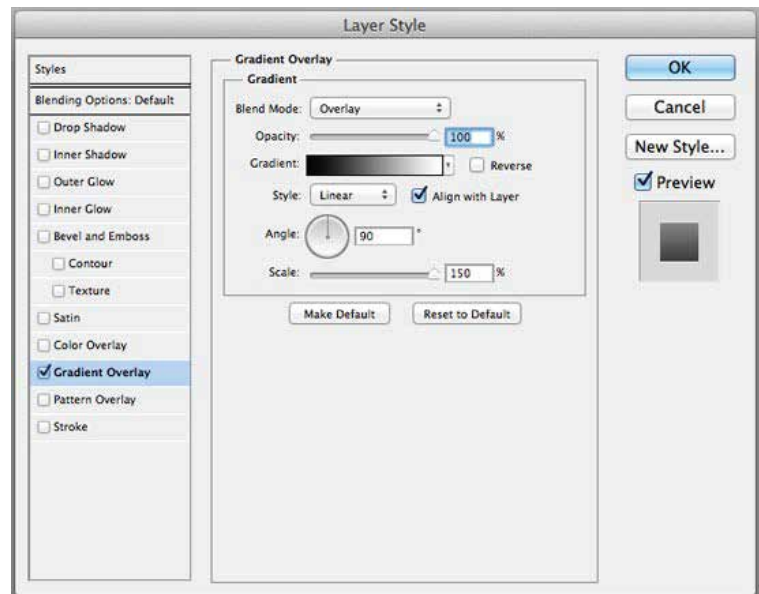
Figure 3.38
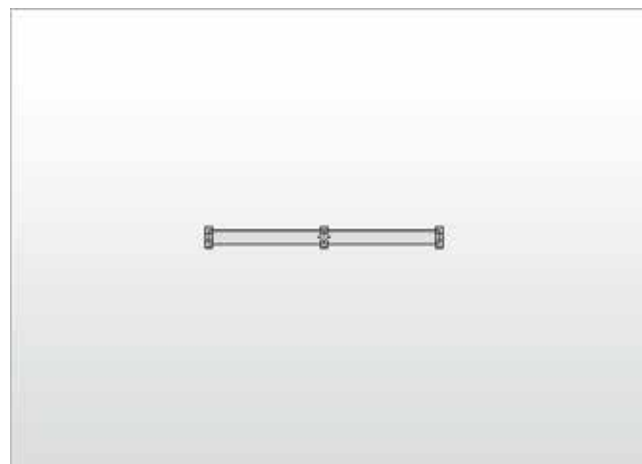
Figure 3.39

Now we have a good, complementary background for our slider:

Step 2: Create the Slider Bar

In this step, we'll make the slider bar, a horizontal rectangle that will be sort of the "track" of our slider control (which we'll create later on).

To start, use the Rectangle Tool (U) and draw a rectangle like on the image below. Make sure that the Rectangle Tool is set to Shape layers mode (you can set this at the Options bar at the top). For the Color of the shape, use a gray color (#dddddd) — you can also set the Color of your shape at the Options bar.

Double-click on the rectangle shape layer to open up the Layer Style window.

We'll give our rectangle shape layer 5 layer effects: Drop Shadow, Inner Shadow, Outer Glow, Bevel and Emboss, and Color Overlay. Below are the settings for each of these layer effects.

Set outer glow to #ffffff, Inner shadow to #000000, Bevel and Emboss to #fffff and the final product is:

Step 3: Create the Slider Control

Let's make the slider control, which is what you'd slide left and right when interfacing with our slider user interface.

Switch to the Rounded Rectangle Tool (U). In the Options bar, set the Radius to 2px. Also, set the Color to the gray color we used for the background (#ececec). Use the Rounded Rectangle Tool to draw a square shape somewhere on top of our slider bar.
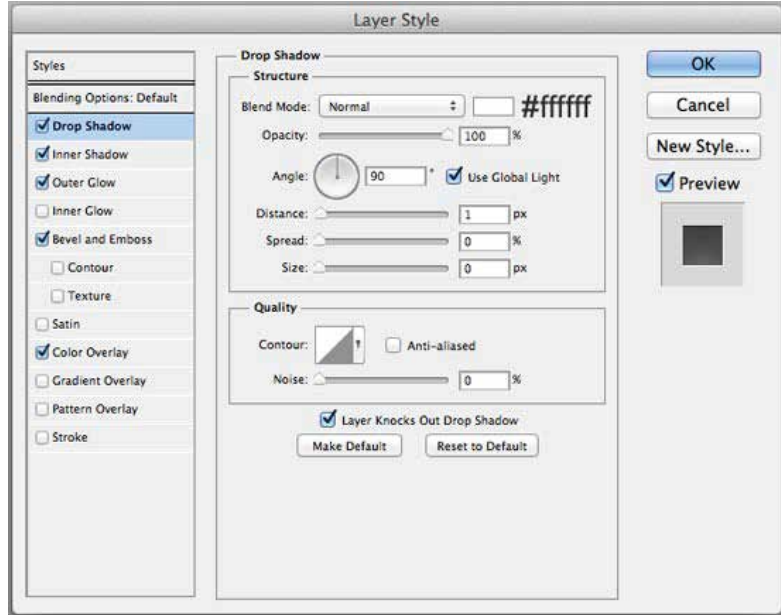
Figure 3.40
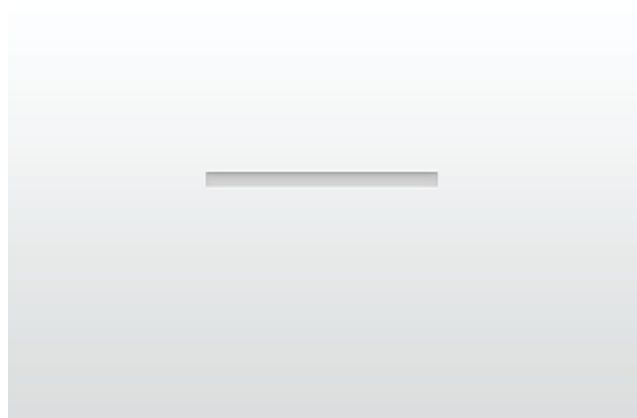
Figure 3.41
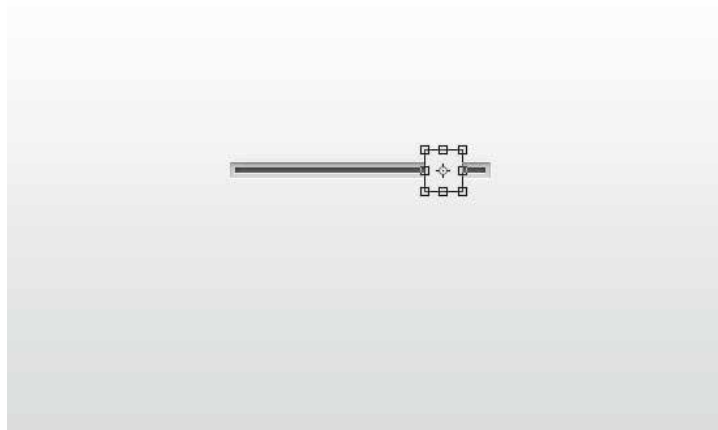
Figure 3.42

3.17 Product Images

High-quality photography is important for developing a successful business, as many customers are convinced to purchase a product based on its photos alone. If your product photos look unprofessional or unappealing, customers may turn away from your online store entirely.

Luckily, you don't need to be a professional photographer to create great product photos. Photo editing software like Photoshop can enable you to improve any product image that you'd like to add to your online store.

Removing the background is one of the most common product photo editing actions. That is why it is recommended to take photos on a white background to eliminate the tiresome

Figure 3.43

process of deleting objects from the background or decoloring it.

Removing backgrounds from an image has many benefits. By doing so, you will help customers focus on the object in the photo without any distractions. There are many tools designed for removing the background.

One of the most popular tools is the pen in Adobe Photoshop. This software also has a quick selection tool, namely "Select and Mask". However, Photoshop does not give you full control, so the selection might not be precise.

White Balance

When taking a picture of your product, you should be careful and pay attention to minor details so that your photo won't have a blue tinge. A picture's white balance can be distorted due to the alteration of light conditions camera settings during the photo shoot, etc. If whites aren't correctly represented in your image, you can adjust white balance with Photoshop.

You also may need to correct the color balance of your image so that it will be identical to the color scheme of your product in real life. Apply the Curves Tool to achieve this.

Contrast and Exposure

By modifying the image contrast, you can brighten the light areas and darken the dark parts of a photograph. With this effect, the picture will look more distinct. Increasing the exposure will help to achieve a brighter picture. Decreasing the exposure will give you the reverse result – a darker picture.

Tweaking Colors

Some devices are not capable of capturing certain colors, such as neon, for example. So, you will need to tweak the photo's colors to achieve the desired shade. This technique allows you to eliminate the effect of the washedout colors and make your pictures look natural and attractive.

After completing this section, Students will be able to: -
• *learn about low and high resolution*
• *understand layer arrangement, smart filters, painting a layer, adding a background, using the history panel to undo edits and upscaling lowresolution images.*

3.18 Resolution

Resolution is a measure used to describe the sharpness and clarity of an image or picture. It is often used as a metric for judging the quality of monitors, printers, digital images and various other hardware and software technologies.
Image resolution is typically described in PPI, which refers to how many pixels are displayed per inch of an image.
Higher resolutions mean that there

High Res Image 300dpi   Low Res Image 72dpi

Figure 3.44

more pixels per inch (PPI), resulting in more pixel information and creating a high-quality, crisp image.
Images with lower resolutions have fewer pixels, and if those few pixels are too large (usually when an image is stretched), they can become visible like the image.
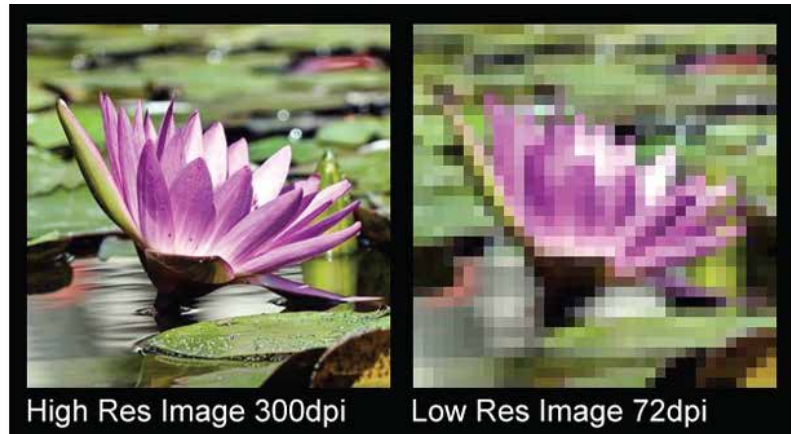
3.19 Layers Arrangement

To change the order of layers and layer groups, do any of the following:
• Drag the layer or group up or down in the Layers panel. Release the mouse button when you see a highlightedline at the position where you want to place the selected layer or group.
• To move a layer into a group, drag a layer to the group folder . If the group is closed, the layer is placed at the bottom of the group.
• Select a layer or group, choose Layer > Arrange, and choose a command from the submenu. If your selected item is in a group, the command applies to the stacking order within the group. If the selected item is not in a group, the command applies to the stacking order within the Layers panel.
• To reverse the order of selected layers, choose Layer > Arrange > Reverse. These options appear dimmed if youdo not have at least two layers selected.
• By definition, the background layer is always at the bottom of the stacking order. Therefore, the Send To Backcommand places the selected item directly above the background layer.
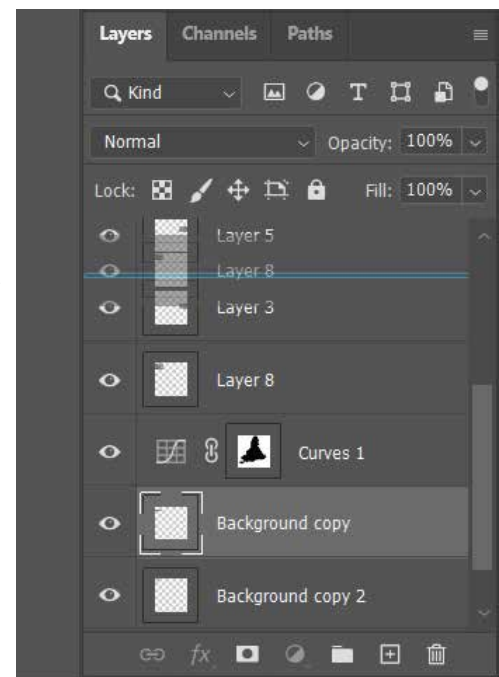
Figure 3.46

Smart Filter

1-Do one of the following:

To apply a Smart Filter to an entire Smart Object layer, select the layer in the Layers panel.

To constrain the effects of the Smart Filter to a selected area of a Smart Object layer, make a selection.

To apply a Smart Filter to a regular layer, select the layer, and choose Filter > Convert For Smart Filters, and click OK.

2-Do one of the following:

Choose a filter from the Filter menu. You can choose any filter, including third-party filters that support Smart Filters, except Extract, Liquify, Pattern Maker, and Vanishing Point.

Choose Image > Adjustments > Shadows/Highlight.

3.20 Painting brush

To better understand how layer masks work, let's try editing the the Acorn layer mask. We'll be using the Brush tool.

1-Select the layer mask thumbnail in the Layers panel. In our example, we'll select the thumbnail next to the Acorn layer.

2-Next, choose the Brush tool from the Tools panel, then set the Foreground Color to white.

3-Click and drag your image to reveal areas in the layer. In this example, we're revealing more of the background by adding white paint to the layer mask.

3.21 Adding a background

Whenever we open an image, Photoshop automatically places it on the Background layer.

1-The first thing we need to do is convert our current Background layer into a normal layer. To do that, go up to the Layer menu at the top of the screen, choose New, and then choose Layer from Background.

Going to Layer > New > Layer from Background.

This opens the New Layer dialog box. Leave the name set to "Layer 0" and click OK to close out of the dialog box:

If we look in the Layers panel, we see that our Background layer is no longer a Background layer. It's now a normal layer named "Layer 0". So far, so good:

2-Next, we'll add a new layer that will become our new Background layer. Click the New Layer icon at the bottom of the Layers panel:
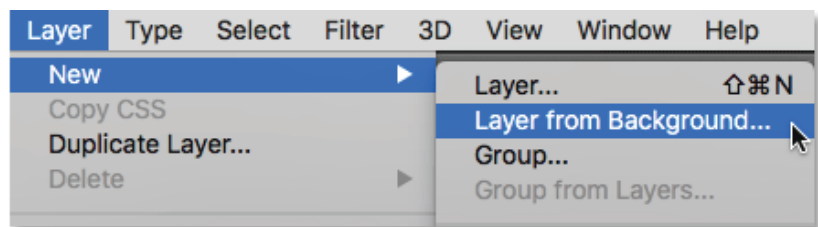
Figure 3.45
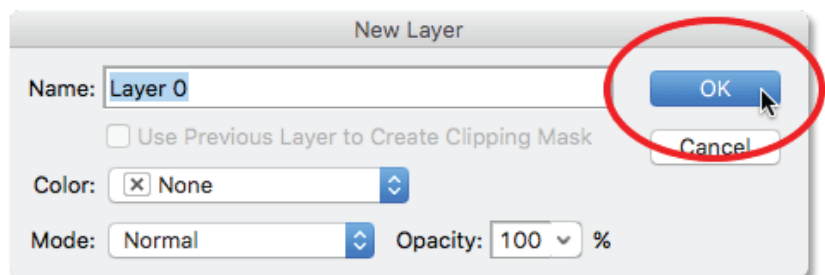
Figure 3.46
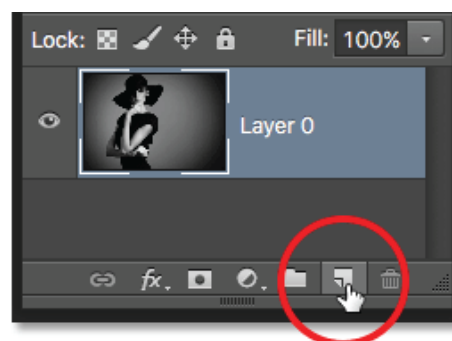
Figure 3.47

Photoshop adds a new blank layer named "Layer 1" above the image:

3-Let's convert the new layer into a Background layer. Go back up to the Layer menu, choose New, and then choose Background from Layer:
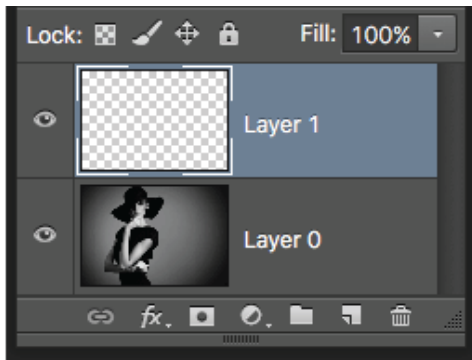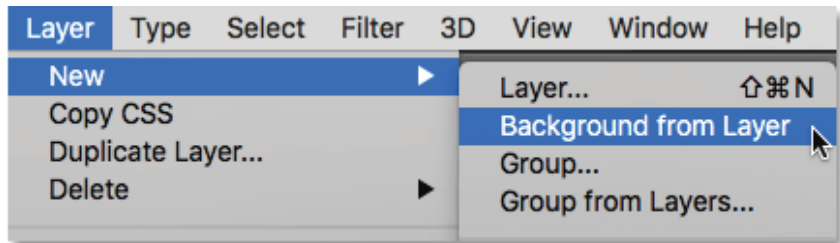

Figure 3.48

Figure 3.49

We see that Photoshop filled the Background layer with white. As we learned earlier, that's because Photoshop automatically fills the Background layer with our current Background color. In my case, it was white:

Using History Panel to undo edits

In Photoshop Elements, your options to undo your work provide you much more than reverting to the last view (as Undo typically works in other applications). The Undo command has been one of the most frequently used menu commands in every program developed. You make a change to your document in Elements, and if you don't like it, you simply choose Edit Undo or press the keyboard shortcut Ctrl+Z (cmd+Z on the Macintosh)

Figure 3.50

3.22 Using the Undo History panel

Photoshop Elements takes the Undo command to new levels by offering you a panel on which all (well, almost all) your changes in an editing session are recorded and available for
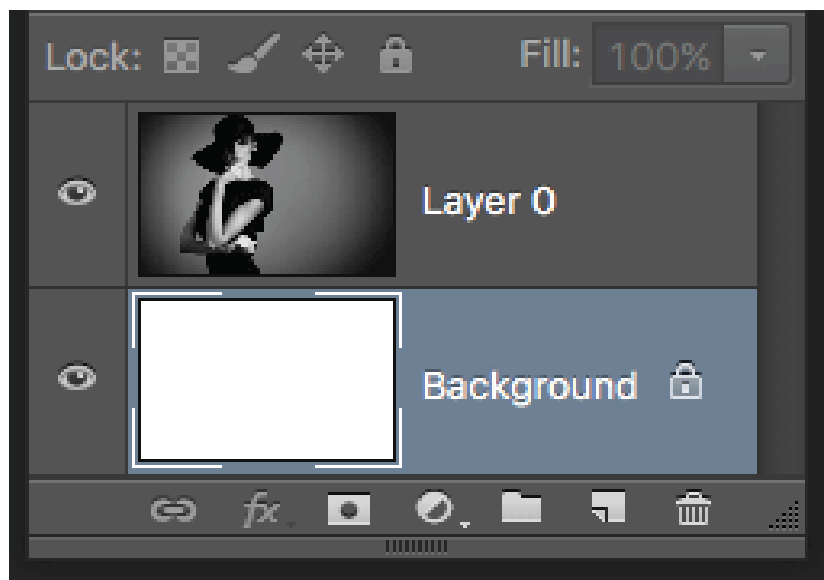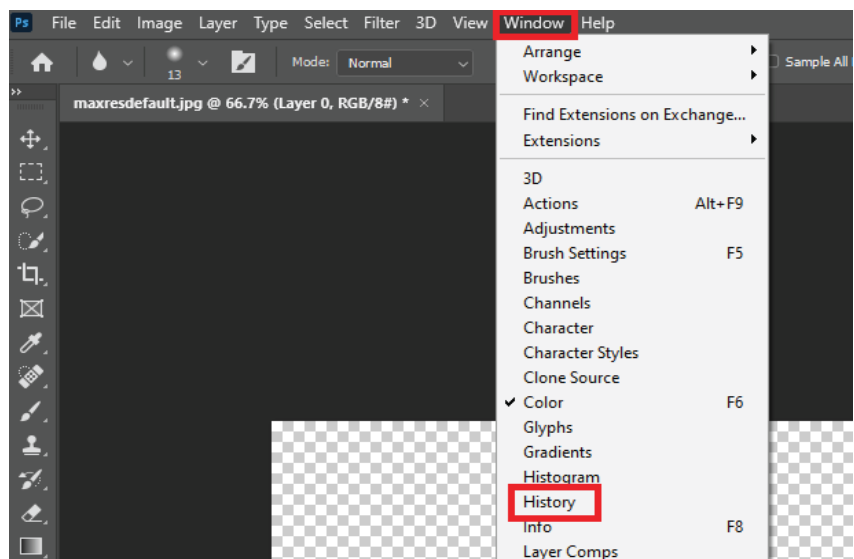
Figure 3.51

undoing at any step in an editing sequence.

Each edit you make is recorded on the Undo History panel. To open the panel, choose Window Undo History. Make changes to your document, and each step is recorded on the panel.

3.23 Up-Scaling Low-resolution images

1. With Photoshop open, go to File > Open and select an image.

Figure 3.52

2. Go to Image > Image Size.
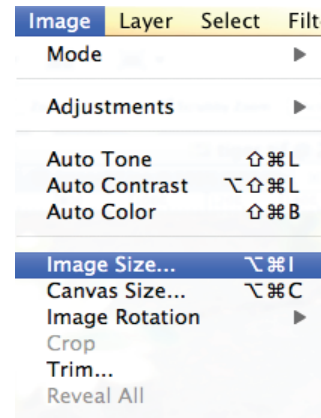
Figure 3.53

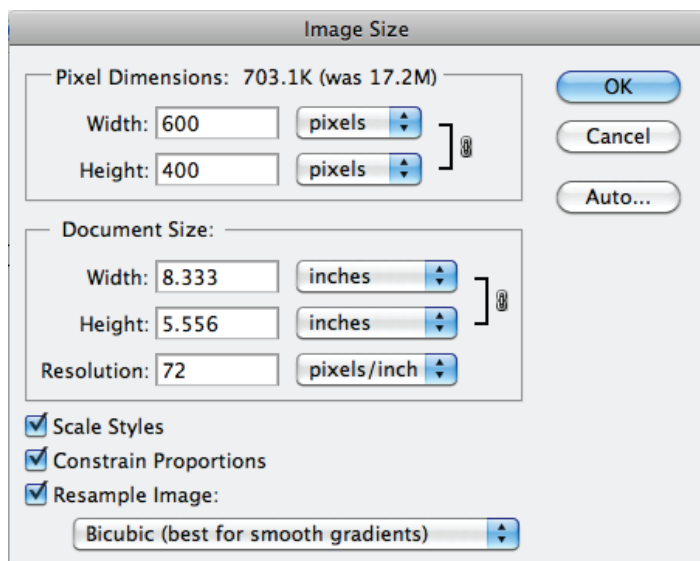3. An Image Size dialog box will appear like the one pictured below.
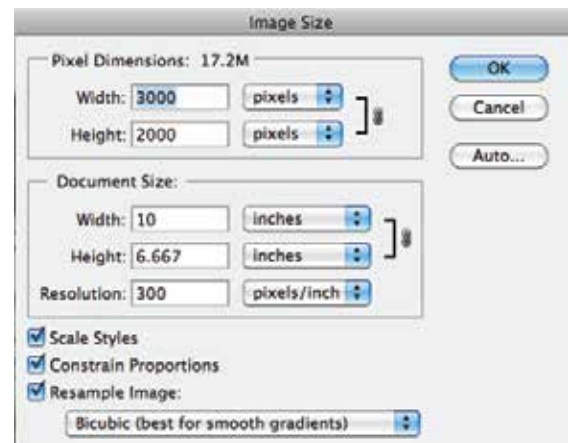
Figure 3.54

Figure 3.55

4. Enter new pixel dimensions, document size, or resolution.

The original image is at 300ppi. Let's say that we want to put this image on our website, so we want it to be only 600 x 400 pixels and with a resolution of 72ppi. First, we can change the resolution by typing in 72 and then, we can change the pixel dimensions by entering 600 x 400 as the width and height.

After completing this section, Students will be able to: -
• *understand about timeline panel, creating new video project and animate text with key frame.*
• *learn effects, transitions, audio effects, muting unwanted audio and rendering video.*
• *recognize about gif timeline*

3.24 Timeline Panel

To animate layer content in timeline mode, you set keyframes in the Timeline panel, as you move the currenttime indicator to a different time/frame, and then modify the position, opacity, or style of the layer content. Photoshop automatically adds or modifies a series of frames between two existing frames—varying the layer properties (position, opacity, and styles) evenly between the new frames to create the appearance of movement or transformation.

For example, if you want to fade out a layer, set the opacity of the layer in the starting frame to 100% and click the Opacity stopwatch for the layer. Then move the current-time indicator to the time/frame for the ending frame and set the opacity for the same layer to 0%. Photoshop automatically interpolates frames between the start and end frames, and the opacity of the layer is reduced evenly across the new frames.

1. Create a new document.

Specify the size and background contents. Make sure the pixel aspect ratio and dimensions are appropriate for the output of your animation. The color mode should be RGB. Unless you have special reasons for making changes, leave the resolution at 72 pixels/inch, the bit depth at 8 bpc, and the pixel aspect ratio at square.

Make sure the Timeline panel is open. If necessary, click the downpointing arrow in the middle of the panel, choose Create Video Timeline from the menu, and then, click the button to the left of the arrow. If the Timeline panel is in frame animation mode, click the Convert To Video Timeline icon in the lower-left corner of the panel.

2. Specify the Set Timeline Frame Rate in the panel menu.

Specify the duration and frame rate.

3. Add a layer

Background layers cannot be animated. If you want to animate content, either convert the background layer to a normal layer or add any of the following:
A new layer for adding content.
A new video layer for adding video content.
A new blank video layer for cloning content to or creating hand-drawn animations.

4. Turn on keyframing for a layer property.

Click the triangle next to the layer name. A down-pointing triangle displays the layer's properties. Then, click the stopwatch to set the first keyframe for the layer property you want to animate. You can set keyframes for more than one layer property at a time.

6. Move the current time indicator and change a layer property.

Move the current-time indicator to the time or frame where the layer's property changes. You can do one or more of the following:
Change the position of the layer to make layer content move.
Change layer opacity to make content fade in or out.

Change the position of a layer mask to reveal different parts of the layer.

For some types of animation, such as changing the color of an object, or completely changing the content in a frame, you need additional layers with the new content.

7. Move or trim the layer duration bar to specify when a layer appears in an animation.

8. Preview the animation.

Use the controls in the Timeline panel to play the animation as you create it. Then preview the animation in your web browser. You can also preview the animation in the Save For Web dialog box.

9. Save the animation.

You can save the animation as an animated GIF using the Save for Web command, or as an image sequence or video using the Render Video command. You can also save it in PSD format, which can be imported into Adobe After Effects.

3.25 Adding Effects to Video in Photoshop

Once you open PS, you need to switch your layout to "motion," which you'll find in the top-right corner of your screen.
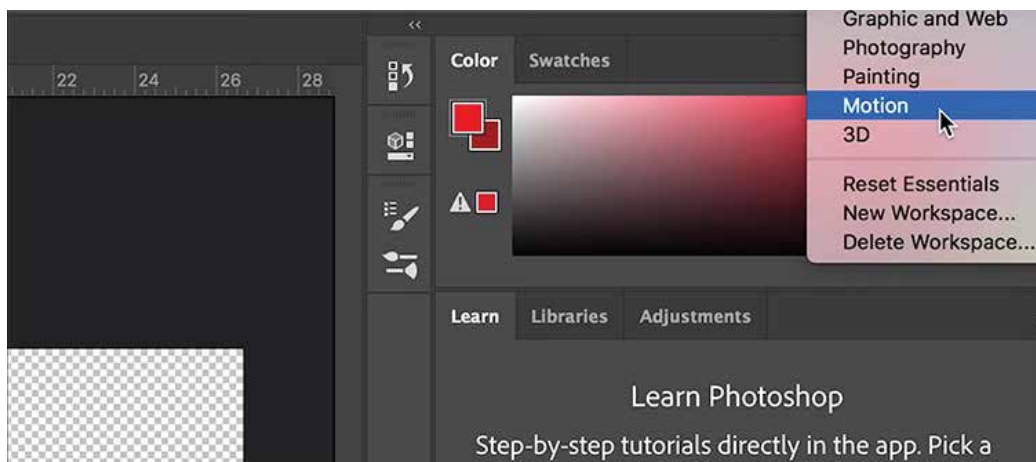
Figure 3.56

Once you've made this selection, a timeline should appear; click Create new sequence.
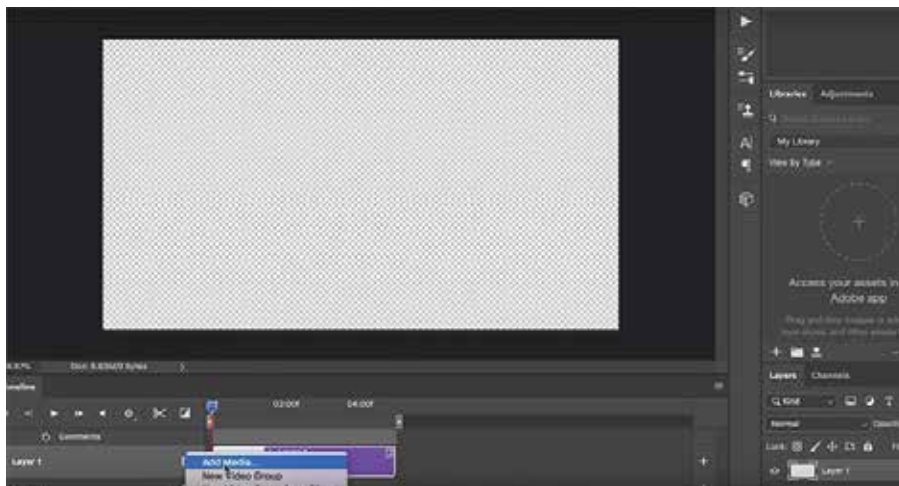
Figure 3.57

Once you've exported your sequence from your NLE of choice, import your video into the Photoshop timeline by clicking Add media next to Layer 1. Delete the default blank layer, and move your clip to the beginning of the sequence. Depending on the length and other specifics of your clip, you can set the two markers at the top as in and out points to focus on a specific section. This is particularly useful if you're making small adjustments and want to analyze specific frames.

3.26 Audio tracks and controls

Adjust Audio in Clicks
Right-click audio clips to mute them, adjust volume, or fade in and out.
Right-click video clips, and click the musical notes to adjust audio they contain.

Create or Delete audio
To the right of audio track names in the Timeline, click the musical notes . Then select Add Audio to place another clip on the track.
Select an audio clip in the Timeline, and click the musical notes to the right of the track name. Then select Duplicate, Delete, or Replace Audio Clip.

Video transitions
Transitions create professional fade and cross-fade effects. Click the transitions icon in the upper left of the Timeline panel. Then choose a duration, and drag a transition type to the start or end of clips. (Place the transition between clips to cross-fade.) Drag the edges of the transition preview in the Timeline to precisely set in and out points.

GIF Timeline
Open the GIF and in the layer sectino you'll be able to see the GIF timeline.
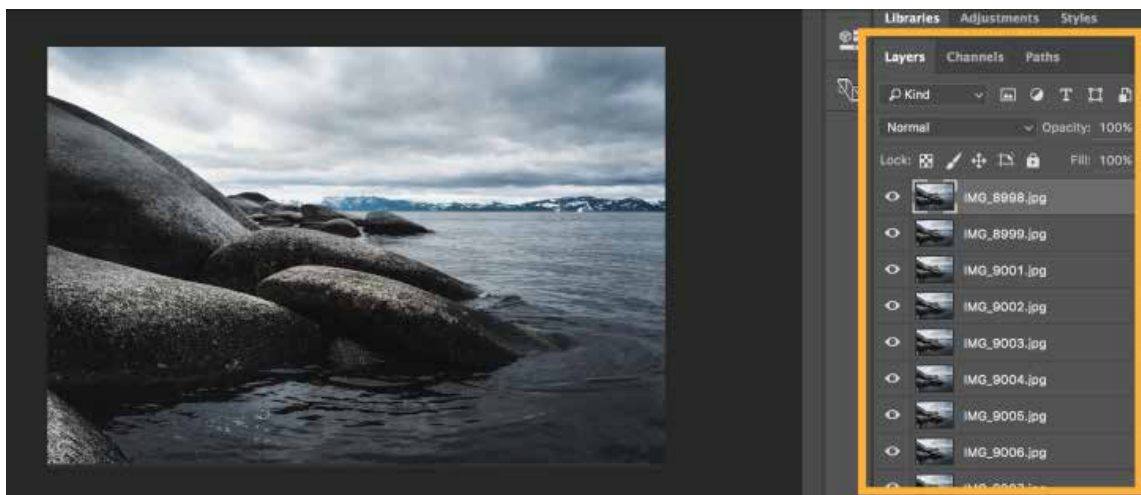
Figure 3.58

Section-VII

After completing this section, Students will be able to: -

• *understand layer groups to create button graphics*

• *comprehend automation of multistep task*

• *know designing with artboards*

3.27 Layer groups to create button graphics

- To create a new layer or group using default options, click the Create A New Layer button or New Group button in the Layers panel.
- Choose Layer > New > Layer or choose Layer > New > Group.
- Choose New Layer or New Group from the Layers panel menu.
- Alt-click (Windows) or Option-click (Mac OS) the Create A New Layer button or New Group button in the Layers panel to display the New Layer dialog box and set layer options.
- Ctrl-click (Windows) or Command-click (Mac OS) the Create A New Layer button or New Group button in the Layers panel to add a layer below the currently selected layer.

3.28 Automating a Multistep Task

An action is a set of one or more commands that you record and then play back to apply to a single file or a batch of files. In this exercise, you'll use actions to color match, sharpen, and save the images you'll combine in a panorama.

Using actions is one of several ways that you can automate tasks in Adobe Photoshop.

Preparing to record an action

You use the Actions panel to record, play, edit, and delete individual actions. You also use the Actions panel to save and load action files. First, you'll open the Actions panel and open the additional files you'll be using.

1-Choose Window > Actions to open the Actions panel.

2-In the Actions panel, click the Create New Set button (newset_butt.jpg). Name the new set My Actions, and click OK.

3-Choose File > Open. In the Open dialog box, navigate to the the folder. Shift-select the psd files. Then click Open.
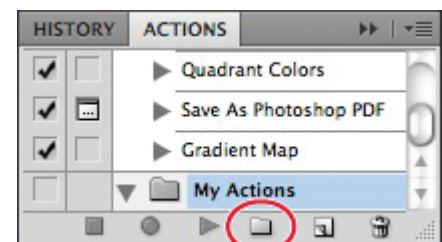
Figure 3.59

3.29 Designing with Artboard

1-Create a new file in Photoshop.

2-Select the Artboard option as the Document Type.

3-Set the desired Artboard Size.

4-Not1ice that each artboard has its own layer in the Layers panel.

5-As you design artwork, you can copy elements from one artboard to another.
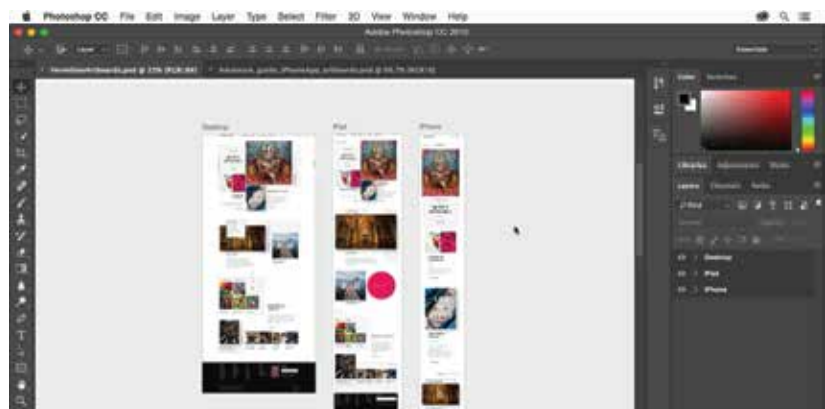

Figure 3.60

Section-VIII

After completing this section, Students will be able to: -
• *define infographics*
• *understand text and image manipulation*
• *learn to exhibit the idea in different ways.*

3.30 Infographics

Infographics (a clipped compound of "information" and "graphics") are graphic visual representations of information, data, or knowledge intended to present information quickly and clearly. They can improve cognition by utilizing graphics to enhance the human visual system's ability to seepatterns and trends. Similar pursuits are information visualization, data visualization, statisticalgraphics, information design, or information architecture. Infographics have evolved in recent years to be for mass communication, and thus are designed with fewer assumptions about thereaders' knowledge base than other types of visualizations. Isotypes are an early example of infographics conveying information quickly and easily to the masses.

What is Photo/Text Manipulation?

Photo and Text manipulations are changes digitally applied to photos or Texts for a certain effector aesthetic. These changes are typically done through a photo editing program, such as PhotoshopLet us manipulate a photo of deer.

3.31 Create a surreal deer manipulation

Open the image of the deer and extend the top part of the canvas. Sample the color of the sky and paint with a soft brush to cover them with the sample color.Open the dead tree images and use the Magic Wand Tool (W) and remove the white background. Refine the edge of your selection if necessary or use the Multiply blend mode technique to remove the background. Watch the video at the end of the article for more details.Place the dead trees on your canvas and try to emulate the antlers of the deer.

Repeat the process and create the right antlers. Add other details if you want. I added a nest anda bird sitting on the branches and some flying birds on the background.You can even create a heart shape or any other thing with the branches if you use the Puppet Warp Tool to bend the branches the way you want.

Figure 3.61

Figure 3.62

EXERCISE

Select the most suitable option.

1. Adobe Photoshop is a software used for _____ editing.
a) Video   b) Images   c) Graphics   d) Both a & c

2. A raster graphic is a _____ data structure that represents generally rectangular grid of pixels.
a) dot matrix   b) digits   c) comples file   d) square maze

3. In vector graphics, points on a cartesian plane are connected by_____
a) Joint   b) Node   c) lines and curves   d) Polygon

4. We can use photo to retouch out _____ photograph.
a) negative   b) printed   c) digital   d) hard copy

5. Quick Mask tool is a _____.
a) Mesh tool   b) Selection tool   d) Shape builder tool   d) None of these

6. Shortcut key for rectangular marquee tool is _____
a) R   b) Ctrl+R   c) M   d) Ctrl+M

7. Lasso tool allows creating _____ selection.
a) Freehand   b) Quick   c) Diverse   d) Both a & c

8. Shortcut key for Burntool is _____.
a) B   b) O   c) T   d) B+T

9. With the Burn tool, You can _____ the pixels in the location of the brush stroke.
a) Lighten   b) Contoure   c) Darken   d) Beautify

10- The history panel is a tool which creates a chronological _____ view of everything you do while working.
a) top-down   b) down-top   c) left-right   d) right-left

11- The shortcut key Ctrl+ Z is used for_____.
a) Zoom   b) Delete   c) Lasso   d) Undo

12- Straight line can be drawn using _____ tool.
a) Shape builder   b) Pen   c) Lasso   d) Magic wand

13. The Smudge tool simulates the effect you see when you drag finger through_____.
a) Water   b) Wet paint   c) Paper   d) Reality

14. There are _____ ranges of Dodge tool
a) Two   b) Four   c) Three   d) One

Answer the following questions briefly.

1. Create a channel mask on an image.
2. What is a Vanishing Point?
3. Describe Color Harmony in detail.
4. Create a 2D Object using Pen Tool.
5. Can we use photoshop to create userinterface (UI) of a website ?
6. What do you know about resolution?
7. Add effects and audio tracks to a video file.
8. How to automate a Multistep ?
9. Define Infographics.
10. What is Photo/Text Manipulation ?
11. What is the difference between bitmap and vector graphics ?

Write answers of the following questions in detail.

1. Describe the common features of Photoshop.
2. What are primary, secondary and tertiary color ? also define harmony.
3. Describe difference between complimentary and split complimentary colors.

ACTIVITIES

1. Prepare a brochure for printing using CMYK mode.
2. Design a letterhead for a company.
3. Prepare PS file for printing and for uploading on social media as per required color mode..

Chapter 4: Adobe Illustrator-II

After completing this section, Students will be able to: -

- *understand basic logo concepts*
- *define logo types*
- *describe golden ratio*

4.1 What is a logo?

A logo is a symbol made up of text and images that identifies a business. A good logo shows what a company does and what the brand values are.

Logo design is all about creating the perfect visual brand mark for a company. Depending on the type, a logo usually consists of a symbol or brandmark and a logotype, along with a tagline.

What does a logo do?

Perhaps the most fundamental function of a logo is giving your business a unique mark that differentiates your business or organization from other businesses.

4.2 Types of Logo

There are seven types of Logos which are explained below:

1. Monogram logos

Monogram logos or lettermarks are logos that consist of letters, usually brand initials. IBM, CNN, HP, HBO. They're the initialisms of a few famous businesses with rather lengthy names. With 2 or 3 characters to remember, they've each turned to using their initials for brand-identification purposes. So it makes perfect sense for them to use monograms.

Figure 4.0

2. Wordmarks

Similar to a lettermark, a wordmark or logotype is a font-based logo that focuses on a business' name alone. Think Visa and Coca-Cola. Wordmark logos work really well when a company has a succinct and distinct name. Google's logo is a great example of this. The name itself is catchy and memorable so, when combined with strong typography, the logo helps create strong brand recognition.

Figure 4.1

3. Pictorial marks

A pictorial mark (sometimes called brand mark or logo symbol) is an icon—or graphic-based logo. It's probably the image that comes to mind when you think "logo": the iconic Apple logo, the Twitter bird, the Target bullseye. Each of these companies' logos is so emblematic, and each brand

Figure 4.2

so established, that the mark alone is instantly recognizable. A true brand mark is only an image. Because of this, it can be a tricky logo type for new companies, or those without strong brand recognition, to use.

4. Abstract logo marks

An abstract mark is a specific type of pictorial logo. Instead of being a recognizable image—like an apple or a bird—it's an abstract geometric form that represents your business. A few famous examples include Like all logo symbols, abstract marks work really well because they condense your brand into a single image.

Figure 4.3

5. Mascots

Mascot logos are logos that involve an illustrated character. Often colorful, sometimes cartoonish, and most always fun, the mascot logo is a great way to create your very own brand spokesperson.

Figure 4.4

6. The combination mark

A combination mark is a logo comprised of a combined wordmark or lettermark and a pictorial mark, abstract mark, or mascot. The picture and text can be laid out side-by-side, stacked on top of each other, or integrated together to create an image. Some well known combination mark logos include Doritos, Burger King and Lacoste.

Figure 4.5

7. The emblem

An emblem logo consists of font inside a symbol or an icon; think badges, seals and crests. These logos tend to have a traditional appearance about them that can make a striking impact, thus they are often the go-to choice for many schools, organizations or government agencies.


Figure 4.6

4.3 The Golden Ratio

The Golden Ratio describes the perfectly symmetrical relationship between two proportions. Approximately equal to a 1:1.61 ratio, the Golden Ratio can be illustrated using a Golden Rectangle. This is a rectangle where, if you cut off a square (side length equal to the shortest side of the rectangle), the rectangle that's left will have the same proportions as the original rectangle.
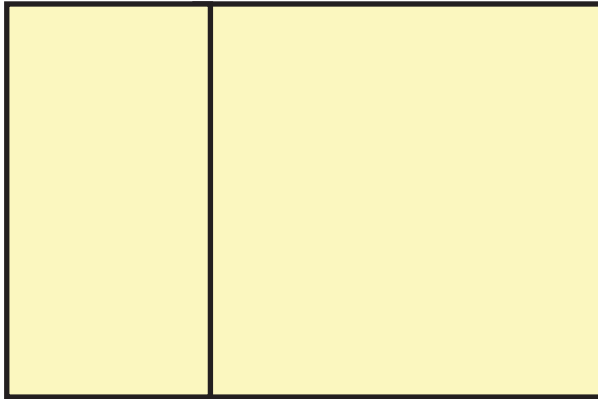

> **Do you know ?**
>
> The first known calculation of the golden ratio as a decimal was given in a letter written in 1597 by Michael Mastlin at the university of Tubingen to his formar student Capler.

So if you remove the left-hand square from the rectangle above, you'll be left with another, smaller Golden Rectangle. This could continue infinitely. Similarly, adding a square equal to the length of the longest side of the rectangle gets you increasingly closer to a Golden Rectangle and the Golden Ratio.
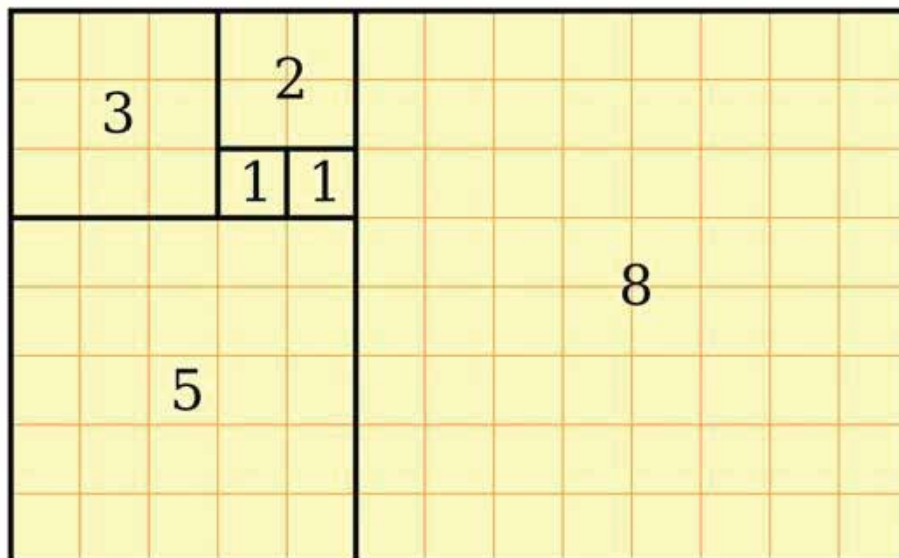
This relates to the Fibonacci Sequence (0, 1, 1, 2, 3, 5, 8, 13, ...) , in which each term is the sum of the previous two.

Plotting the relationships in scale provides us with what's known as a Golden Spiral. This occurs organically in the natural world.
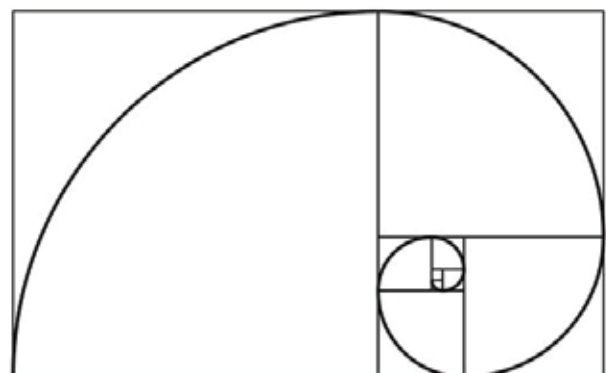
4.4 Using Golden Ratio

It's believed that the Golden Ratio has been in use for at least 4,000 years in human art and design. However, it may be even longer than that – some people argue that the Ancient Egyptians used the principle to build In more contemporary times, the Golden Ratio can be observed in music, art, and design all around you. By applying a similar working methodology, you can bring the same design sensibilities to your own work. Let's take a look at a couple of examples to inspire you in the figure 4.7.

the pyramids.

Ancient Greek architecture used the Golden Ratio to determine pleasing dimensional relationships between width of a building and its

Figure 4.7

height, the size of the portico and even the position of the columns supporting the structure.

The final result is a building that feels entirely in proportion. The neo-classical architecture movement reused these principles too.
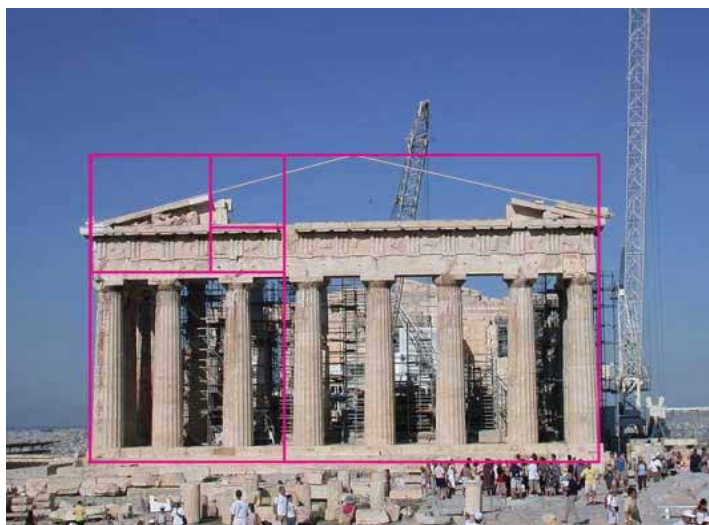
After completing this section, Students will be able to: -

- *understand basic vector concept*
- *know vector tracing*
- *define flat character designing*

4.5 Vector Graphics

The vector graphics are points, lines, curves and shapes that are based on mathematical formulas. When you scale a vector image file, it preserves resolution and there's no loss of quality, so it can be resized to whatever large or small you need it to be. It's an excellent tool for putting company logos on business cards, creating poster designs. Any art made with vector illustration software like Adobe Illustrator is considered vector art. For Example we may draw the domino logo in Illustrator as vector:

No matter how much you zoom. it will not break pixels because it is a vector graphics.

4.6 Vector Tracing

Vector tracing is the process of convertion of rastor image to vector graphics. Before you can getstarted, you'll have to selec the image you want to convert. We'll use the logo of Shell Petrol for an example.
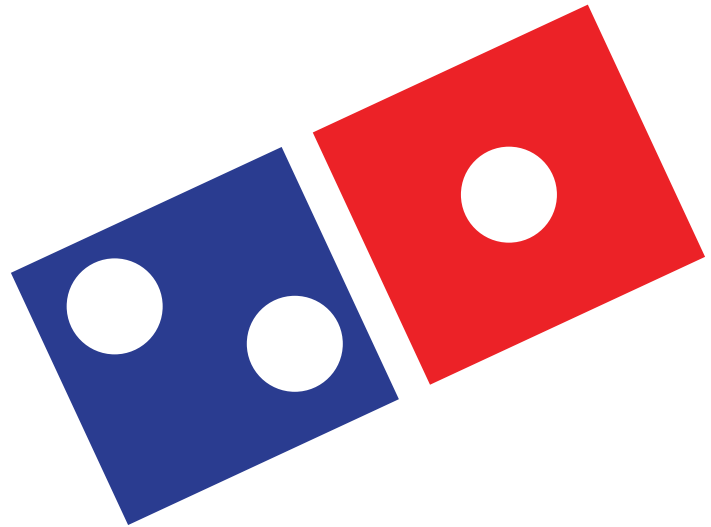
Do you know ?

The first version of Illustrator which was conceived by Adobe co-founder John Warnock, appeared about 28 year ago, in late 1986. The first version available to the general public was released on 19th March 1987.

Step 1. Open the Image and select it using the selection tool. as can be seen in figure 4.8.
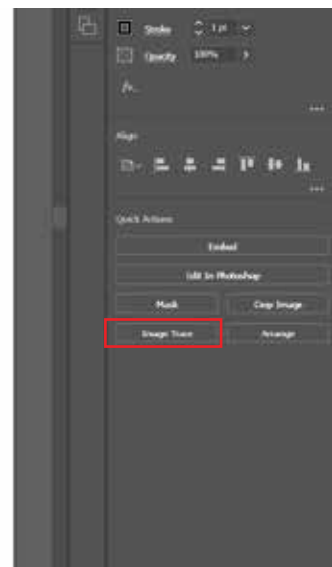
Figure 4.8

Step 2. After clicking, You'll be asked to choose the tracing method, depending on the resolution of the image choose any method.
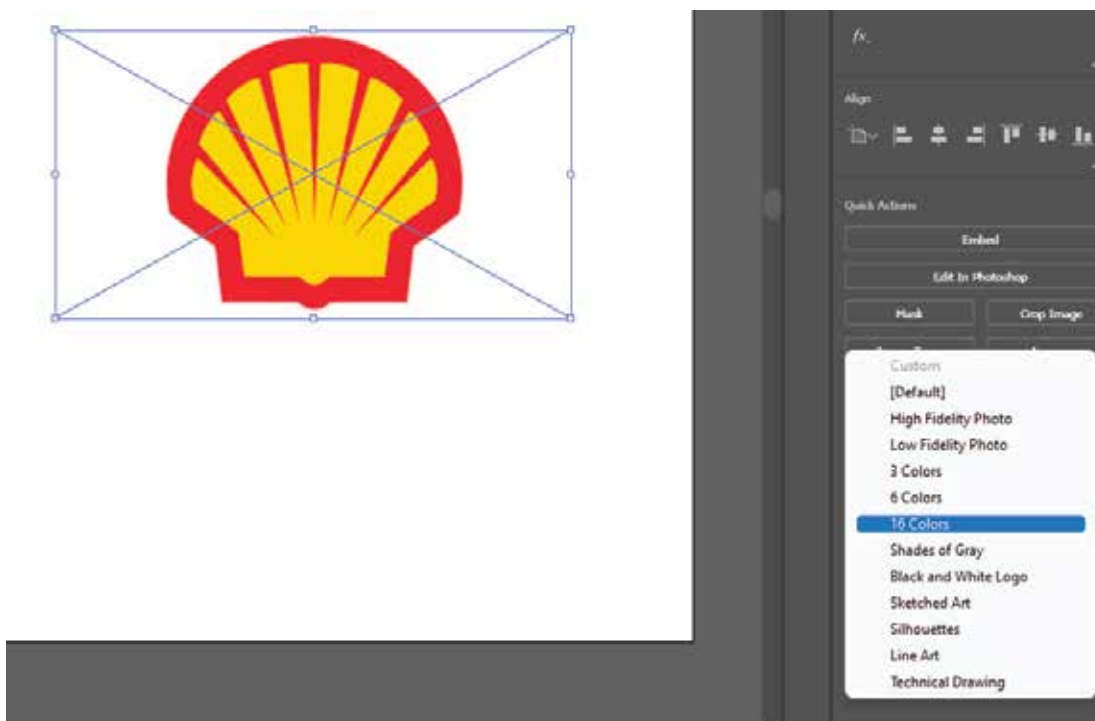

Figure 4.9

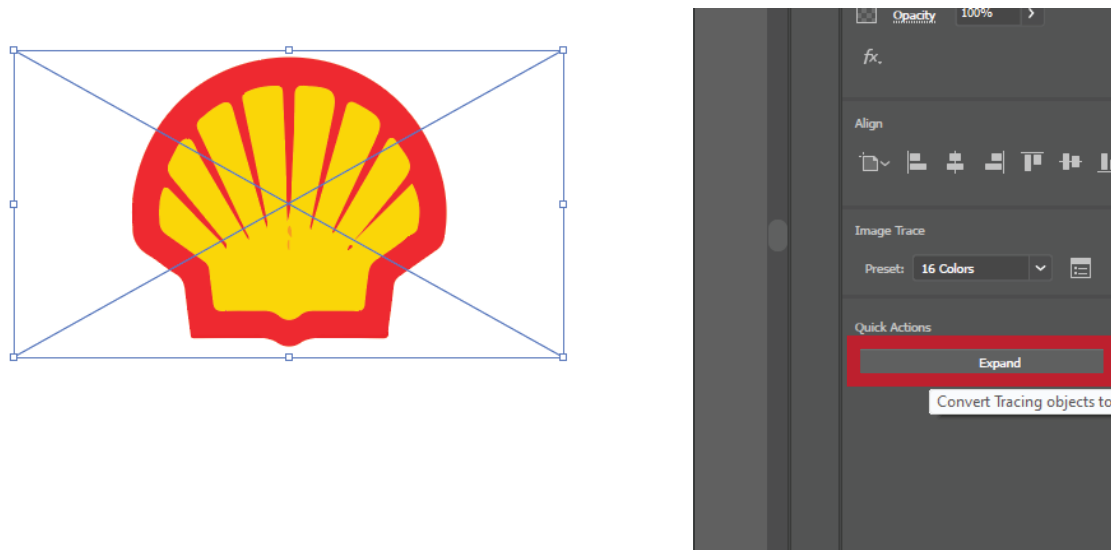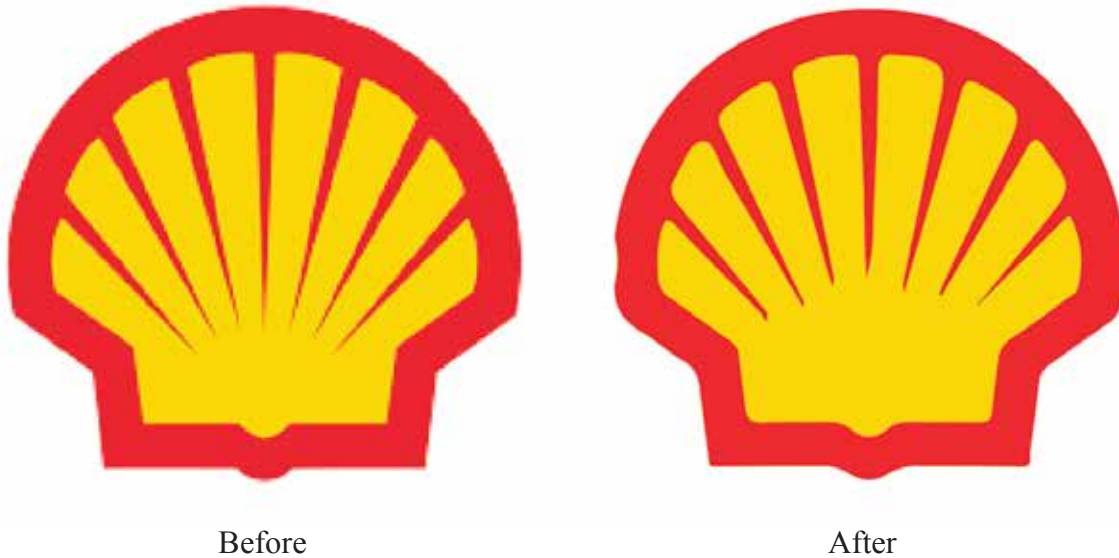**Step 3.** You can click on expand and edit the image.

Figure 4.10

Now let's compare Normal Image vs Vector

Before   After

4.7 Flat Character designing

Step 1: Let's make a cup from a rectangle. Create a 32W x 25H px green shape. Make its top corners slightly rounded, and then move to the bottom corners and set the Radius to 9 px.
Create a light-green highlight on the left edge of the mug.
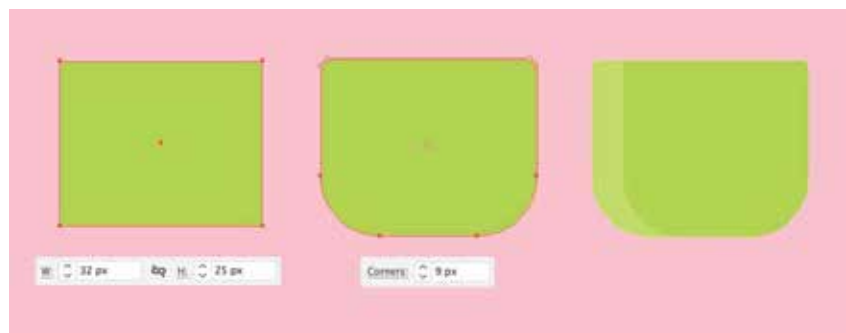
Figure 4.11

Step 2: Let's add a handle. Create a 12W x 15H px rectangle. Select its top and bottom left anchor points with the Direct Selection Tool (A) and make the corners 5 px rounded.
Duplicate (Control-C > Control-F) the shape, hold Alt-Shift and make the copy smaller. Select both shapes and use the Minus Front function of the Pathfinder to cut the top shape out, making a hole in the center of the handle.
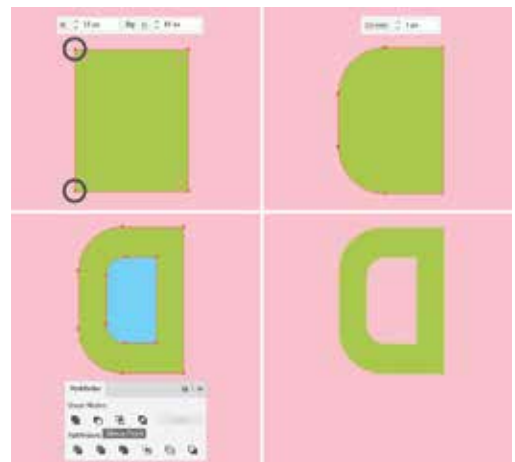

Figure 4.12

Step 3: Attach the handle to the mug and Send to Back (Shift-Control-[). Finish the mug by adding a small narrow rectangle to its bottom edge.

Figure 4.13

Section-III

After completing this section, Students will be able to: -
• *understand downloading assets from cc libraries*
• *learn installation of assets from cc libraries*

4.8 Managing assets from cc libraries

To download assets to a Creative Cloud Library in your desktop app, go to Window > Libraries or Window > CC Libraries to open the Libraries panel. As can be seen in figure below:
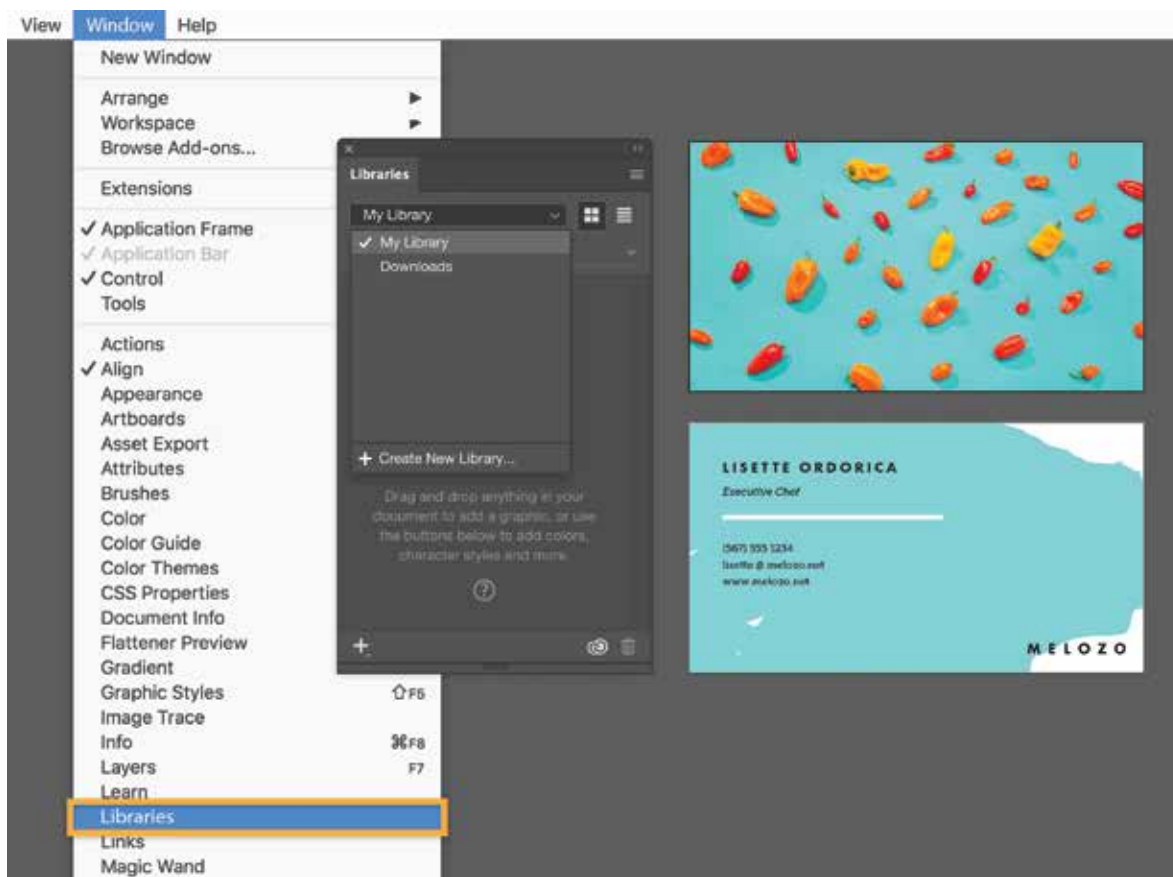

Figure 4.14

You can use the Libraries menu to create a new library and name it, or simply add assets to the default, My Library.

Click plus (+) in the Libraries panel to add graphics, text styles, colors, and effects from your document. You can also add graphic assets such as shapes and photos by dragging them directly from your project into the Libraries panel.

Asset thumbnails are organized by category, so they're easy to locate. Double-click an asset's title to rename it.

Now that the asset is saved to a library, it's easy to drag and drop it to other projects.

4.9 Add assets from Adobe Stock and mobile apps

You can access Adobe Stock directly from Adobe desktop applications.

In the Libraries panel, type a term in the search field and filter by asset type. When you find the right asset, drag it directly from the search results field to your document. This saves a copy of the watermarked asset to your current library. You can also download the watermarked version of the asset directly to your Libraries for use in any Adobe desktop application.

If you don't find anything you like in the Libraries panel, click See More Results On The Web to browse the Adobe Stock website. Pick an asset and click Save

Figure 4.15

Preview to Computer. You can also click the pop-up menu to save the preview to one of your libraries.
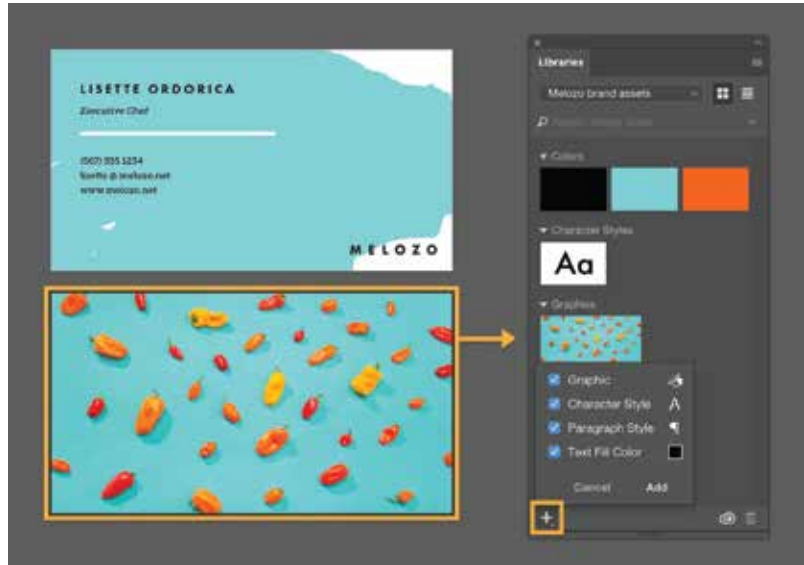
4.10 Reuse assets from CC Libraries

To add a graphic asset to your project, drag it directly from the library onto your Illustrator artboard, Photoshop canvas, InDesign layout, Premiere Pro or Animate timeline, or web page layout in Dreamweaver or Muse.

To apply layer styles, colors, and text styles, select an object in your project and click the thumbnail of the desired library asset.
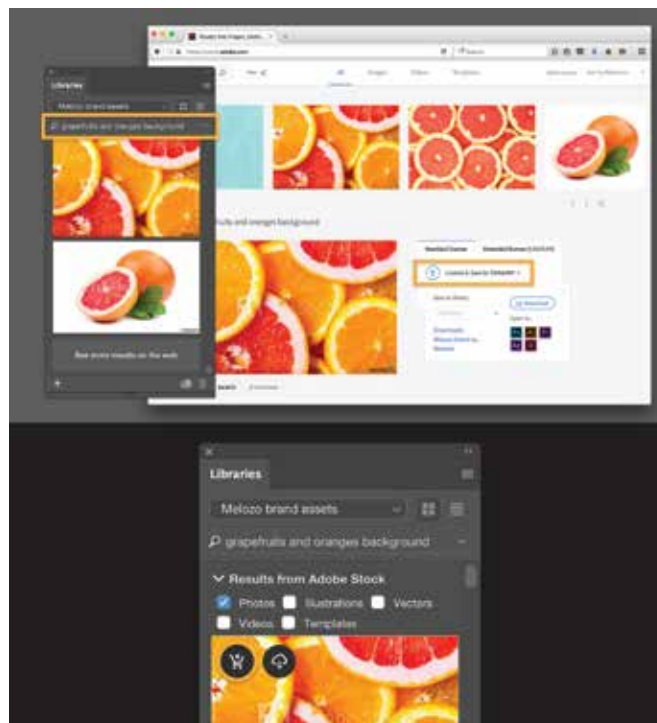

Figure 4.16

Section-IV

After completing this section, Students will be able to: -
 • *understand complete typography techniques according to products and industry requirements*
• *define major classifications of typefaces*
• *understand clipping mask from type.*
• *describe warping print type, type on a path, paragraph of type, type on a rectangle and vertical test.*
• *enlist characteristics of the various families of typefaces*
• *classify the anatomical aspects of type.*

4.11 Typography

Typography is the art and technique of arranging type to make written language legible, readable and appealing when displayed. The arrangement of type involves selecting typefaces, point sizes, Line lengths, line-spacing, and letter-spacing, and

> **Do you know ?**
> Typography with moveable type was invented during the eleventh century song dynasty in China by Bi Xheng (990-1051).

adjusting the space between pairs of letters.Graphic designs are meaningless if they aren't well-equipped with typography. The use of typography elements has an overwhelming presence, especially in text-based designs. For graphic designers, theuse of typefaces is crucial to create a message for viewers or the target audience of a brand.

Type Faces
There are five basic classifications of typefaces: serif, sans serif, script, monospaced, and display. As a general rule, serif and sans serif typefaces are used for either body copy or headlines (includingtitles, logos, etc.), while script and display typefaces are only used for headlines. Monospaced typefacesare generally used for displaying code, though they can also be used for body and headline copy,and were originally used on typewriters.Not all serif and sans serif type faces are equally suitable for both body and headline copy. Different typefaces are more legible than others at small sizes, while others are more suitable for larger type. (This kind of information can generally be found in the commercial descriptions of the various fonts.)

4.12 Create a clipping mask

Hold down Alt (Option in macOS), position the pointer over the line dividing two layers in the Layers panel (the pointer changes to two overlapping circles), and then click.In the Layers panel, select the top layer of a pair of layers you want to group, and choose Layer > Create Clipping Mask, With the help of following figures, you'll havea better understanding of clipping:
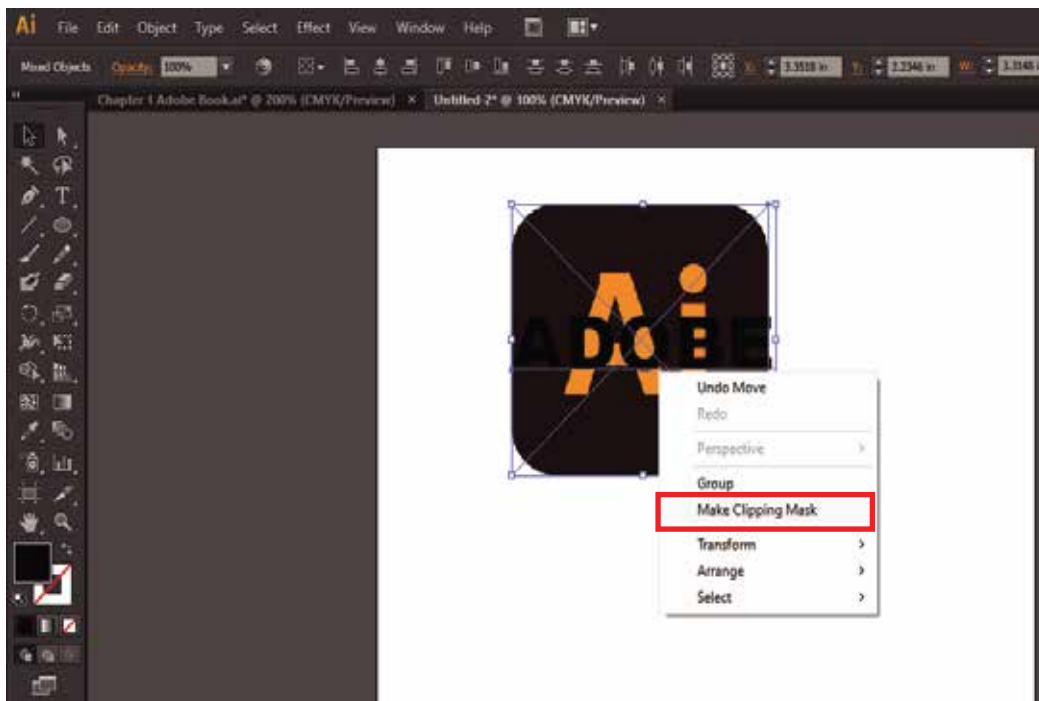**Step 1:** Take Two layers

Figure 4.17

Step 2: Place layer 2 on layer 1.
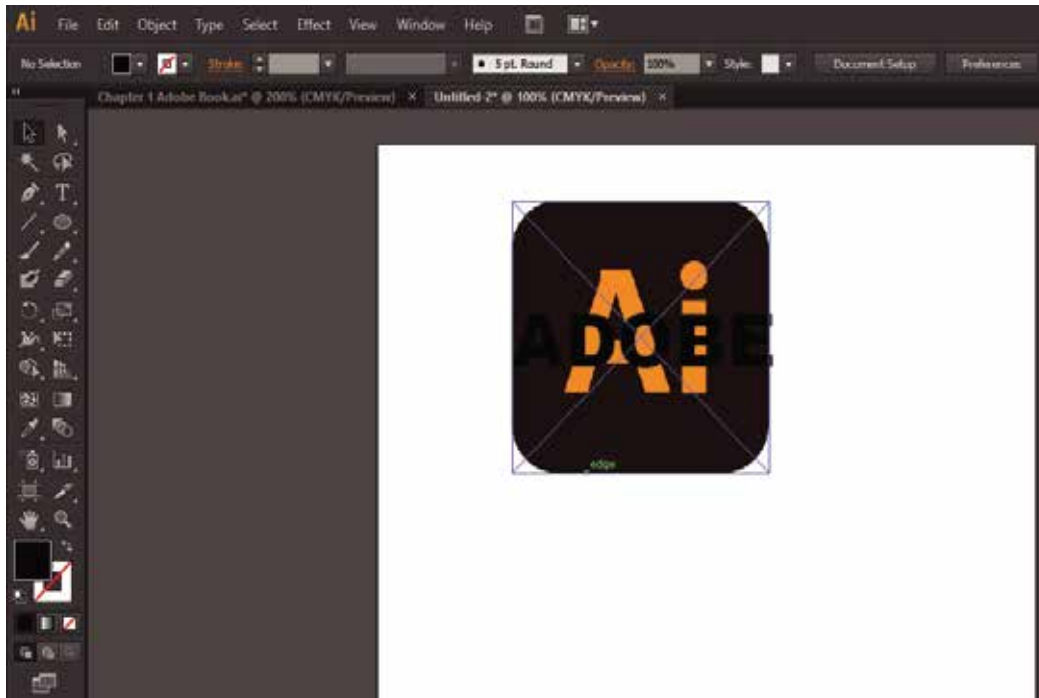
Figure 4.18

Step 3: Right Click on it and select clipping mask.

Figure 4.19

Step 4: Final Results can be seen in 4.20

Figure 4.20

If you want to remove clipping mask , simply right click and select "Release Compound path".

4.13 Text wraping

Let's grab our Type Tool, left click anywhere on the artboard, and type some text. Let's type "WARPED".And we can go to the Character panel at the top, and we can pick a font—let's go for Gotham Bold. Goto alignment options and select Align Center so that it's in the middle. Now let's create a couple ofcopies by holding Alt-Shift and dragging. So your screen should look like this:

Figure 4.21

4.14 Create a Bulge Effect

We'll select the first piece of text, and go to Object > Envelope Distort > Make with Warp. We've got the Preview option checked, and we can choose the Style as well. There are lots of presets to choose from, so let's go for Bulge, and see how that looks.

Figure 4.22

4.15 Type on a path

1- Select the path type object.

A bracket appears at the beginning of the type, at the end of the path, and at the midpoint between the start and end brackets.

2- Position the pointer over the type's center bracket until a small icon appears next to the pointer.

3- Do one of the following:

To move text along the path, drag the center bracket along the path. Hold down Ctrl (Windows) or Command (Mac OS) to prevent the type from flipping to the other side of the path.

4- To flip the direction of text along a path, drag the bracket across the path. Alternatively, choose Type > Type On A Path > Type On A Path Options, select Flip, and click OK.
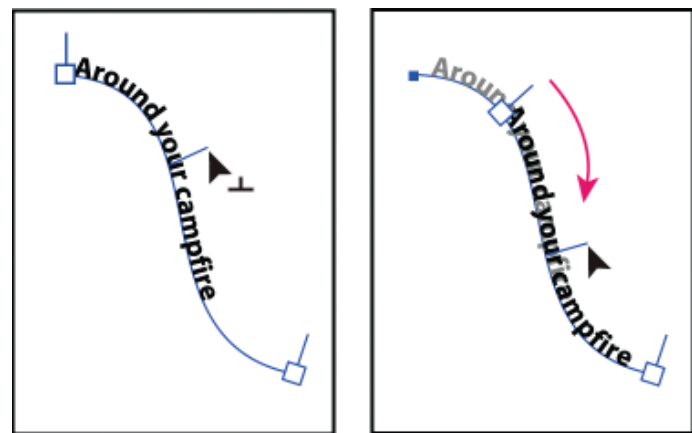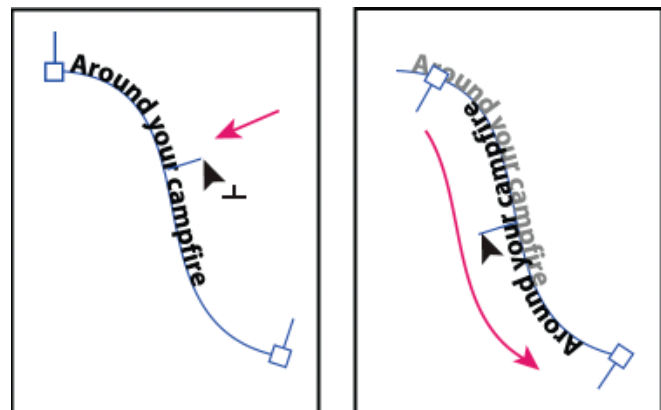

Figure 4.23

Figure 4.24

For example: following is an example of Type on path , text is typed on a polygon for a better idea.

AAAAAAAAAA
AAAAAAAAAAAA
AAAAAAAAAAAAAA
AAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAA
AAAAAAAAAAAA
AAAAAAAAAA

4.16 Characteristics of Type face Families
Serifs
These typefaces have small extensions, which embellish the basic structure of a typeface. Serif typefaces have existed since the beginning of type. They are visible in Old style and Humanist type serifs like Garamond. Baskerville, another serif typeface belongs to the transitional era. Bodoni and Rockwell are part of Modern and Slab serif(Egyptian) styled typefaces.

Sans-serif
Sans means without. These typefaces are devoid of those small extensions, hence without serif. Examples include Gill sans which has Humanist connotations, Helvetica with it's transitional characteristics and so on.

Script
Letter forms developed in close relation to human handwriting are script typefaces. They are flexible in nature with varying stroke widths. Example : Bistro Script, Shelly, Minstral etc.

Blackletter
A bold script style of calligraphy used heavily during the renaissance. Example: Fraktur.

Decorative
Typefaces which do not fit in other categories are decorative in nature. Built for specific use cases which largely consist of headlines, posters etc.

Section-V

After completing this section, Students will be able to: -
  • *define stationary components*
  • *learn to design business card, brochure, letter head, and flyers etc.*
  • *export files in different formats*

4.17 Stationary Components
Stationery is the name given to materials needed for written and print communications, especially in businesses, companies, and organizations. Office supplies such as letterheads, envelopes, pens and pencils, notepads, etc.

Stationery design, then, refers to applying custom graphic art to these items as part of a branding strategy, to make them part of a brand's image commonly including logo design, name, and slogan plus graphic elements to make them pop.

4.18 Designing a Stationary component
Business Card
1. Create a new document
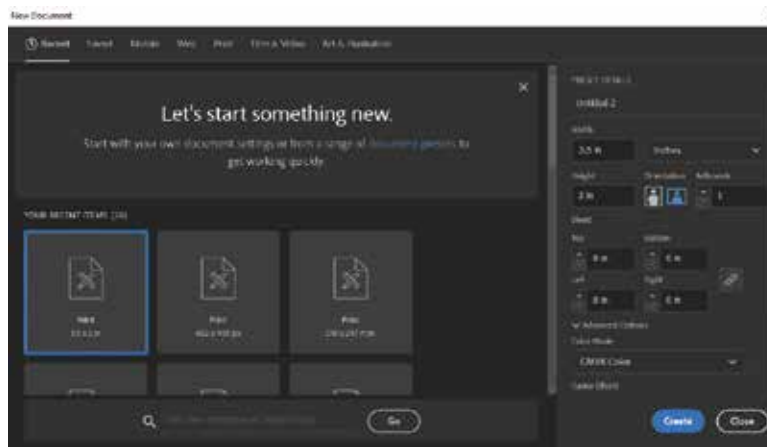Create a new document with the dimensions 2 inches by 3.5 inches, which is international standard size.

Figure 4.25

2. Design a logo or add a photo
The front of your business card can feature a logo, photos or simply your name. You can create a logo in Adobe Illustrator and add it to the business card afterwards, or you can design the logo directly on your business card.

Figure 4.26

3. Add important information

To make a design for the back of your business card, create a new document with the same dimensions. Then, design the back to include important information like your name, phone number, email address, address or general location, and any relevant websites like your Adobe Portfolio and social media.

4.19 Letter Head

1. Choose a standard page size

In the United States and Canada, standard letter size is 215.9 by 279.4mm, or 8.5 by 11 inches. Many other countries use a standard letter size called A4 (210 by 297mm, or 8.27 by 11.7 inches).

2. Try creative logo placements

The typical letterhead has a logo in the upper left corner of the page. Your team may want to differentiate your design with an artistic layout that weaves in your logo and other design elements more creatively.

Figure 4.27

3. Select colors and fonts carefully

Choose colors and fonts in harmony with your brand guidelines, so your letterhead matches your other marketing materials. Make it easy for your audience to read important information, like email addresses and phone numbers, by ensuring good color contrast and text spacing.

4. Pick an appropriate paper stock

Once it's time to put your letterhead out into the world, think about what kind of information different paper qualities communicate. A thicker, high-quality paper adds weight to your message, literally and figuratively.

4.20 Flyer

1. Add a strong image

First, you'll create a round frame, and then add your image inside the frame.

Press and hold the Rectangle Frame tool in the Tools panel and select the Ellipse Frame tool. Press Shift and drag to create a perfect circle.

With the round frame selected, choose File > Place and open any photo on your computer, or use our sample file.

Now you can reposition your image inside the frame. Press the V key to switch to the Selection tool. When you hover

Figure 4.28

over the image, the Content Grabber appears (donut-shaped circle). Drag the Content Grabber to move the image inside the frame. To move the frame on the page, drag it by its edge or square bounding box.

Try clicking one of the Fitting options in the Frame Fitting section of the Properties panel to fit the image to its frame in different ways.
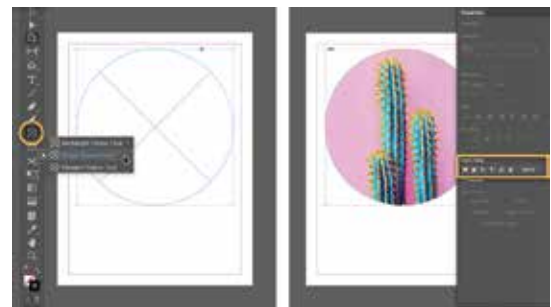
2. Create an impactful headline

Press the T key to select the Type tool and drag a large text frame for your headline.

Type your headline text. Select your text with the Type tool and choose a font from the Character section of the Properties panel. You can choose a font that's already installed on your computer or activate new fonts from Adobe Fonts available to Adobe Creative Cloud members.
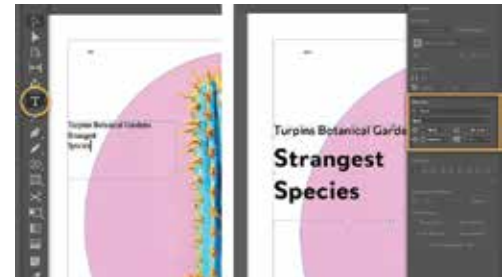
Figure 4.29

3. Add the remaining text and format it

With the Type tool, drag to create another text box and type your text. Practice formatting the text as shown in the previous step. We set the body copy in Merel Light at 18 pt size and increased the tracking.
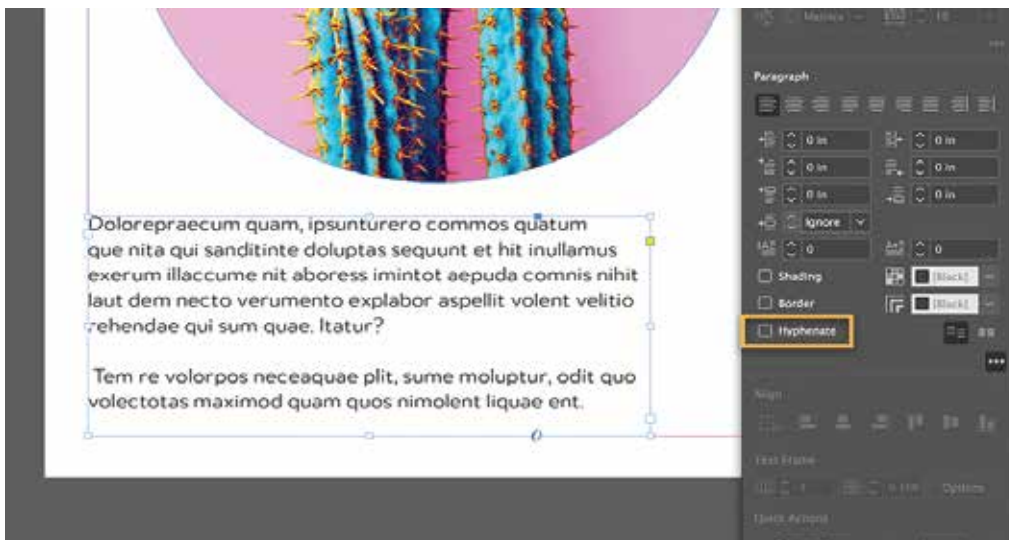
Figure 4.30

4. Prepare your flyer for printing

Your modern flyer design is ready.

To save a PDF you can hand off for printing, choose File > Export. Select Adobe PDF (Print), and then click Save. In the Export Adobe PDF window that appears, select the High Quality Print preset at the top and click Export.
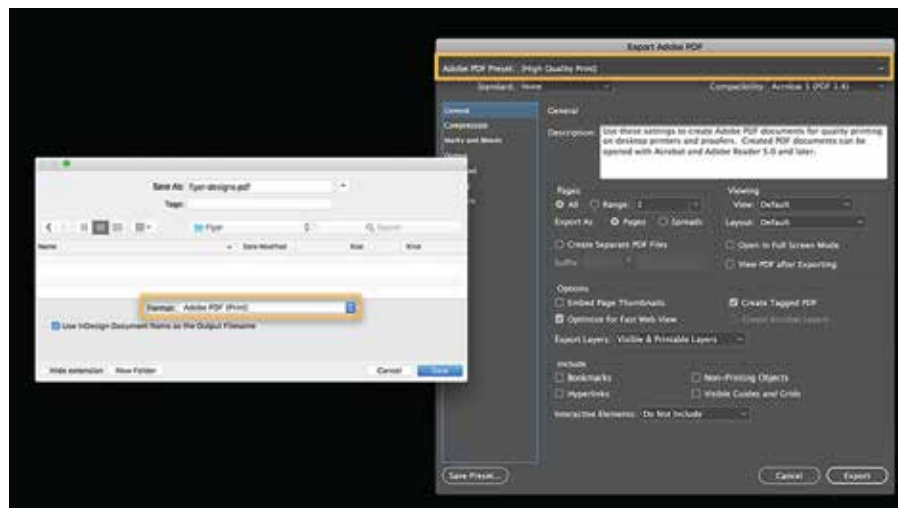
Figure 4.31

4.21 Exporting Files in Different Formats

Step 1. To export a file to different formats, Click on Files then on Export and then on "Export as"
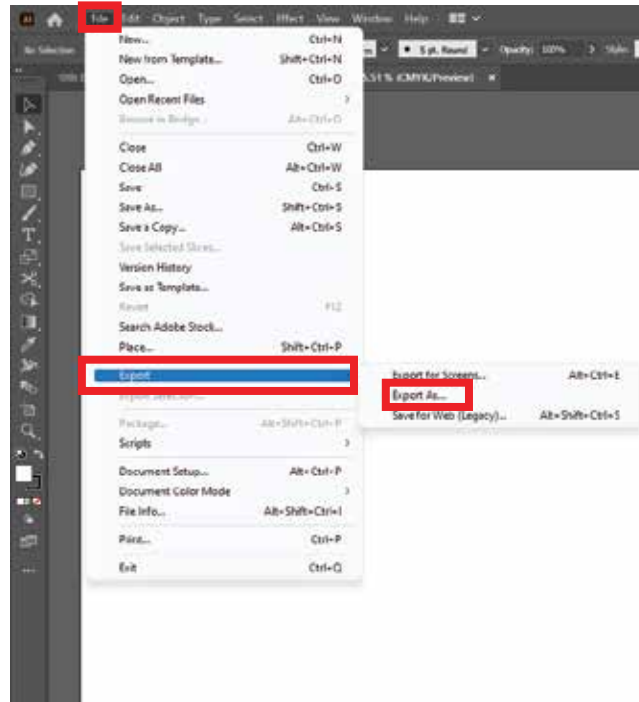

Figure 4.32

Step 2. Then Go to the directory you want to save the file and click on "save on type" and then select the format you want your file to be saved in.
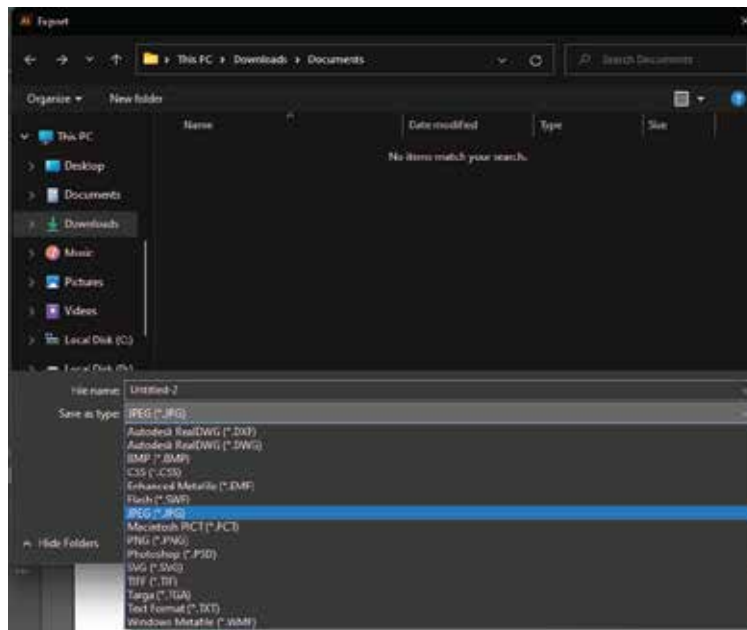

Figure 4.33

EXERCISE

Select the most suitable option.

1. Adobe Illustrator is an application program which helps to create.
a) Logo   b) Graphics   c) Illustrations   d) all of these

2. The home screen on Illustrator is something you will _____ see after opening the program.
a) seldom   b) instantly   c) quickly   d) rarely

3. Workspace is the main _____ screen of Illustrator.
a) work   b) home   c) office   d) exit

4. Menu bar is always on the _____ of the windows.
a) bottom   b) top   c) left   d) right

5. The tool panel is on the _____ of the illustrator by default.
a) top   b) bottom   c) right   d) left6

6. Selection tool is found in_____
a) Menu bar   b) Property bar   c) Tool bar   d) none of these

7. The white color pad on the workspace is_____.
a) Page   b) Paper   c) Art board   d) both a and c

8. The area outside the artboard is called_____.
a) Grey zone   b) Practice zone   c) paste board   d) both b and c

9. Shortcut key for selection tool is_____.
a) S   b) S+T   c) V   d) M

10. Shortcut key for Type tool is_____.
a) N   b) T   c) O   d) A

11-_____ is used to select part of the object.
a) full   b) half   c) particular   d) both a and c

12- Eyedropper tool_____ any color from the images or objects that are already present or created within the
a) Waters   b) Picks   c) Erase   d) Undo1

13- The Most powerful drawing tool in illustrator is _____
a) Selection tool   b) Pen tool   c) Magic wand tool   d) Marquee tool

14- There are _____ different types of shapes available in illustrator by default
a) two   b) three   c) three   d) four

15- If you press the _____ while drawing key and the shape will be drawn equally resized

a) Ctrl   b) Alt   c) Shift   d) Esc

Answer the following questions briefly.

1. What is Golden Ratio and how to use it?
2. Describe monogram logos.
3. What is Typography and Type Faces?
5. Define the emblem types of logo
6. Describe text wraping.
7. Describe Sans Sarif font.
8. Describe Sarif fonts.
9. Describe pictorial mark logo.
10. Differentiate between wordmark and letter mark logo.
4. What are the characteristics of Typeface Families?

Write answers of the following questions in detail.

1. What are Vector Graphics ? Also write the procedure to trace vector?
2. What is a Stationary Component and how to design it?
3. Explain different types of logos.

ACTIVITIES

1. Design a logo by using golden ratio
2. Design a Monogram for your school
3. Download and install brushes and font libraries.
4. Design Stationary for school.
5. Design a simple Flat Character.
6. Create Clipping Mask Between Two Text Layers.
7. Create a Bulge Effect and text on a path.
8. Create a letter head on a Legal Size page.
9. Create a Simple Flyer.

Chapter 5:
Adobe XD-II

After completing this section, Students will be able to: -

• *understand XD Interface*
• *define artboard and grid usage*
• *understand import and export content*

5.1 Adobe XD
Adobe XD is a vector-based UI and UX design tool and it can be used to design anything from smartwatch apps to fully fledged websites. Let's take a look at what it offers to designer and why it has become such a powerful tool in the web design industry.

5.2 Purpose
The main purpose of Adobe XD is to addresses the two main problems that Photoshop and other graphics applications couldn't:
1- Interaction design isn't static. A designer cannot communicate a fluid and dynamic design using pixels alone.
2- A modern design process involves more than a polished finished article. Wire-framing, iteration, and behavior are all part of the collaborative decision making with UI and UX design.
Adobe XD is ideal for vector-based UI design, wireframing, interactive design, prototyping, and hifidelity web/app design, for solo designers or whole teams.

5.3 Interface
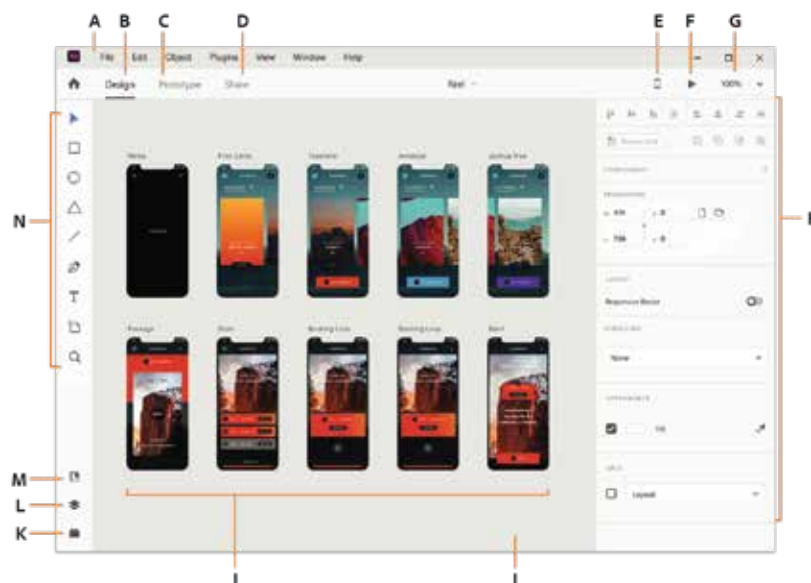The Interface of Adobe XD can be seen in figure below

Figure 5.1

Referr to FIgure4.1 for following labels:

A. Main menu   **B.** Design mode   **C.** Prototype mode   **D.** Share mode

E. Preview on device   **F.** Preview   **G.** Zoom percentage   **H.** Property Inspector

I. Pasteboard   **J.** Artboards   **K.** Plugins   **L.** Layers   **M.** Libraries   **N.** Toolbar

5.4 Art Board

Artboards represent the screens in your application or pages in your website. It streamlines the design processes and creates interactive designs for multiple screen sizes in a single document. Use artboards to create your XD project.

Create a new artboard

Adobe XD provides you with artboards for popular screen sizes such as those for different versions of iPhones, iPads, and Web. You can create a custom artboard if the choices do not meet your requirements, as can be seen in figure 4.2.
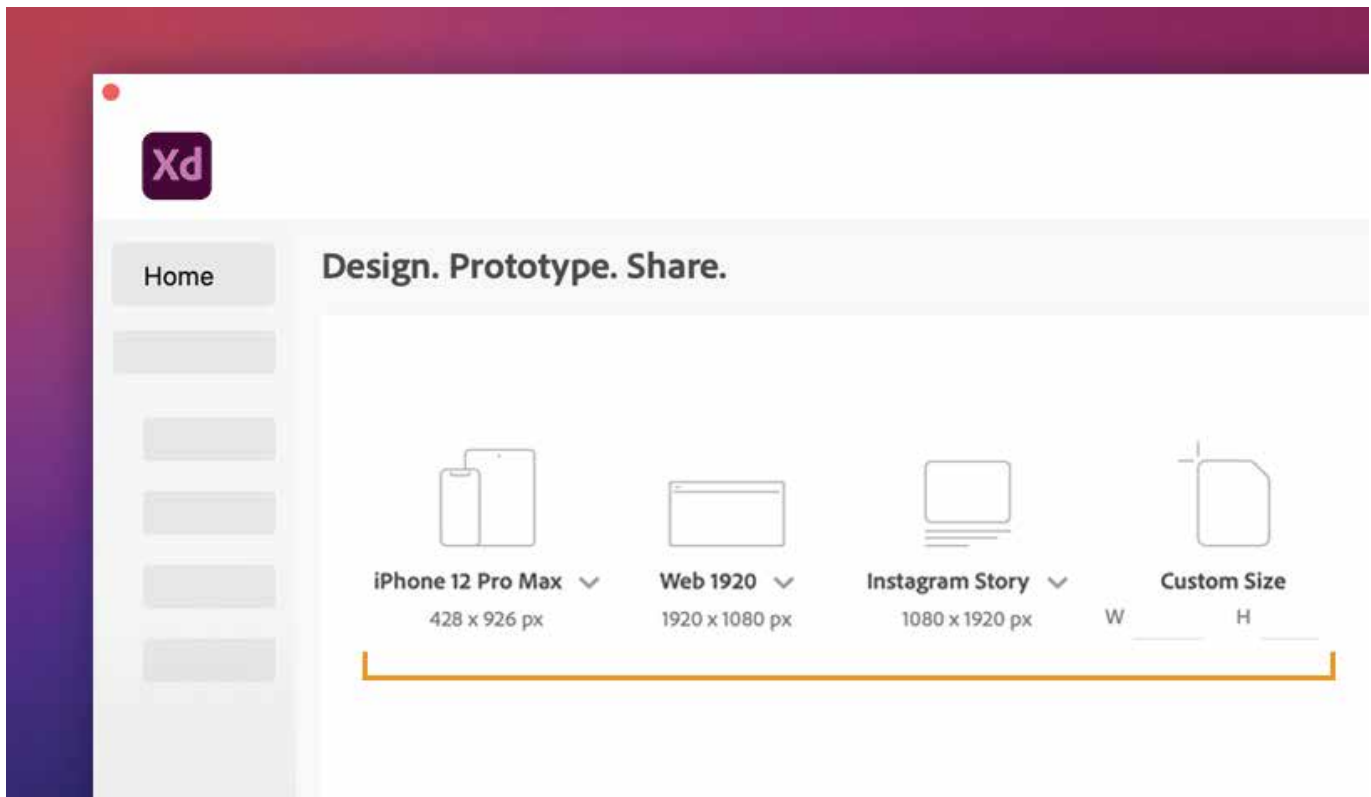

Figure 5.2

5.5 Arrange artboards

You can marquee select (drag select) or hold down Shift and select to pick up multiple artboards and move them. You can also use the Arrange buttons or the Arrange option in the menu to arrange the selected artboards. Refer to the figure 5.3.
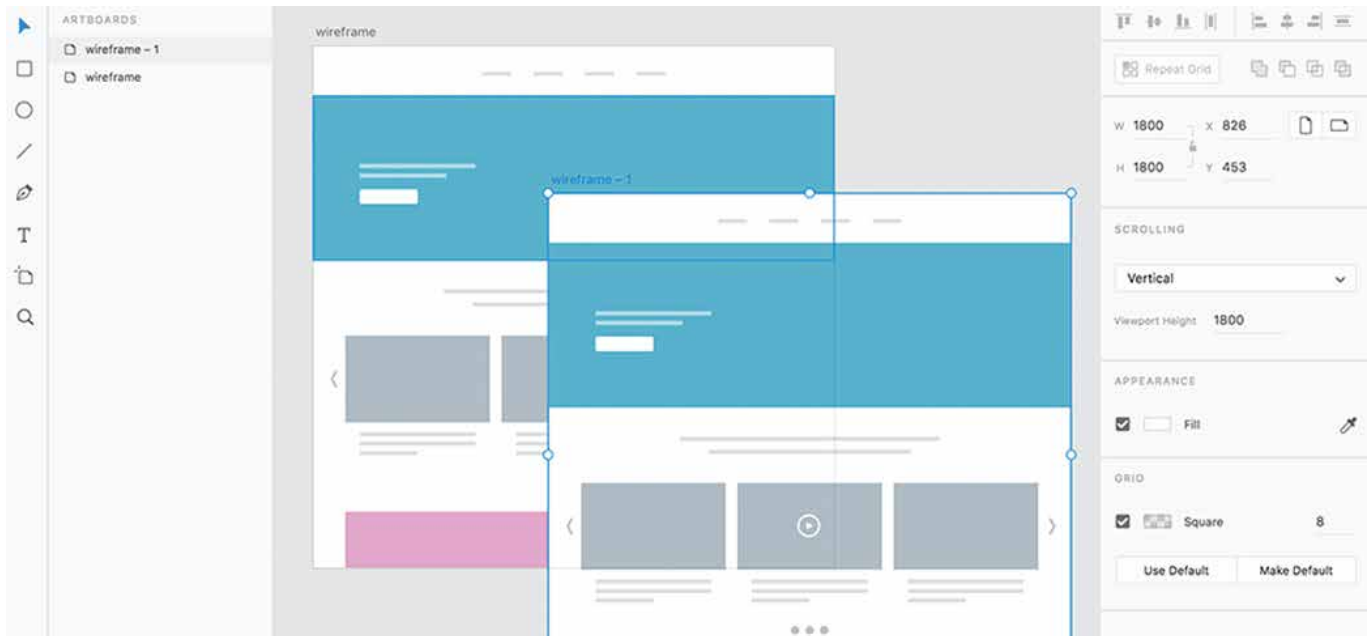
Figure 5.3

5.6 Design in grids

Grids let you align objects and text with guides. When you draw, objects snap to the grid automatically when the object's edges are within the grid's snap-to zone. Grids also help you get a quick idea of measurement while laying out objects or text on your artboards as can be seen in figure 4.4.
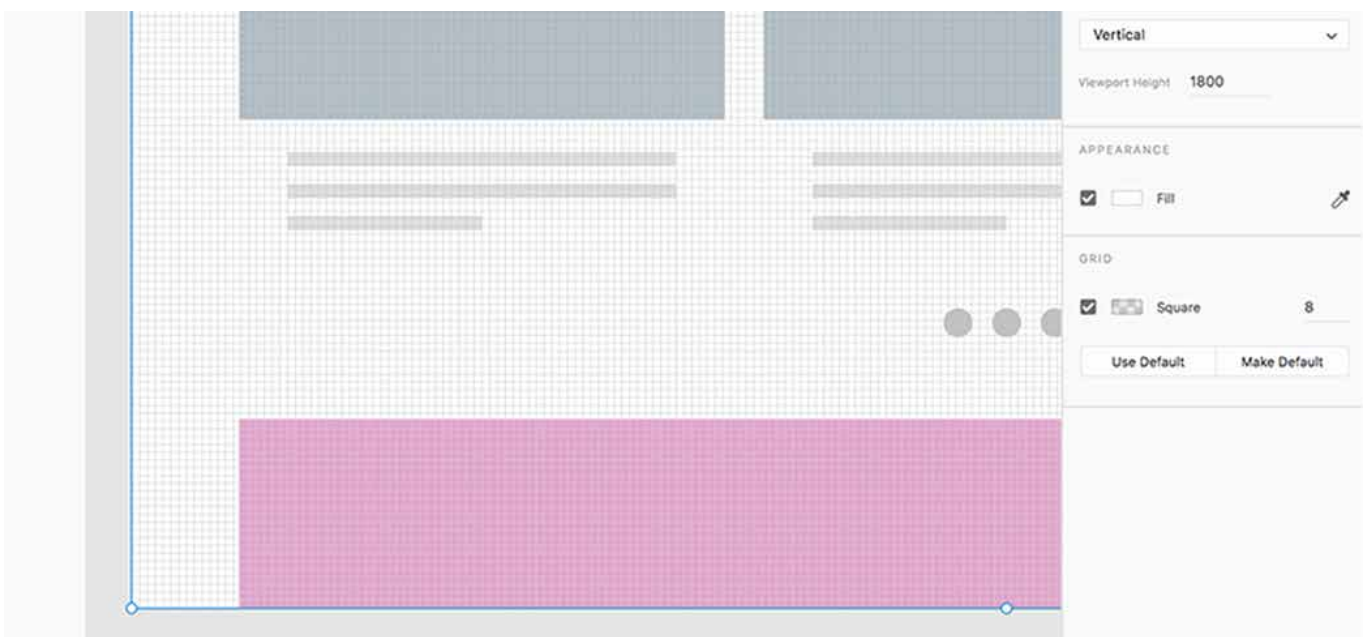

Figure 5.4

5.7 Exporting and Importing Files

Exporting Assets

Open your Adobe XD file and select the asset or the artboard you want to export. To select an artboard click the artboard title.

You can also mark assets or artboards for export and then export them all in bulk. To mark assetsfor export, open the Layers panel and click the Mark for Batch Export icon.

To export a JPEG on macOS, select File > Export. On Windows, click the Hamburger menu, and click Export. There are 3 options to export:

Batch: Export assets that are marked using the Mark for Export option.

Selected: Export selected assets.

All Artboards: To export all the artboards in your design.

When you export assets (such as photos) as JPEG, you can set the quality level of the exported JPEG according to your needs. Choose any of the percentage options in the Quality drop-down list,navigate to the destination folder, and click Export.

Importing Assets

To import an image from your computer filesystem (Finder or Windows Explorer)
- Drag and drop the file into XD
- Or copy the file and paste it into XD
- To import an image from your browser:
- Drag and drop the image into XD
- Or right click on the image, select "Copy image" and then paste it into XD
- To import an image from Photoshop:

With the marquee tool, select the image you want to import, Copy it or "Copymerged" it (Edit > Copy merged) and then paste it back into XD

To import a vector from Photoshop:
- Right-click on a shape/vector layer, click on "Copy SVG" and then copy it back into XD.
- To import a vector from Illustrator:

Select the vector shape in Illustrator, copy it and paste it back into XD.

Section-II

After completing this section, Students will be able to: -
- *understand layouts, Designs, creation, and preview Using UI kits*
- *define add and edit artboard*
- *understand Grids to set columns and margins.*
- *understand designing landing pages with XD and PS.*

5.8 Layouts

The layout option enables a series of columns and gutters across the artboard, allowing content to be aligned to a number of columns for defining width and spacing. The Layout Grid option is an excellent choice when working with responsive web layouts. Spacing, color, and the width of a layout grid can be easily adjusted in the property inspector. As can be seen in figure.

Square

The square grid provides a grid overlay to your artboards, creating what looks like graph paper so elements can be aligned to the grid both horizontally and vertically. If your layouts work on defined grid sizes (e.g. 8px, 16px, etc.), you can set this manually in the property inspector to ensure your elements can align to the proper grid, refer to figure.

5.9 Content-Aware Layout

As your design evolves changes will be made – everything from buttons, labels to full page layouts. In the past, iterating through a design, especially at higher fidelity stages, could be a chore, but it doesn't have to be. With Content-Aware Layout features in Adobe XD layouts adapt accordingly whenever content changes or elements are adjusted.

Padding

With padding enabled, modifying text on a button is as easy as changing the text. As the text string gets longer or shorter, the button will adapt and resize based on the padding defined in the Property Inspector.
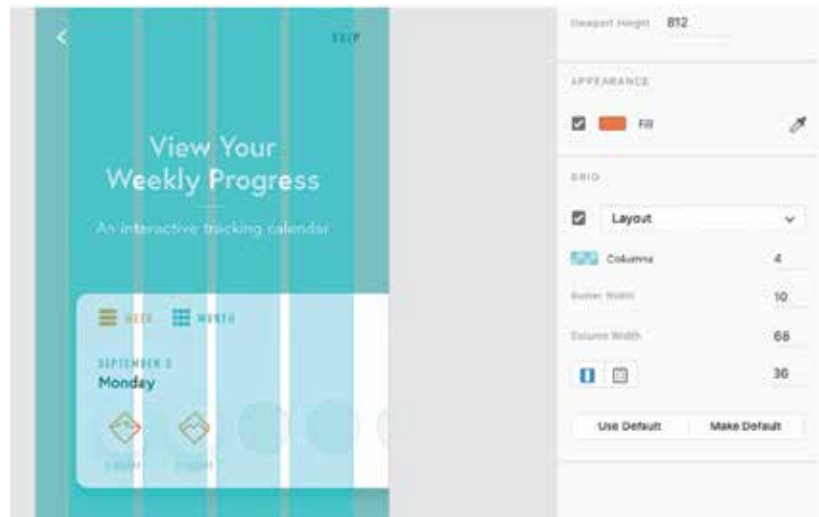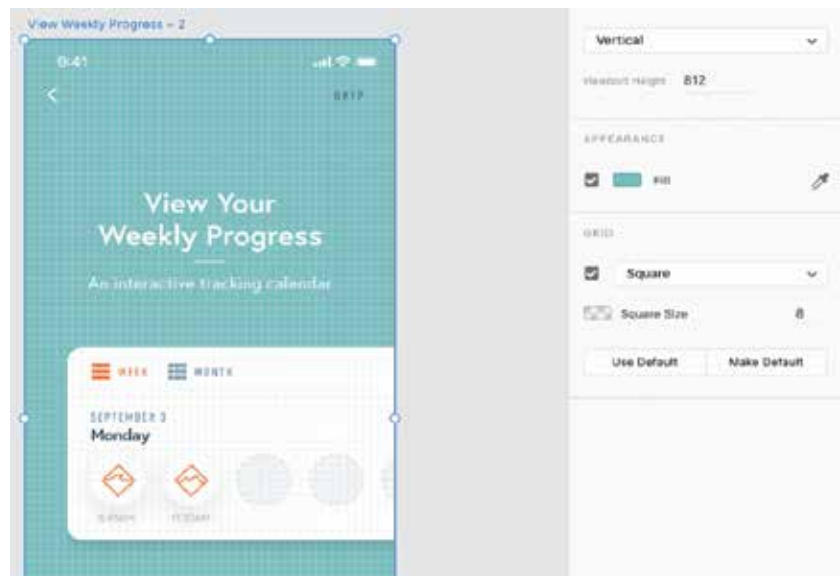

Figure 5.5

Figure 5.6

Stacks

Working alongside padding, a Stack makes rearranging elements in your design as simple as clicking and dragging. Using stacks with a list of elements, a horizontal gallery, or full content sections allows a page to be rearranged in a matter of seconds, all while maintaining proper spacing and alignment.

UI Kits

UI kits in Adobe XD are a great way to jumpstart a new design project. With these kits, you get access to some handy resources that you can modify and use for your website or app design.

let's take a look at how you can download UI kits in Adobe XD, right from within the software. Just follow these steps to get started:

Step 1: Click on the hamburger menu button in the top left corner of the software. (Refer to the figure below)
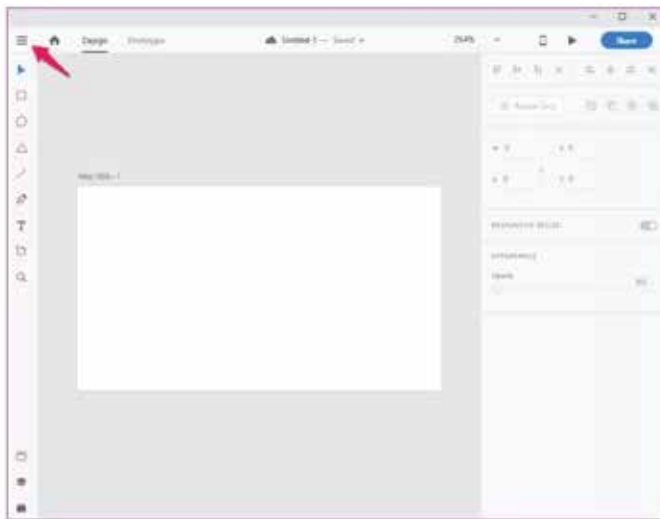

Figure 5.7

> **Do you know ?**
>
> Jacob Nielsen renowned web useability consultant and partner in the Nelsen Noman Group, and Rolf Molich, another prominent usability expert, established a list of ten user interface design guidelines in the 1990s.

Step 2: In the menu, scroll down to the Get UI Kits option and then click on either three of the available options. (Refer to the figure below)

Let's choose the Google Material UI kit. However, depending on your project you can select either the Apple iOS or the Microsoft Windows kits. That will open up an official web page from which you can download the UI kits for free.

Step 3: Locate the Adobe XD UI kit in the following web page, and download it on your system. (Refer to the figure below)
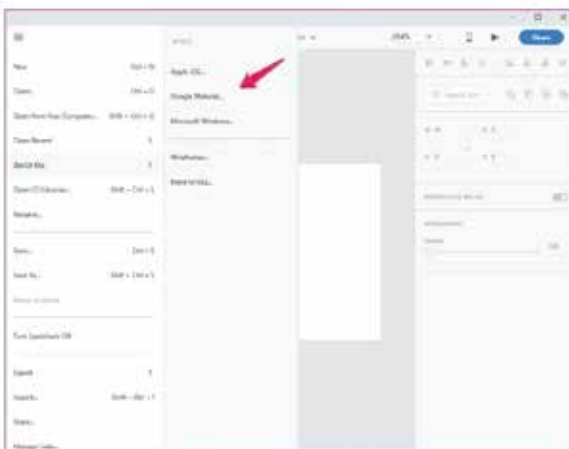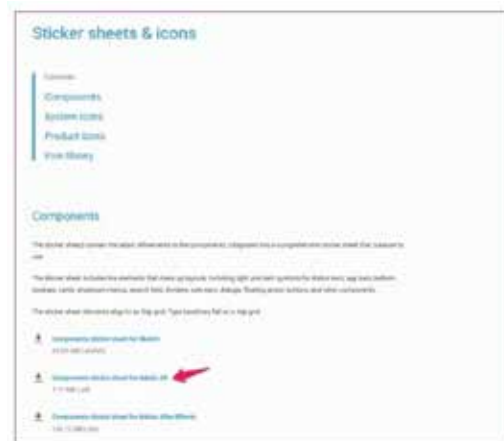

Figure 5.8

Figure 5.9

Step 4: Now open up the downloaded file in Adobe XD and you'll be greeted with a bunch of artboards containing UI resources for the respective platform. (Refer to the figure below)
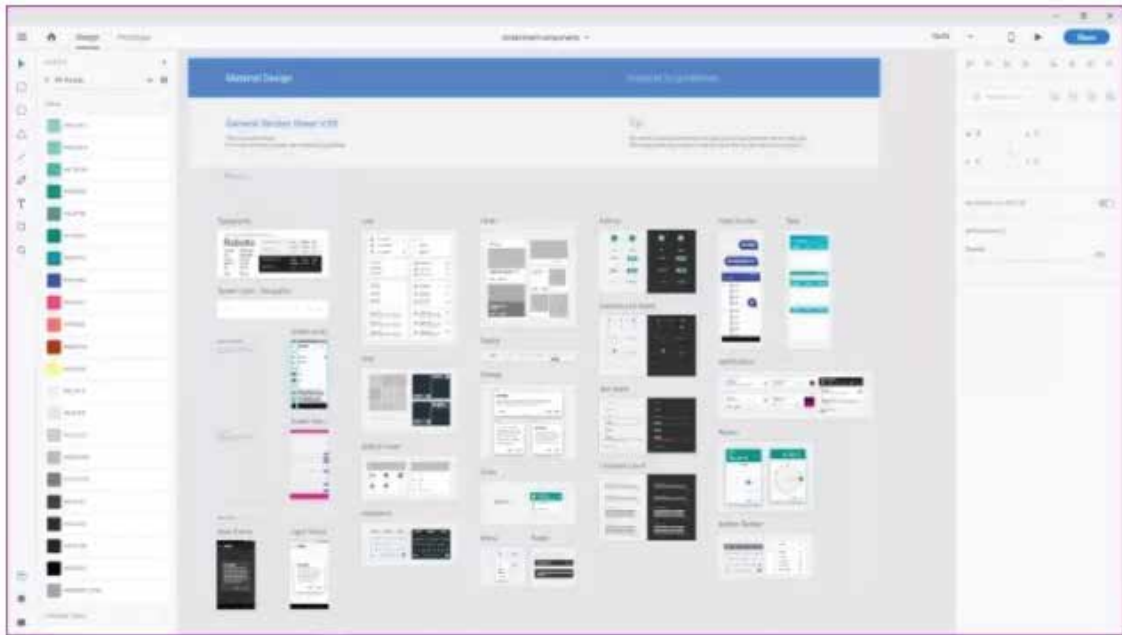

Figure 5.10

You can hold the Ctrl button and move the scroll wheel to zoom in/out to see all the individual artboards. (Refer to the figure below)
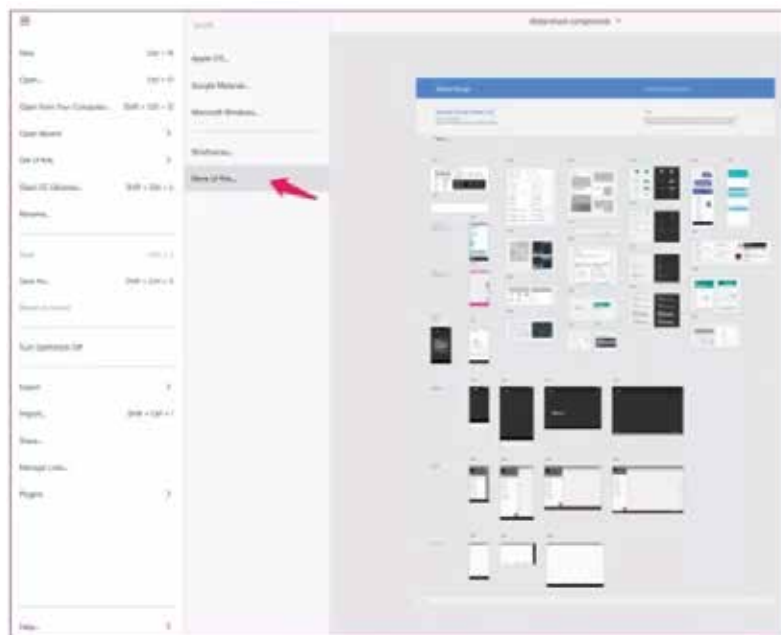

Figure 5.11

The website has some great options to choose from, including this really cool Movie Magic UI kit that looks like a heads-up display. (Refer to the figure below)
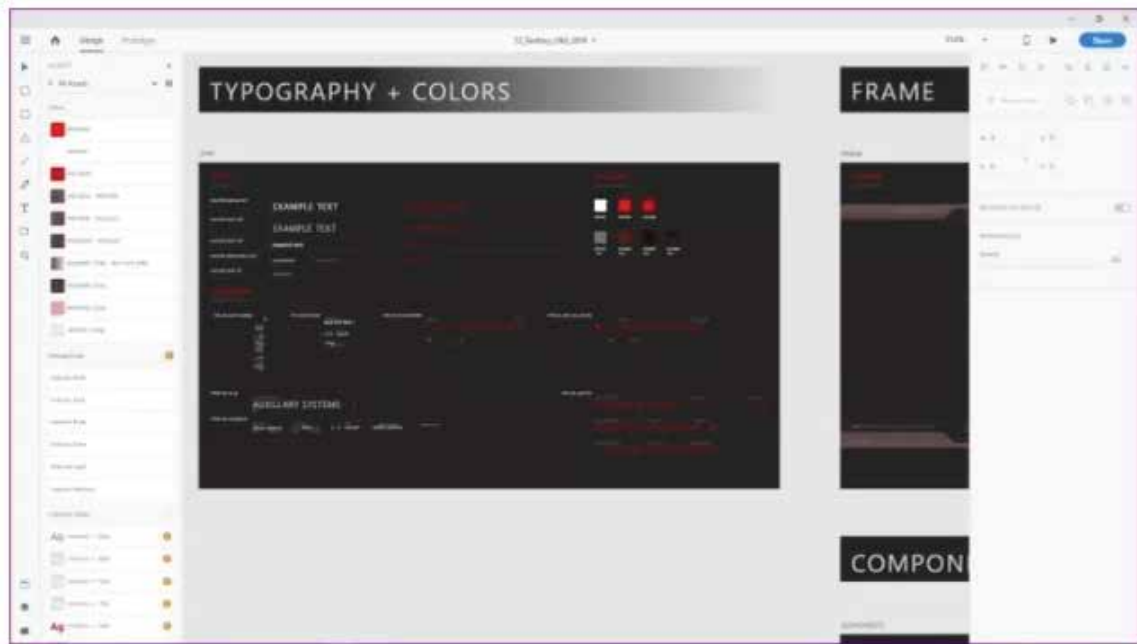

Figure 5.12

5.10 How to use kits in Adobe XD

To use UI kits in your project, just follow these simple steps:

Step 1: Zoom in on the UI element you want to use in your project and click on its title to select it. (Refer to the figure below)
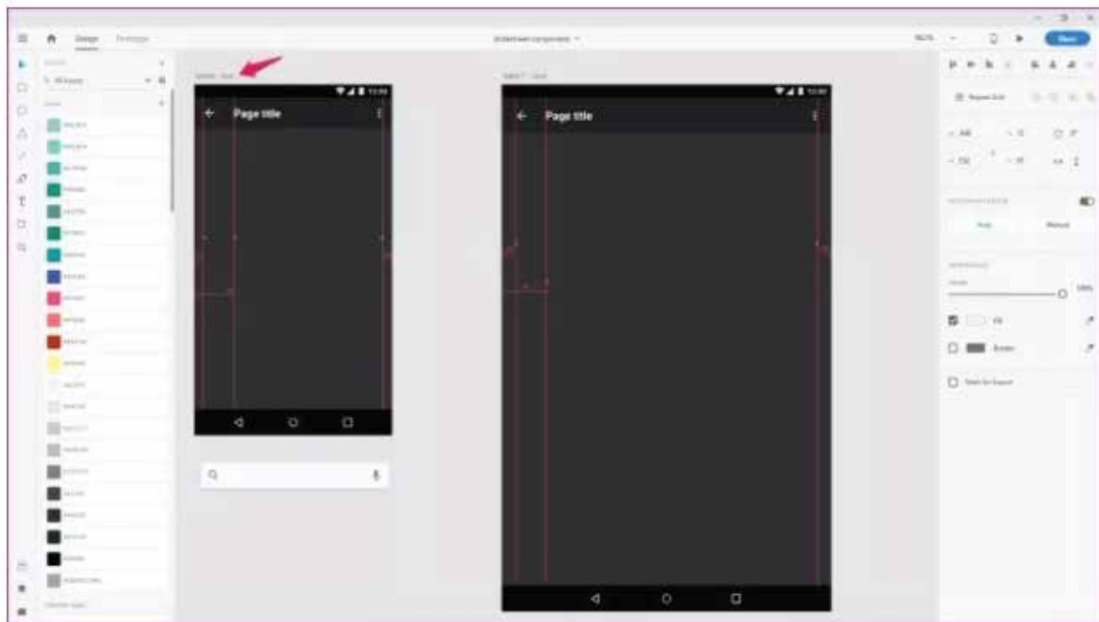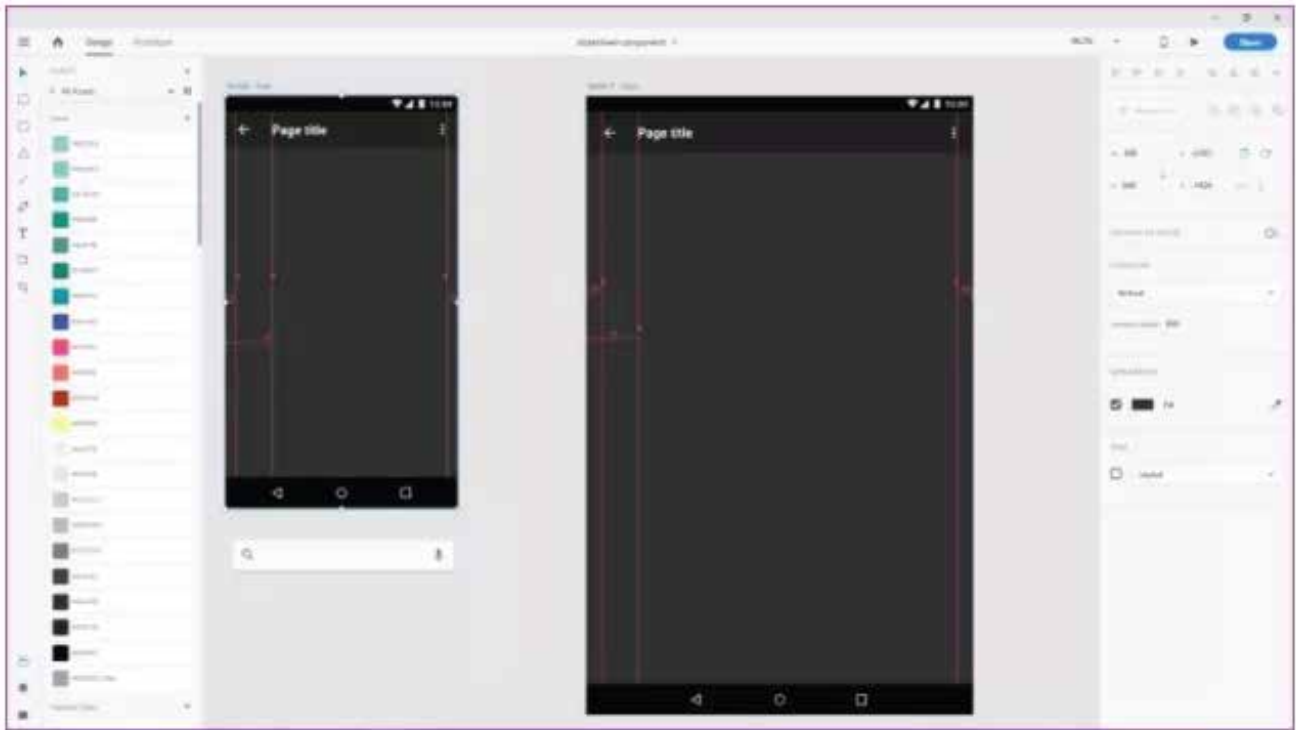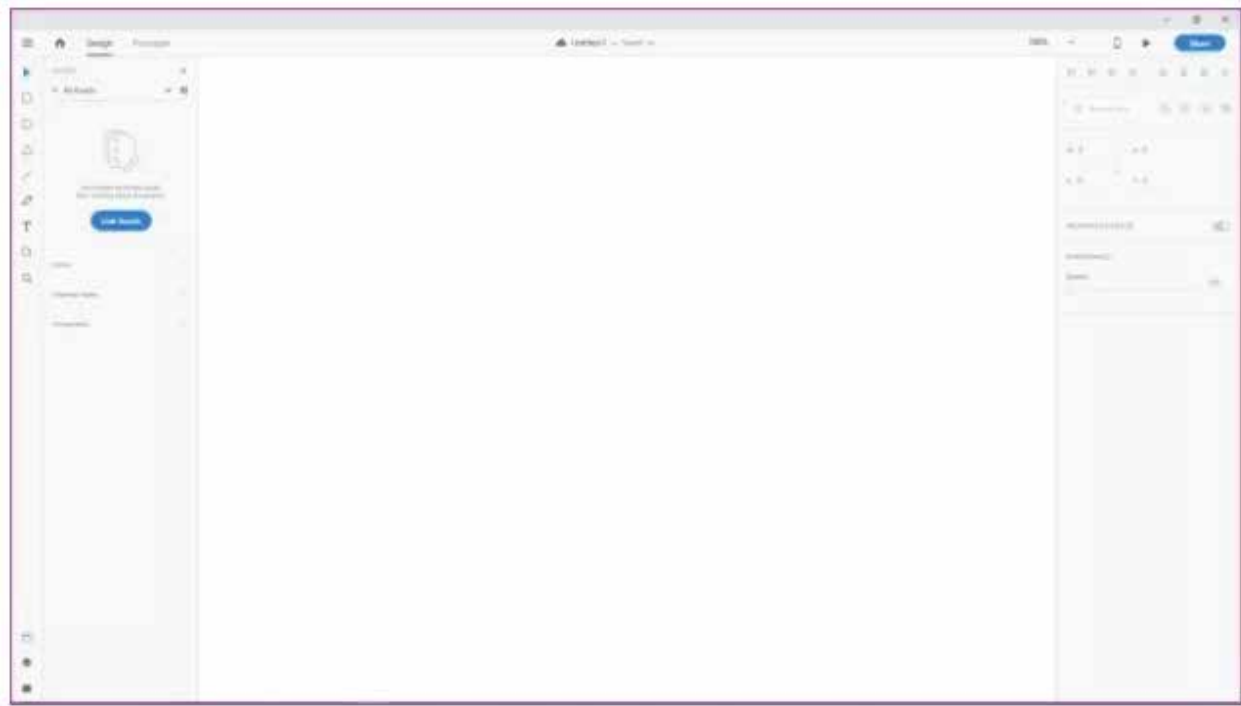

Figure 5.13

Step 2: Now copy the element using the Ctrl+C shortcut. (Refer to the figure below)

Figure 5.14

Step 3: Then open up a new Adobe XD project from the menu.(Refer to the figure below)

Figure 5.15

Step 4: Here, paste the UI element using the Ctrl+V shortcut.(Refer to the figure below)
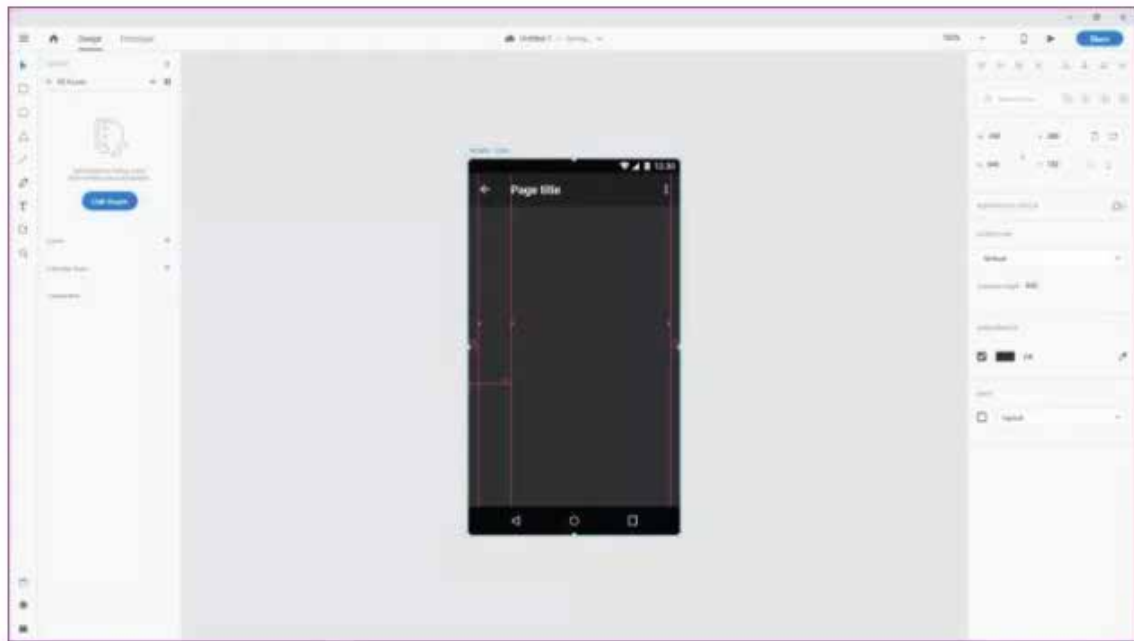
Figure 5.16

Step 5: To remove guides, click on the lock icon in the top left corner and then hit delete. You can skip this step if you wish to use the guides to place more objects into the element accurately. (Refer to the figure below)
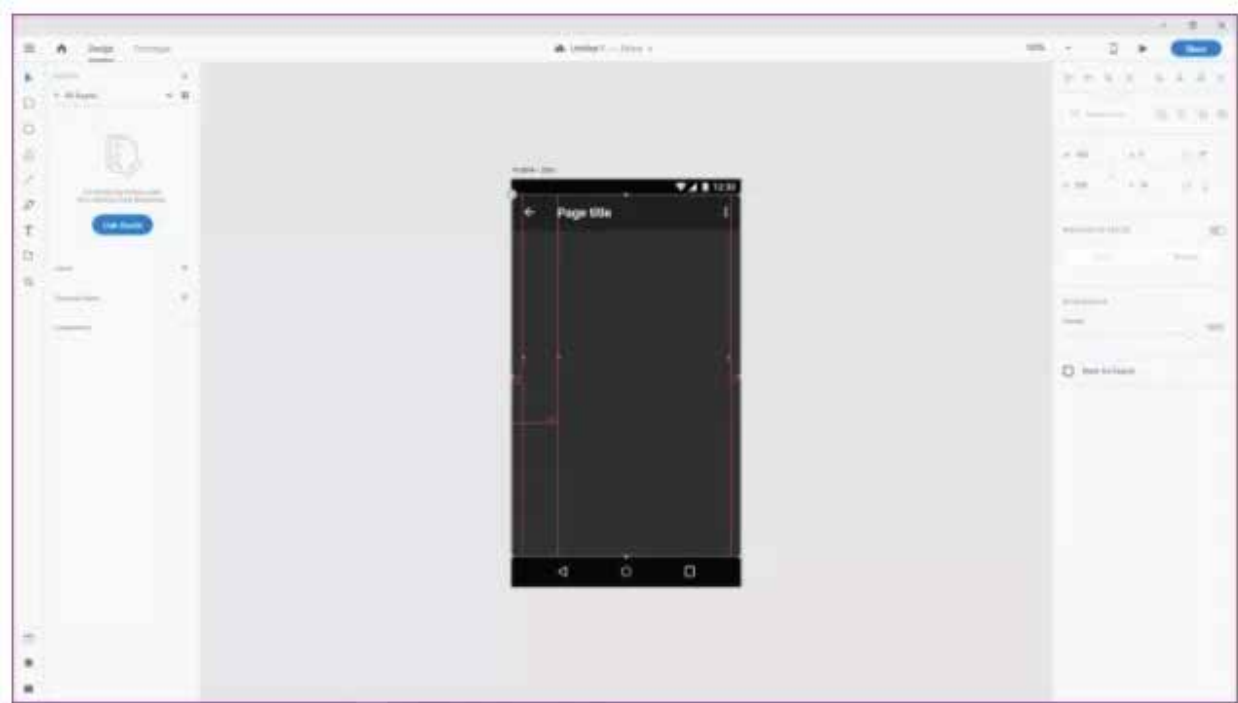
Figure 5.17

Step 6: Now head back to the UI kit to select another element to add to this page. Once again, click on the title of the element and copy it using the Ctrl+C shortcut. (Refer to the figure below)
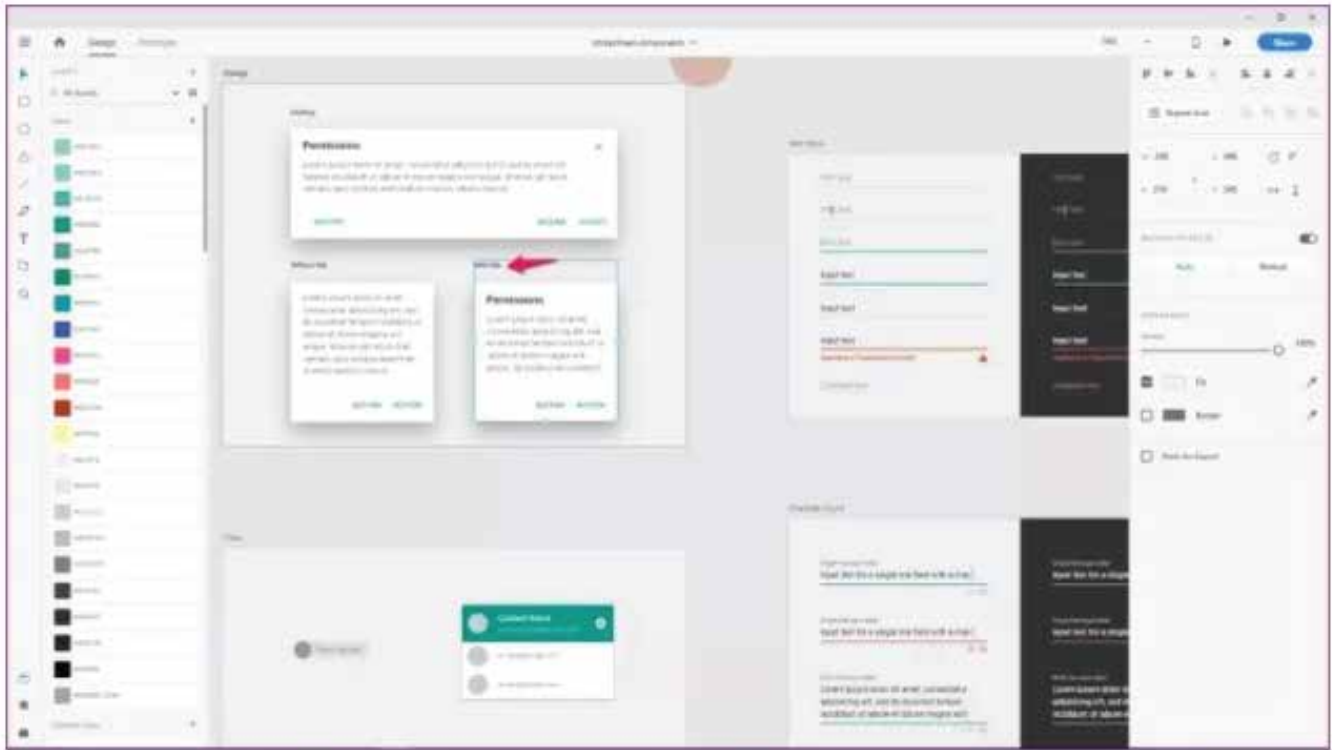
Figure 5.18

Step 7: Paste the new element on the previous element and then align it as per the guides.(Refer to the figure below)
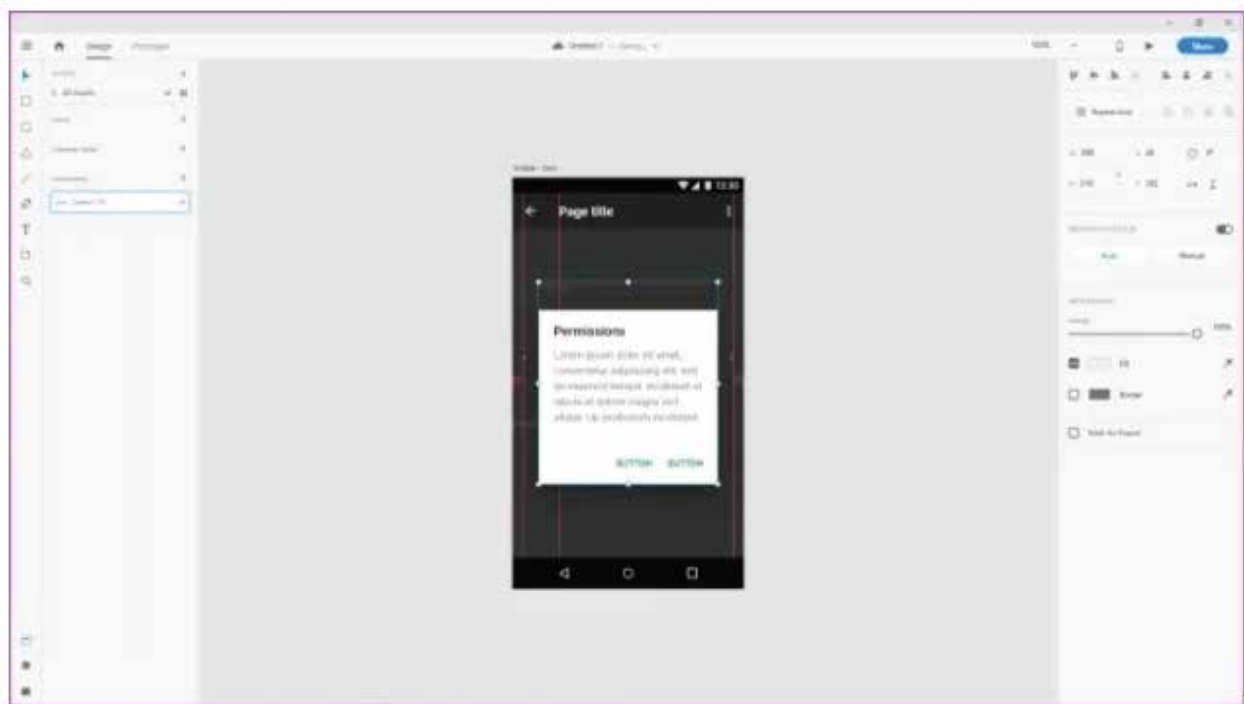
Figure 5.19

Step 8: Now to edit each element in the toast, double click on the text box and then enter the text you want to use. First, let's change the title of the toast. (Refer to the figure below)
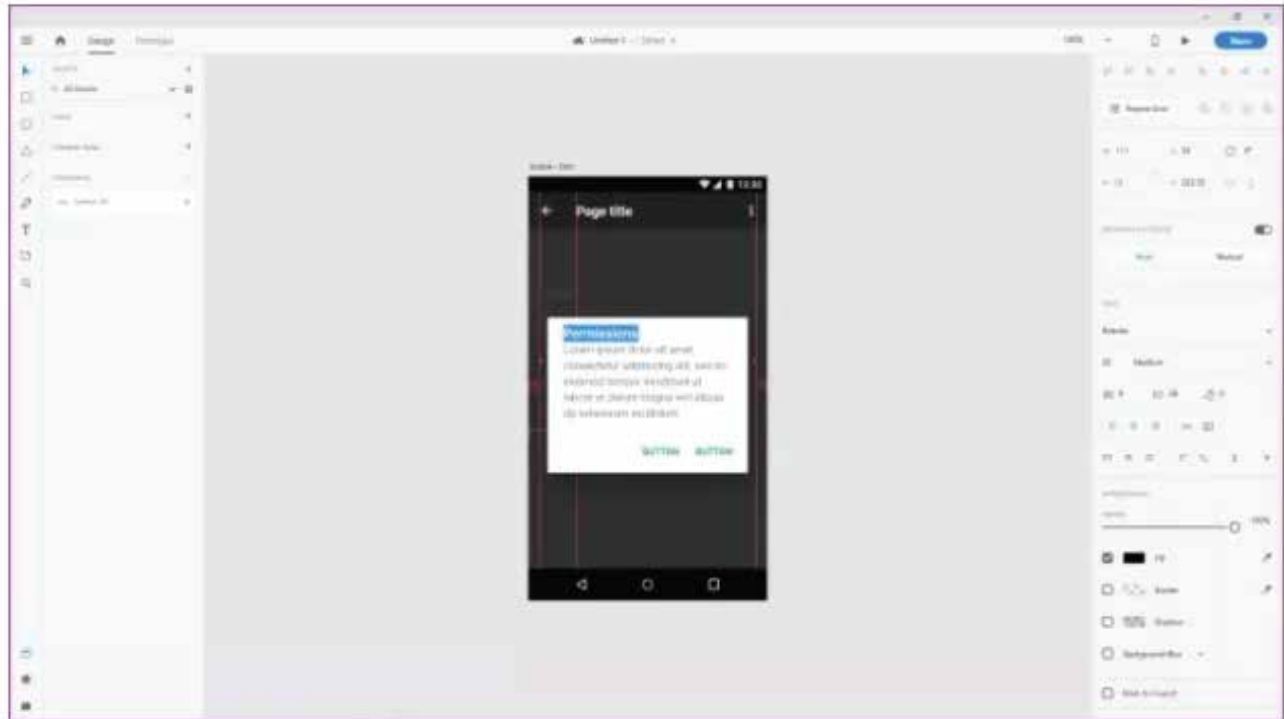
Figure 5.20

Once you're satisfied with the outcome, just go ahead and save your file by clicking on the Save As option in the menu or by using the Shift+Ctrl+S shortcut.
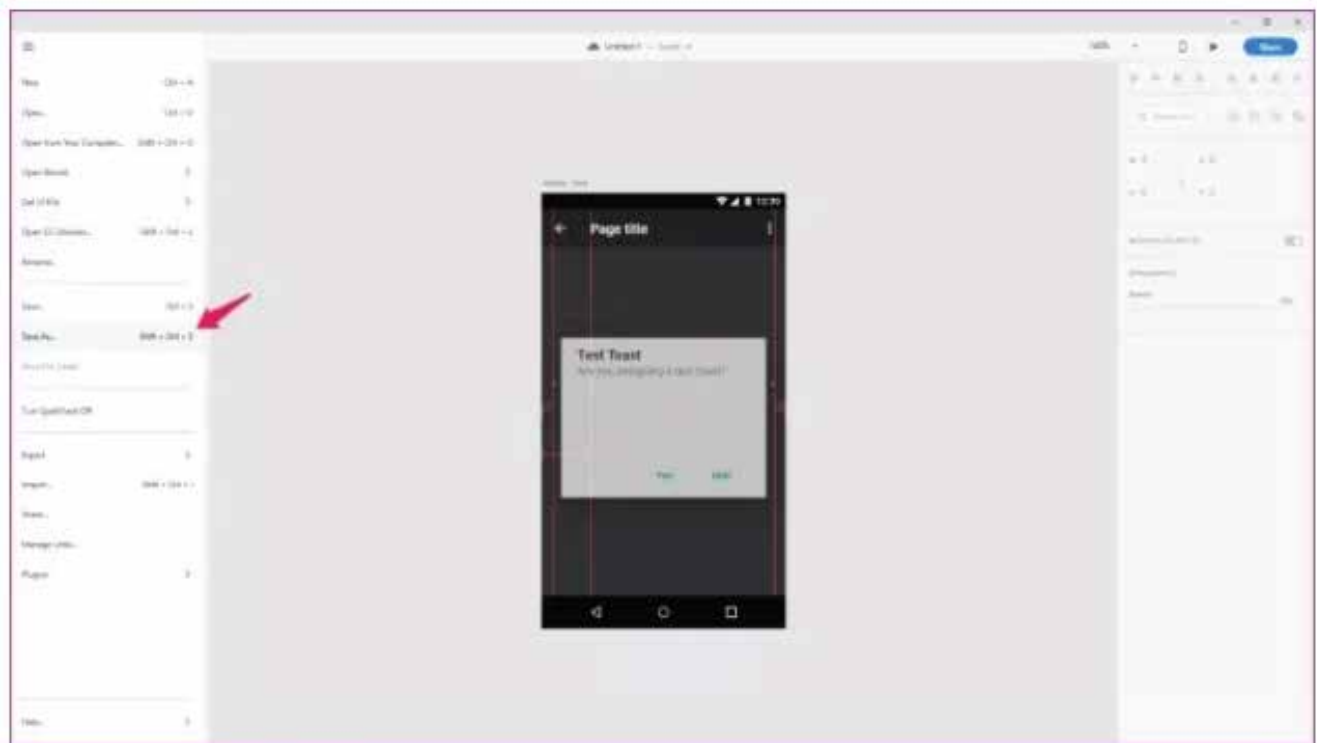
Figure 5.21

5.11 Managing Artboards

Create a new artboard

Adobe XD provides you with artboards for popular screen sizes such as those for different versions of iPhones, iPads, and Web. You can create a custom artboard if the choices do not meet your requirements.

Use the preset artboard sizes or create your custom artboard.
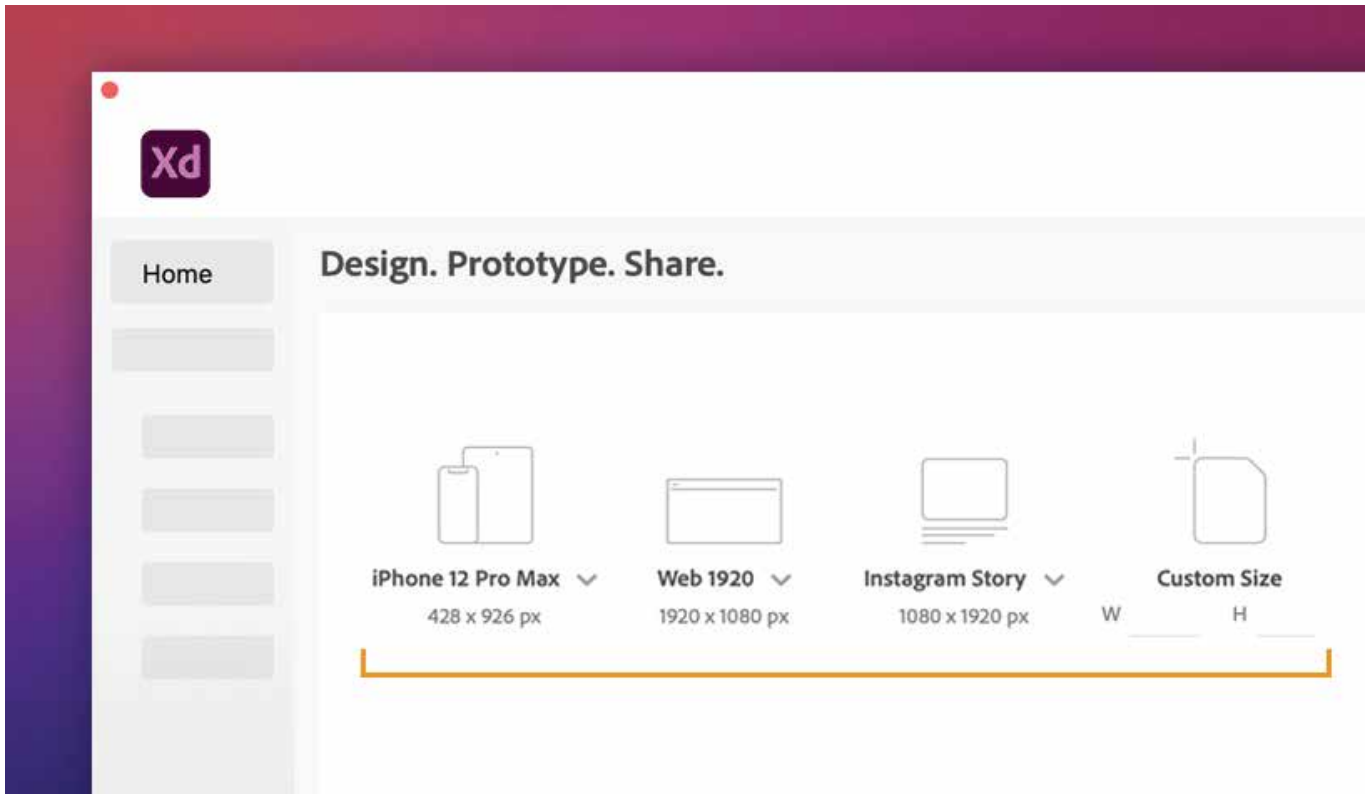
Figure 5.22

Changed your mind about the artboard size? Resize them. You can also rename them based on your design needs. Want to create more artboards and manage their placement? Duplicate and rearrange them.

Rename

Double-click the artboard title.
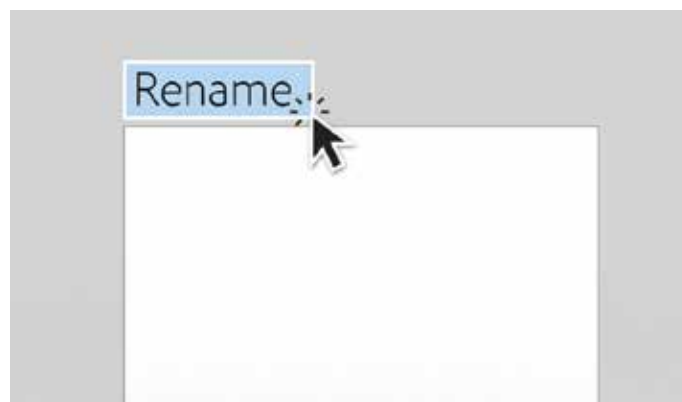
Figure 5.23

Resize

Drag the circular handle that appears on the edges of an artboard.
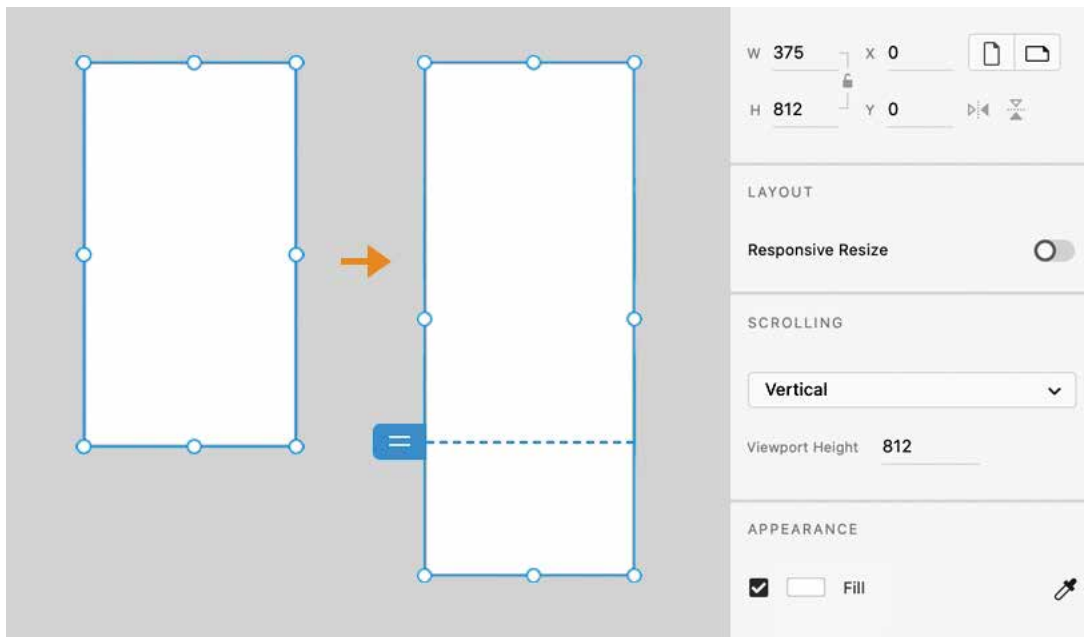
Figure 5.24

Duplicate

Select the artboard and press Ctrl /Cmd + D.
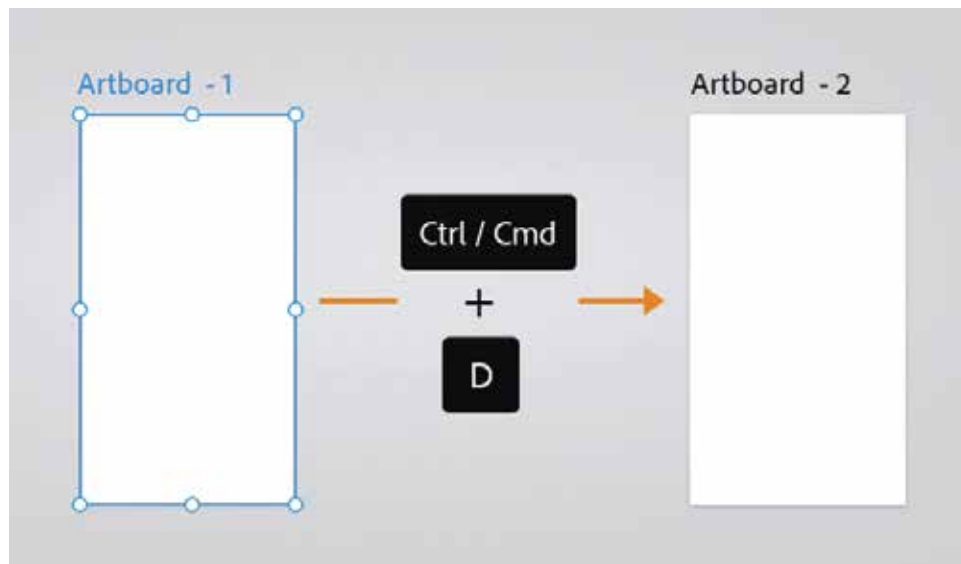
Figure 5.25

Align and Distribute

Select multiple artboards and click Align and Distribute in the Property Inspector. Drag the artboard around to rearrange them.
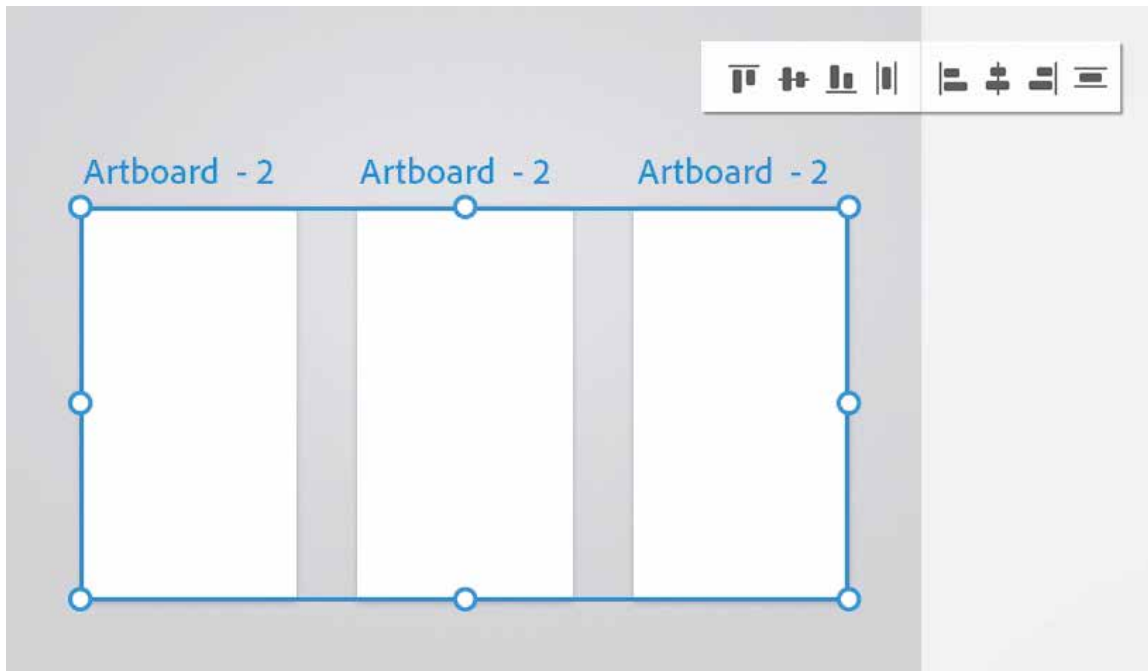
Figure 5.26

5.12 Columns and Margin with Grid

With a layout grid applied to an artboard, you can set the number of columns, column width, gutter properties, and margin sizes from the Grid section of the Property Inspector.

Change number of columns

Enter the value in the Columns field. For web designs, 12 or 16-column grids are commonly used.
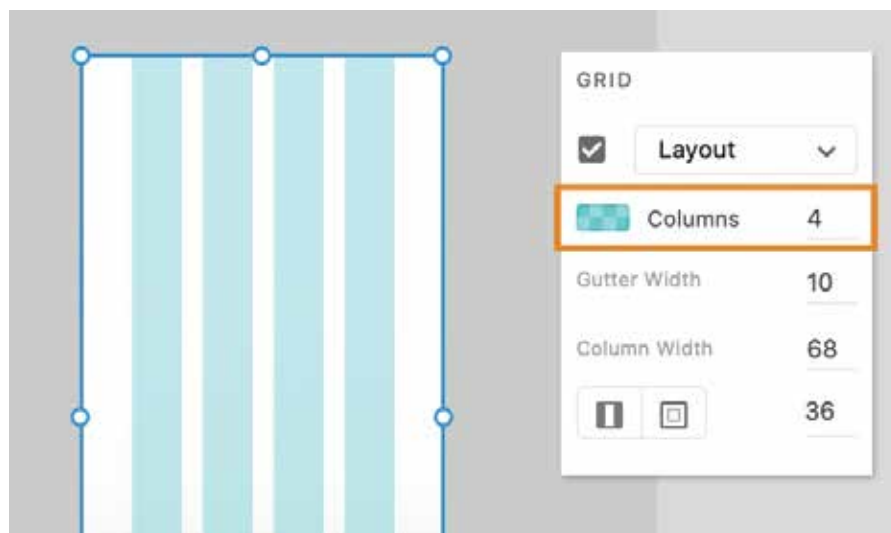
Figure 5.27

Change column width and gutter properties

To change the width of the columns, enter the value in the Column Width field. To define your own gutter width, edit the default Gutter Width field.
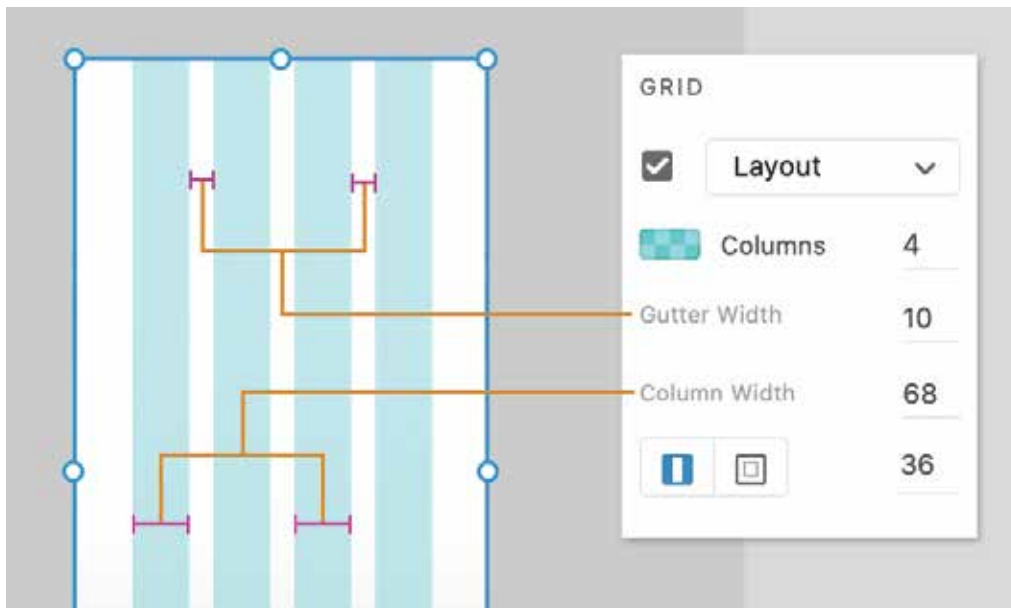
Figure 5.28

5.13 Landing Page

To achieve an effective design, it is important to know what the goal of the design should be. In this case, the goal will be to direct visitors to browse available properties through the fictional online realty service, homey.

Depending on the product or service, a website may have several different landing pages to capture audiences from various email, or search campaigns. Most frequently, the homepage of the website is the main landing page, though there can be many more.
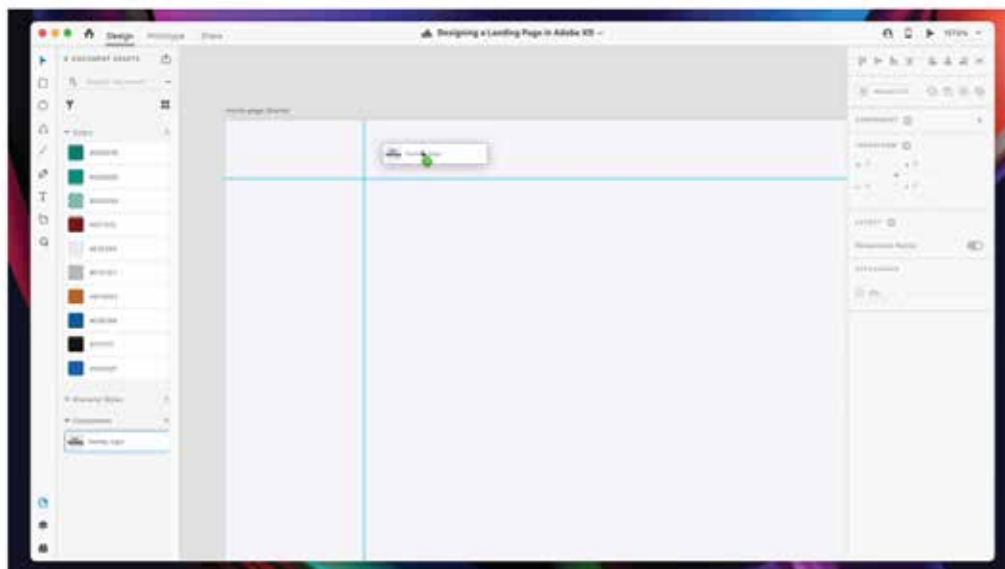
Figure 5.29

5.14 Navigation links

The navigation links will be set up on the right side of the navigation bar to create balance with the page, and follow standard conventions. Using the text tool, click to add the first navigation item labelled Browse Inventory. Set the text alignment to be right aligned.
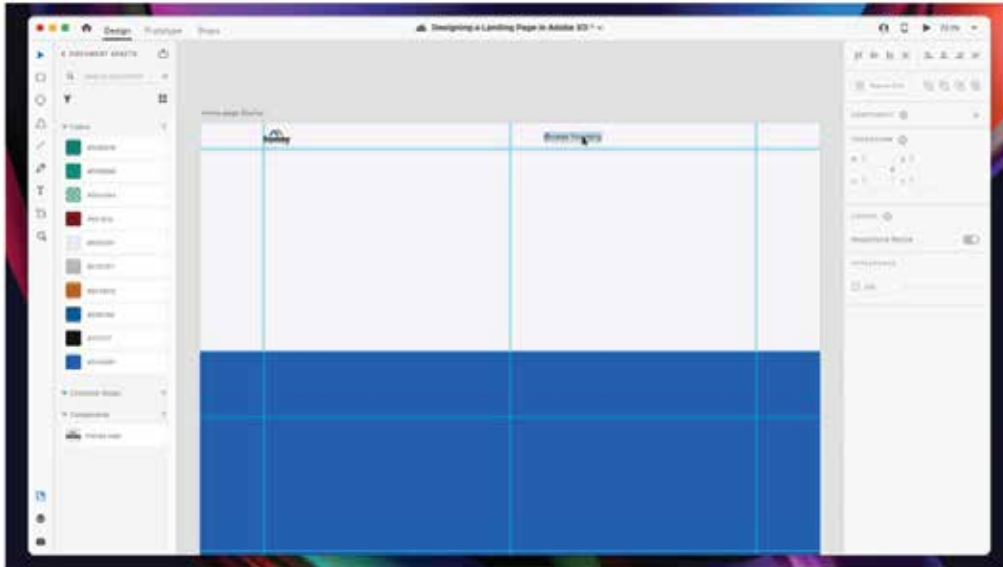
Figure 5.30

Next, make a group out of the text box. Making this a group will allow a Stack to be enabled enabling easier duplication and rearrangement of menu items. Once the stack is enabled, double click into the group and select the text box. Copy and paste the first text box until there are three text boxes stacked horizontally.
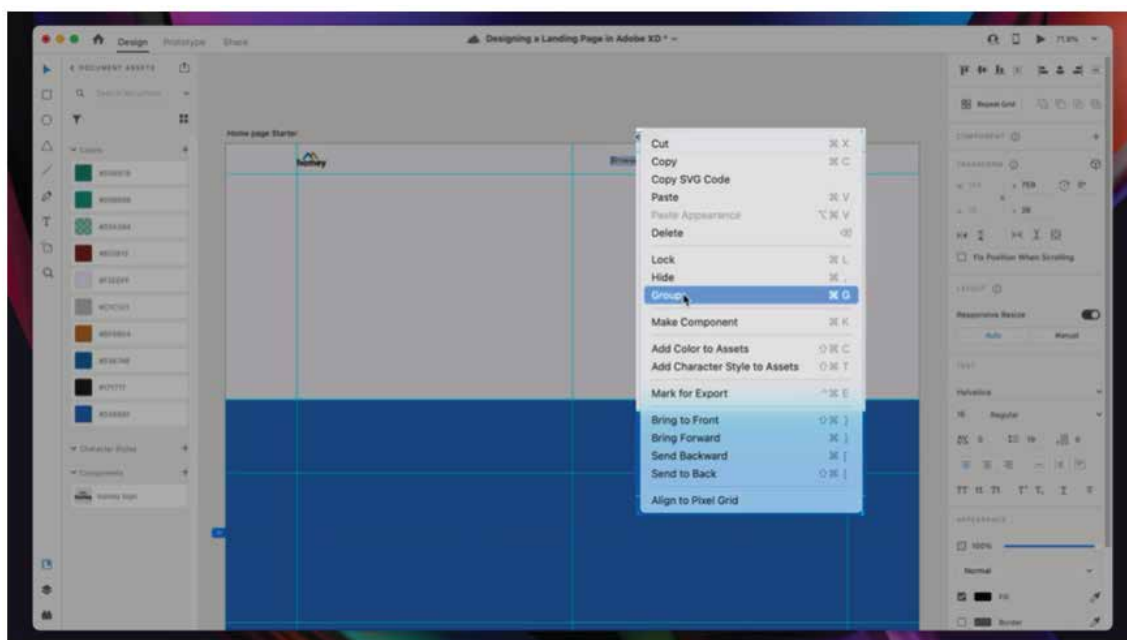
Figure 5.31

5.15 Login button

Finally, create the login button by drawing out a rectangle about 46px in height and adding the text Login on top. Using the alignment tools, center the text vertically and horizontally in the button. Group the two elements together, and enable Padding to ensure that the button spacing is maintained as the text changes.
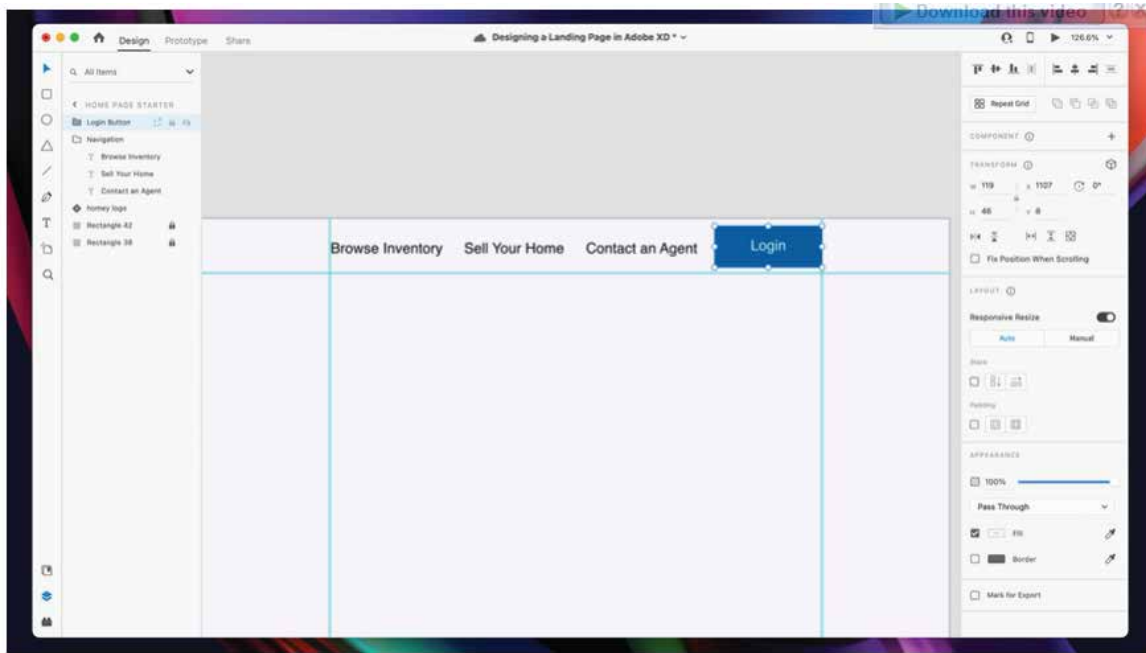
Figure 5.32

Since this button will be used elsewhere in the design, convert it to a component for easy reuse by using the right click menu and selecting Make Component.
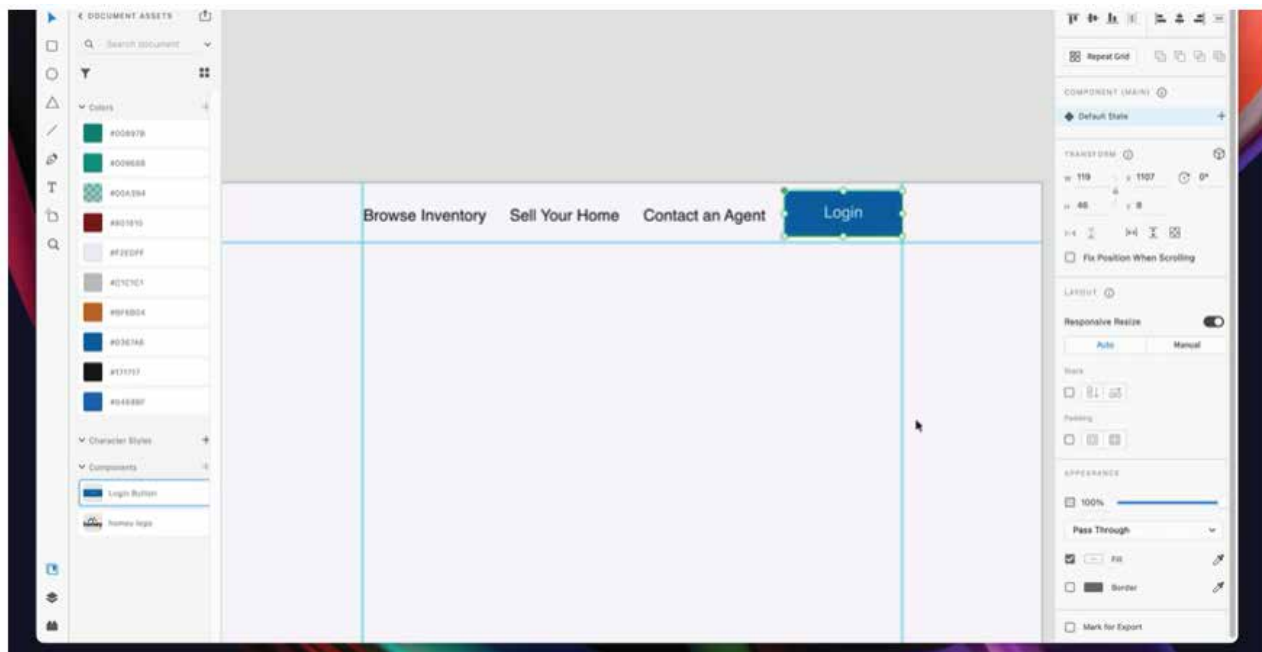
Figure 5.33

5.16 Title and call to action

To start, the title section will be defined. To keep it simple, this hero layout uses an approximate 50% split between the illustration and the copy.

Using the text tool, add a text box with the title Search thousands of homes handpicked for you. This will be the main title, so set the text box style to auto-height to allow the text box to resize vertically. Set the font size to 34px and make the type bold so that it really stands out and carries weight.
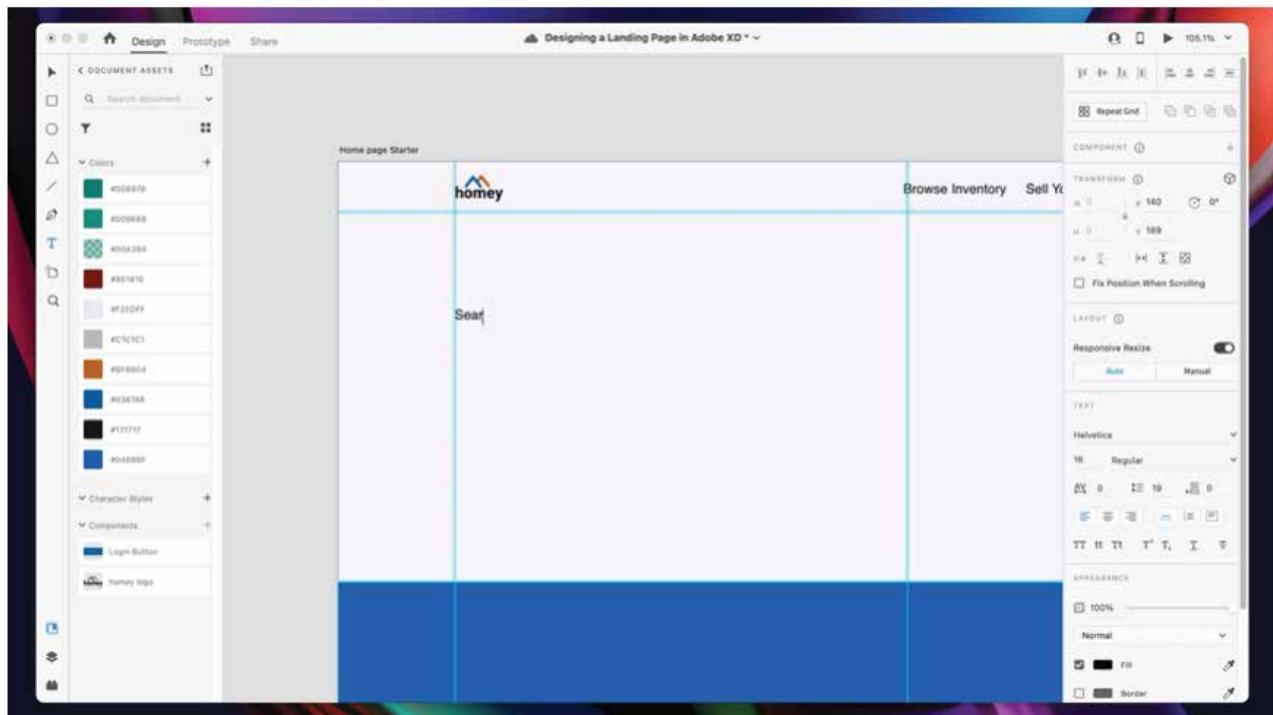
Figure 5.34

Finally, the call to action will be added under the heading, prompting visitors to take the next step in their journey. In many cases this is a primary button with a descriptive, actionable label. Since a button component was already created, it can be dragged out of the components window and placed on our hero design.

After completing this section, Students will be able to: -

• *understand importing graphics, text and facts, multiple screen layouts for games, mobile and web Using grids repeating elements*
• *explain single interaction, content scrolling and record an interactive prototype.*
• *describe export artboard and assets*

5.17 Importing assets via drag and drop

Another method for bringing assets into Adobe XD is to drag and drop from the Finder (macOS) or Windows File Explorer (Windows). This is a great way to insert images into existing frames, as you'll see in a later section "Masking with an image fill," or as a more precise placement option.
Note: Below mentioned folders and files are assumed. You can reffer to your folder and files
1-Press Command+0 (macOS) or Ctrl+0 (Windows) to see all of the artboards.
2- With the Select tool (example.jpg) selected, click in a blank area away from artboards to deselect all.
3- Go to the Finder (macOS) or Windows Explorer (Windows), open the Lessons > Lesson04 > images folder, and leave the folder open. Go back to XD. With XD and the folder showing, click the image named "image.jpg."

The image.jpg image has a dimension of 1300 pixels x 1135 pixels. As I mentioned, JPEGs you import are placed at half their original size.
4- Command-click (macOS) or Ctrl-click (Windows) the image named "dann.png" to select both images. Release the key and drag either image into XD, just to the right of the artboard named "Instructor detail – Dann," above the watch artboards.
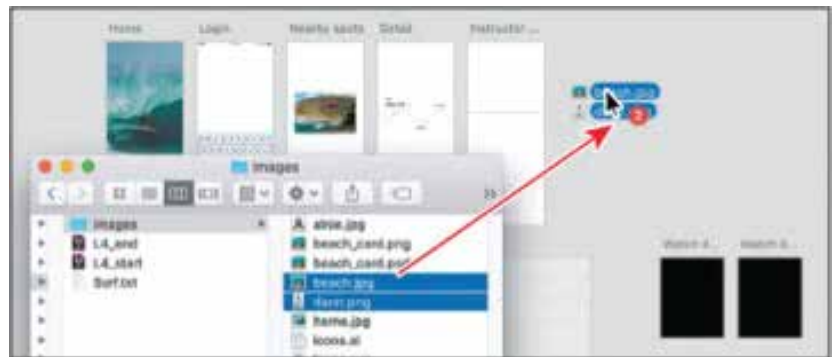
Figure 4.55

Single Interaction
The interactions module and related APIs provide read only information about the document's interactive prototype mode, including:
The blue "wires" seen in XD's prototyping UI, known as "interactions," which specify gestures/events which trigger actions to occur in the prototype. Accessible as a single consolidated global listing via this module's all interactions API, or you can access information from specific nodes in the scenegraph via Scene node triggered Interactions and Artboard.incoming Interactions.
Designers can author multiple prototype or interaction flows in a single document and publish uniqueshareable links for each flow. Developers can access all document flows using the flows API. With multipleflow support the home Artboard API is being deprecated as XD no longer has a single home artboard restriction Properties that affect Artboard scrolling behavior: Artboard.

5.18 Recording interactions of prototype

1- In the Design or Prototype mode, click the Desktop Preview icon.
The Preview window appears. The Preview window displays the artboard that contains the currently selected objects. If no object is selected, the Preview window opens with the Home artboard first.

2- (Optional) Click an asset or prototype interaction in XD and make changes if necessary. Notice that the changes are instantly updated in the Preview window.

3- To close the Preview window, click the close button of the window.

(Recording prototypes is not supported in Adobe XD on Windows. However, there's a workaround. Press the Windows + G keys and use the native recorder to record the Preview window.)

To preview your design or prototype, click the Preview icon. In the Preview window, click Record. If there's an interactive prototype, all interactions in the Preview window, are recorded as a .mp4 file.

To stop recording, click Record again or press Esc. Specify a location to save the .mp4 file.

The recording also stops if:

1-You switch away from the application

2-The preview window does not have focus anymore.

Do you know ?

A prototype is an early sample, model or release of a product built to test a concept or process. It is a term used in a variety of contexts, including semantics, design, electronics, and software progremming A prototupe is generally used to evaluate a new design to enhance precision by system analysis and users.

5.19 Grid Layout

Grid Layout contains features targeted at web application authors. The Grid can be used to achieve many different layouts. It excels at dividing up space for major regions of an application, or defining the relationship in terms of size, position, and layer between parts of a control built from HTML primitives.

Like tables, the Grid enables an author to align elements into columns and rows, but unlike tables, the Griddoesn't have content structure, and thus enables a wide variety of layouts not possible with tables.

For example, the children of the Grid can position themselves with Grid Lines such that they overlap and similar to positioned elements.

In addition, the absence of content structure in the Grid helps to manage changes to layout by using fluid and source order independent lay out techniques. By combining media queries with the CSS properties that control layout of the Grid and its children, authors can adapt their layout to changes in device form factors orientation, and available space, without needing to alter the semantic nature of their content.

EXERCISE

Select the most suitable option.

1-Adobe XD is a vector-based _____ and UX design tool.
a) UI b) User Experience c) Dev d) both a and b

2-UX stands for_____
a) Unique Xavier b)User Experience c) Ultimate Xamp d) User Xample

3-Interaction design is _____ in Adobe XD.
a) Static b)Flow c) Motion d) Good

4-Adobe XD is ideal for ____ UI design.
a) Genuine b) Real c) vector d) Logo

5-Cloud Document can be accessed from_____.
a) Settings b) Home c) Menu d) Help

6-Main Menu and Design mode is a part of _____.
a) Home screen b) Intro c) Files d) Workspace

7-Artboard represents the _____ in your application.
a) screen b) paste board c) workspace d) none of these

8- Adobe XD provides different versions of screen e.g _____.
a) Iphone b) Ipad c) Web d) all of these

9- Design view means organise_____ information.
a) File b) Folder c) Design d) Source

10-Prototype view can be accessed from_____.
a) Prototype tool b) Share mode c) Chrome cast d) Screen Mirror

11-Repeat grid is a grid of repeating items such as _____.
a) photo b) text c) vector d) all of these

12-XD can open files from_____.
a) Inpage b) Corel Draw c) Illustrator d) both b and c

13-_____ command can be used to design apps.
a) text b) voice c) visual d) both a and b

14-Any website or app starts with _____.
a) intro b) outro c) program d) wireframe

15-_____ let you align objects and text with guides.

a) Rule   b) Guide   c) Grid   d) Mesh

Answer the following questions briefly.

1. Define Adobe XD and its Purpose?
2. What are different parts of Adobe XD Interface Design?
3. What are artboards and Grids in Adobe XD?
4. What are Layouts in Adobe XD and Square?
5. Shortly Describe Content-Aware Layout, Padding and Stacks.
6. What is Grid Layout?

Write answers of the following questions in detail.

1. How do you Export and Import Files in Adobe XD?
2. What are single Interactions and how do you record Interactions?
3. Define user interface (UI) kits, how you can use them in XD ?

ACTIVITIES

1. Create multiple art boards to design UI kits.
2. Design a Website UI with XD.
3. Design a responsive single layout using grid.
4. Create a new Artboard using UI Kits and modify it uniquely.
5. Import Assets into Adobe XD.

Chapter 6:
Adobe InDesign-II

After completing this section, Students will be able to: -
• *define InDesign*
• *understand InDesign workspace*
• *understand pages panel*
• *describe paragraph styles, character styles and object styles*

6.1 InDesign
InDesign is a sophisticated page-layout program. You can use it to createprofessional-looking documents, including newsletters, books and magazines.You can also use it to create documents for distribution on a tablet such as an ipad and even documents that includes interactivity or videos. It has evolvedinto a tool that lets you publish content to just about any device or in print.For example, using InDesign you can create a document and distribute content in print and then add hyperlinks, videos, and export it to PDF or EPUB.

6.2 Workspace
The Workspace refers to how the entire InDesign window is configured—the panels on the Panel Dock, the tools that are displayed on the top level of the Toolbar, etc. There are several preset workspaces built into InDesign that are geared for different kinds of projects, such as Digital Publishing. Customized workspaces can also be created by users.

1- To select a preset workspace, click the Workspace menu at the upper right of the InDesign window.

2- Choose Typography as can be seen in figure 6.0 to use as the base for the custom workspace. Now bring out some additional panels by going to the Window menu and, in this case, scrolling to Object & Layout and choosing Align.
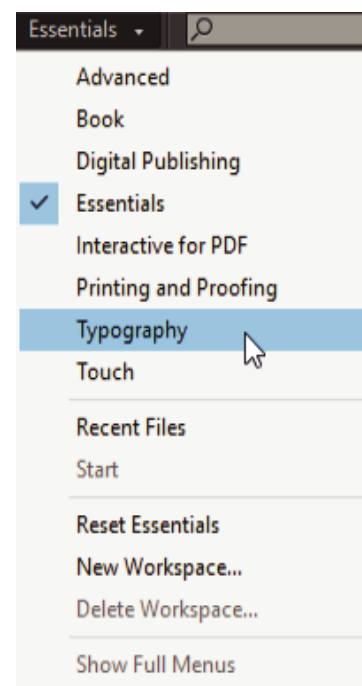
Figure 6.0

> **Do you know ?**
>
> Adobe launched InDesign in United Kingdom through a series of promotinal presentations in hotels. The marketing concentrated on new software architecture-a small central software kernel (about 2Mb) to which add-ons would be bolted as the program's functionality expanded in later versions.
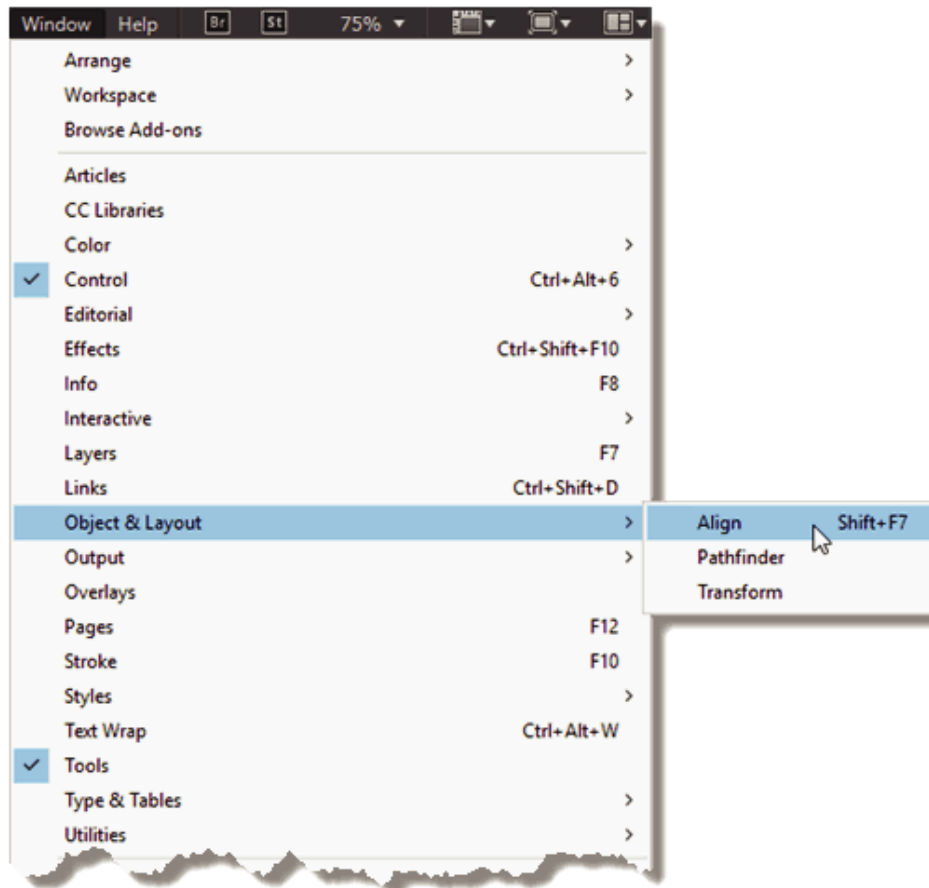
Figure 6.1
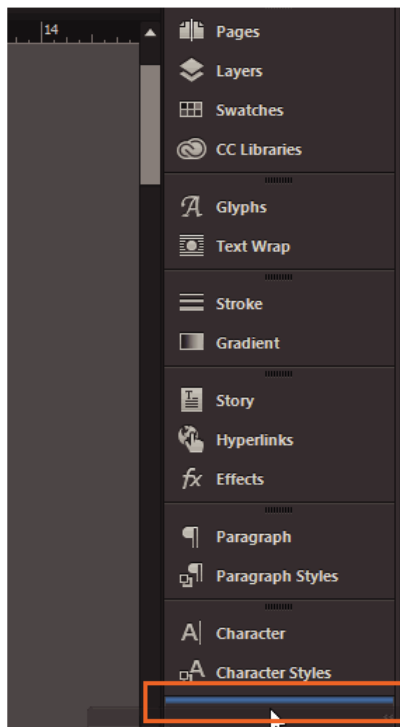
Figure 6.2

3- The panel opens in the middle of the InDesign window. To anchor it to the Panel Dock at the right, click and hold on the bar at the top of the Align Panel groupand drag it underneath the other panels on the dock so that a blue highlight appears. This indicates the panel will be anchored to the dock.

4- This new configuration can be saved by going back to the Workspace menuand choosing new Workspace.
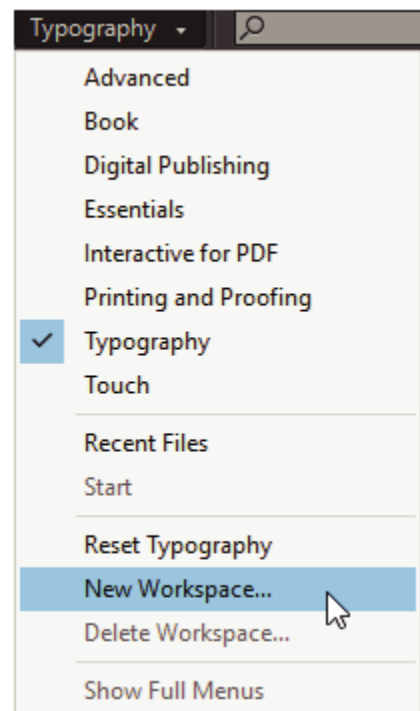
Figure 6.3

5- Name the workspace in the next dialog box and click OK.
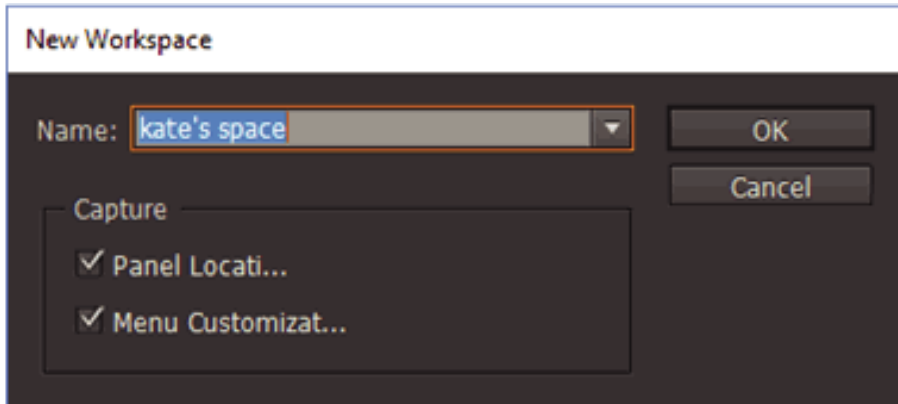
Figure 6.4
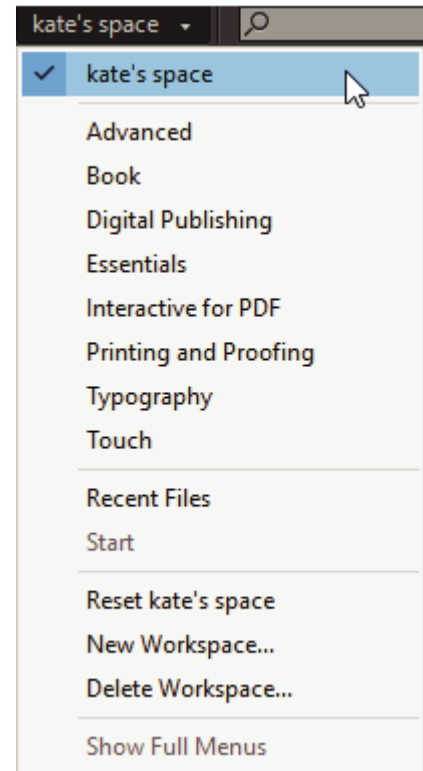
6- The custom workspace now appears in the Workspace menu.

6.3 Pages Panel

Step 1: Locate/Open the Pages panel

When you click the OK button in the New Document window, InDesign creates a blank document set up to your specifications. If you're used to working in a single-page programme like Illustrator or Photoshop, or even a word-processing programme, like Microsoft Word orPages, the way that documents are laid out and navigated through in InDesign can seem quite different and may not be immediately intuitive.

Figure 6.5

Unless you have set your Preferences to open a pre-defined Workspace, InDesign will open the workspace (the collection and arrangement of panels) in Essentials mode. You can view this, or alter the workspace to suit your specific purposes, from the top right of the control panel running along the top of your screen as can be seen in figure 6.6.

One of the most important, and useful, panels in InDesign is the Pages panel. This will open by default, or you can find it in the Window menu (Window > Pages). You will seethat the panel is actually a group of three panels: Pages, Layers and Links.
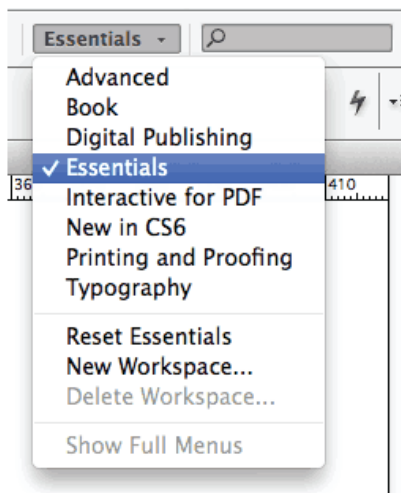
Figure 6.7
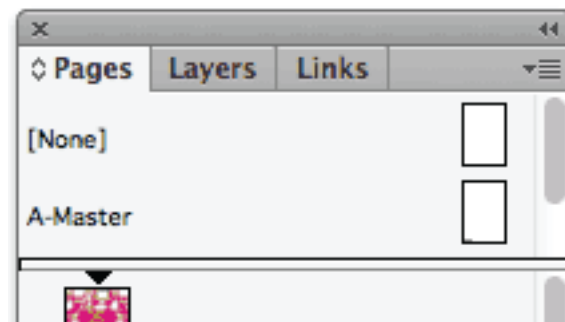
Figure 6.6

The Layers panel allows you to manage layers in your document, just as you would in Photoshop or Illustrator. You can choose to View or Hide layers, and Lock or Unlock them,by clicking in the two square spaces to the left of the layer's name in the panel.
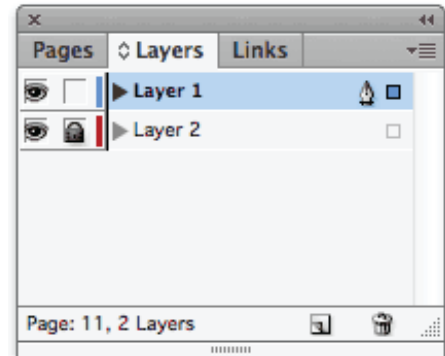
Figure 6.8

6.4 Paragraph Styles

Paragraph styles allow you to save and re-use specific text formatting (e.g. font or size) and paragraph formatting (e.g. tabs, indents or paragraph spacing) reference in figure.

- Font family
- Font style
- Font size
- Leading
- Spacing
- Horizontal/vertical scale
- Alignment
- Indents
- Space before/after
- Tabs
- Paragraph Colour

6.5 Character styles

Character styles allow you to save and re-use specific text formatting (e.g. font face or fon colour). Using a character style allows you to customise specific text within a paragraph. Reference in figure.

- Font family
- Font style
- Font size
- Leading
- Spacing
- Horizontal/vertical scale
- Character Colour

As a general rule, you should have a lot more paragraph styles defined than character styles.
Character styles are for the exceptions, paragraph styles are for everything else.
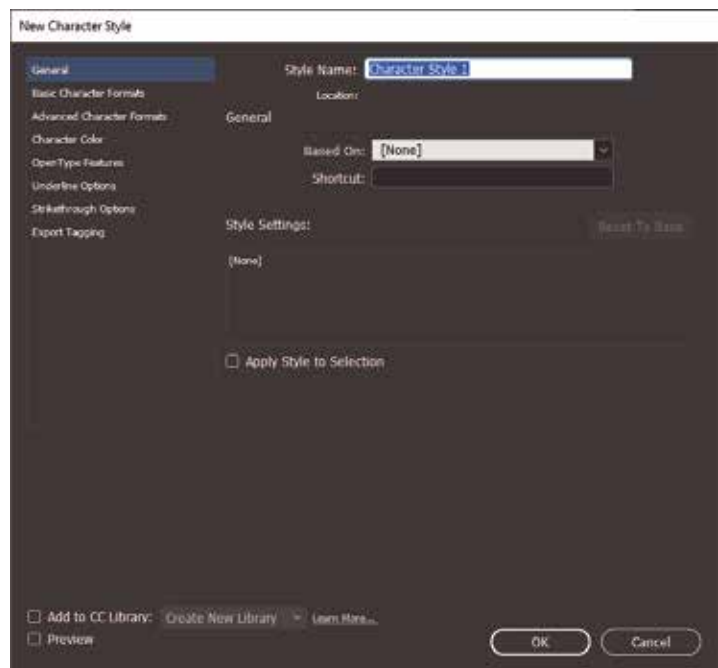
Figure 6.9

Figure 6.10

Use the Object Styles panel to create, edit, and apply object styles. For each new document, the panel initially lists a default set of object styles. Object styles are saved with a document and display in the panel each time you open that document. The Text Frame icon marks the default style for text frames; the Graphics Frame icon marks the default style for graphics frames and drawn shapes.

Use the Object Styles panel to create, name, and apply object styles. For each new document, the panel initially lists a default set of object styles. Object styles are saved with a document and display in the panel each time you open that document. The Text Frame icon marks the default style for text frames; the Graphics Frame icon marks the default style for graphic frames; the Grid icon marks the default style for frame grids.
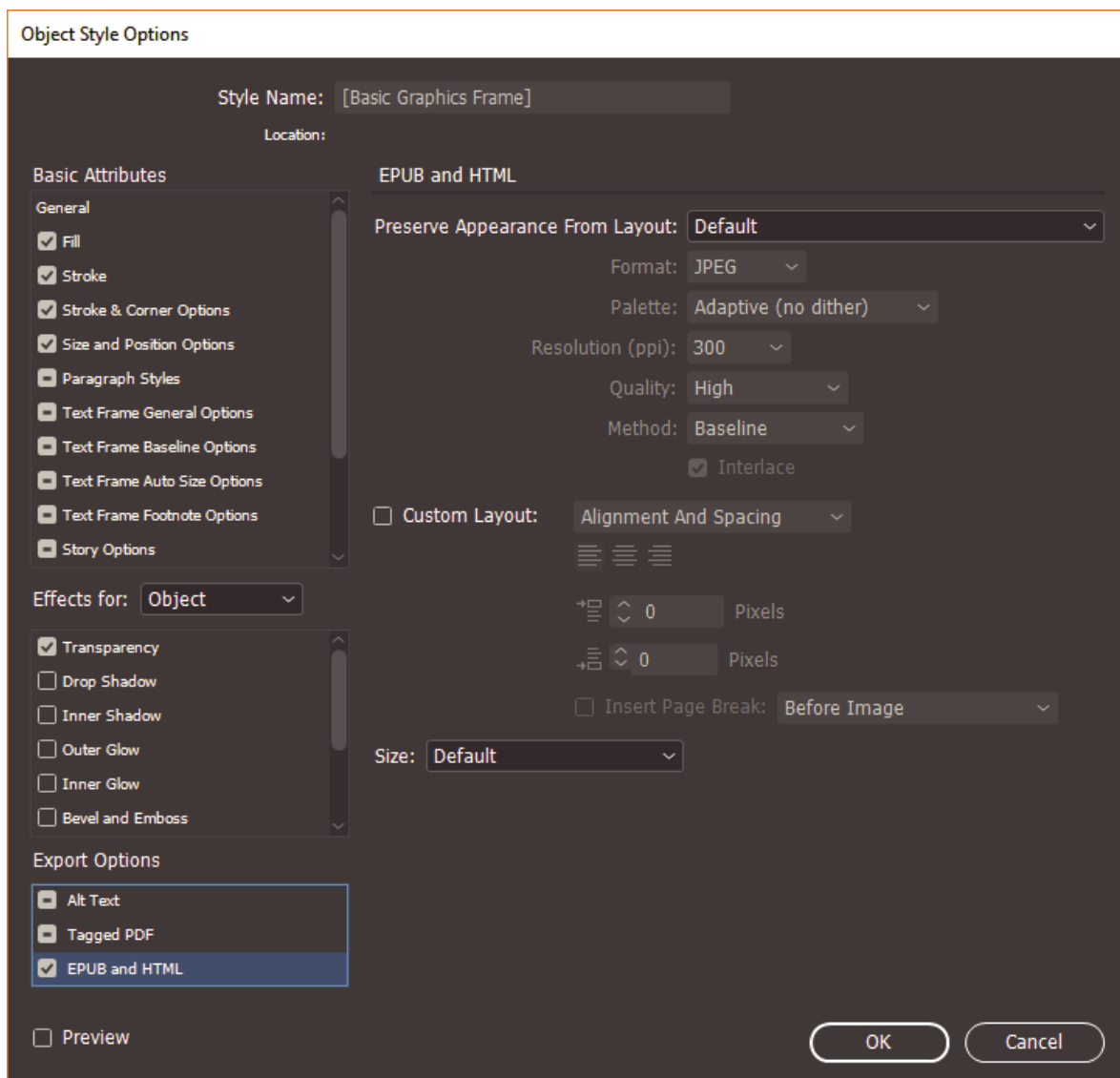
Figure 6.11

Section-II

After completing this section, Students will be able to: -

• *define InDesign graphics, how to handle InDesign graphics*
• *define working and customizing the link panels, locate missing images, and adding graphic layout.*
• *define auto fitting, using adobe bridge to import graphics, multiple graphics using mini bridge, object style, wrapping text, clipping path and alpha channels*
• *understand to import PS file*

6.6 Graphics in Adobe InDesign

In InDesign, you can bring raster images, like an image you take with your phone, or vector graphics, like a logo, into your documents:

1-Choose File > Place to place a graphic (or multiple graphics) in your document.
2-Click Open. If a frame was selected before placing, the graphic is placed within the frame. You can also click to place a graphic into an existing empty frame or create a frame as you place a graphic.
3-With the Selection tool in the toolbox, drag a corner point of a graphic frame to resize the frame and toreveal or hide parts of the image.
4-Drag within the graphic area (not the center) to reposition the graphic and the frame.

Graphics placed in InDesign are linked by default to the original file outside InDesign. If a placed graphic is updated outside InDesign in Adobe Photoshop for instance the graphic is automatically updated in InDesign.

Choose Window > Links to see a list of all the graphic files placed in a document in the Links panel. Each linked graphic is listed in the Links panel along with the number of the page it's on.Select an image in the Links panel and click the Go To Link button to select the image.Click the Relink button with a graphic selected in the list and navigate to a replacement image. Any transformations performed in InDesign are preserved.

When you open a document with missing or modified graphics, a dialog box appears.

1-In the Links panel, a graphic with a stop sign means it's missing. To fix this issue, select the graphic in the Links panel, and click the Relink button at the bottom of the panel or click the Relink File button in the Properties panel.

2-A graphic with a yellow yield sign icon indicates it has been modified. To fix this issue, select the graphic in the Links panel, and click the Update Link button at the bottom of the Links panel or click the Update File button towards the bottom of the Properties panel.

6.7 Links panel overview

All files placed in a document are listed in the Links panel. These include both local (on disk) files and assets that are managed on a server. However, files that are pasted from a website in Internet Explorer do not displayin this panel.
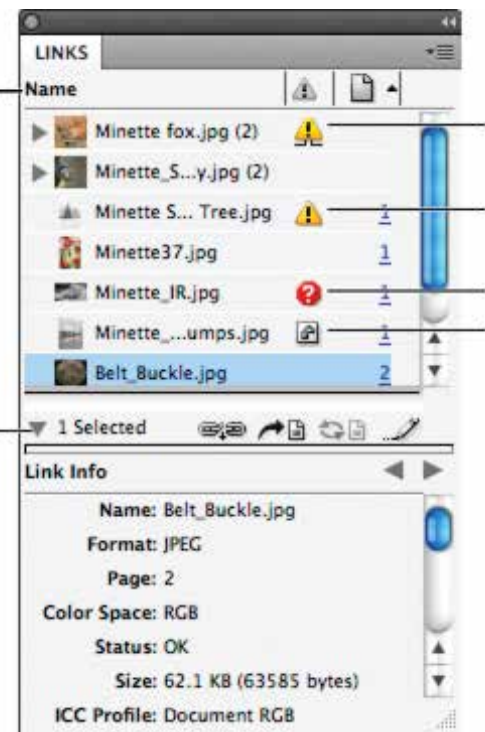
In InCopy, the Links panel also displays linked stories. When you select a linked story in the Links panel, theLink Info section displays information such as the number of notes, the managed status, and the status of tracked changes.

A. Category columns B. Show/Hide Link Information C. One or more instances modified icon D. Modified icon E. Missing-link icon F. Embedded-link icon.

Modified

This icon means that the version of the file on disk is more recent than the version in your document. For example, this icon appears if you import a Photoshop graphic into InDesign, and then you or someone else edits and saves the original graphic in Photoshop.

A slightly different version of the Modified icon appears when a graphic is modified and one or more instances are updated while others are not.

Missing

The graphic is no longer in the location from which it was imported, although it may still exist somewhere. Missing links can happen if someone deletes the original file or moves it to a different folder or server after it's been imported. You can't know whether a missing file is up to date until its original is located. If you print or export a document when this icon is displayed, the file may not print or export at full resolution.

6.8 Work with Links panel columns

You can display additional categories, such as Creation Date and Layer, in the Links panel to display more information about the graphics. For each category, you can determine whether the information appears as a column in the Links panel and in the Link Info section at the bottom of the Links panel.

Choose Panel Options from the Links panel menu.

Select the check boxes under Show Column to add columns in the Links panel.

Select the check boxes under Show In Link Info to display the information in the Link Info section at the bottom of the Links panel.

Click OK.

You can change the order of columns by selecting a column and dragging it to a different location. Drag the column boundaries to change the column width. Click a category title to sort the links by that category in ascending order. Click again to sort in descending order.

Auto Fitting

The introduction of the Auto-Fit feature to CS5 should not be over looked. By the end of this Quick tip youthe designer will be able to save some valuable time when importing images and graphics. Follow the steps mentioned: -

Setp 1: To open the Auto-Fit feature go to Object > Fitting > Frame Fitting Options.

Setp 2: You will be presented with a floating panel. The top section of the panel controls how the images fit within the frame. First tick the Auto-Fit box and then select the fitting option you require from the drop down menu and fill Frame Proportionally and align to the centre of the frame.
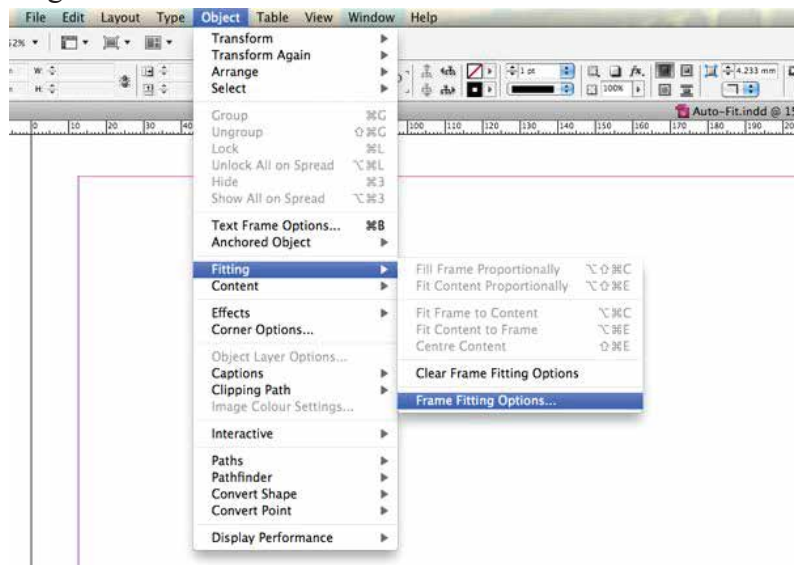
Figure 6.12
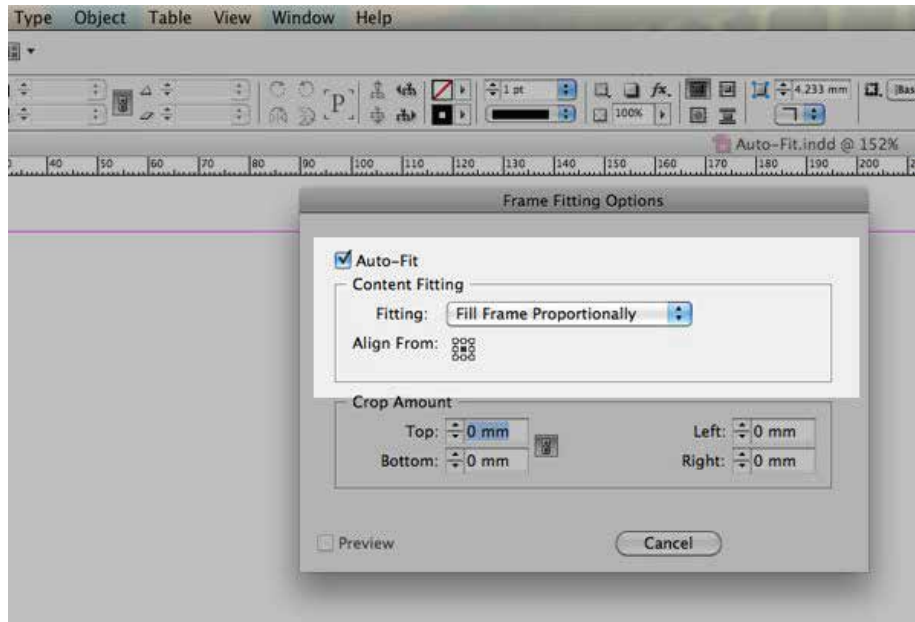
Figure 6.13

Setp 3: Ok, let's begin by importing a number of images to work with.

Once the Auto-Fit feature is active, InDesign indicates this by a ticking a box in the control panel. You can quickly turn Auto-Fit off by unticking the option box too. (Note: The Auto-Fit tick box will be only visible when a frame is selected).

6.9 Importing graphics from Adobe Bridge

Select a graphic from Adobe Bridge, Explorer (Windows), the Finder (Mac OS), or your desktop, and drag it into InDesign. The image must be in a format that InDesign can import.

After dragging a file from any location other than Illustrator, it appears in the Links panel in InDesign. Using the Links panel, you can control versions and update as necessary.

Select the original graphic and Drag the graphic into an open InDesign document window.

Once the Auto-Fit feature is active, InDesign indicates this by a ticking a box in the control panel. You can quickly turn Auto-Fit off by unticking the option box too. (Note: The Auto-Fit tick box will be only visible when a frame is selected).

6.9 Importing graphics from Adobe Bridge

Select a graphic from Adobe Bridge, Explorer (Windows), the Finder (Mac OS), or your desktop, and drag it into InDesign. The image must be in a format that InDesign can import.

After dragging a file from any location other than Illustrator, it appears in the Links panel in InDesign. Using the Links panel, you can control versions and update as necessary.

Select the original graphic and Drag the graphic into an open InDesign document window.

6.10 Multiple graphics using Mini Bridge

Adobe Bridge is a really useful tool for 'bridging' the content of your computer's folders between your Adobe design applications. You can use the programme to organize files, and create sophisticated libraries of image sand text documents ready to use in your layout designs. Mini Bridge creates a miniature version of Bridge within your Adobe application, allowing you to drop content into your InDesign layouts quickly and easily.

Object Style

Object Styles is used to create, edit, and apply object styles. For each new document, the panel initially lists a default set of object styles. Object styles are saved with a document and display in the panel eachtime you open that document. The Text Frame icon marks the default style for text frames; the Graphics Frame icon marks the default style for graphics frames and drawn shapes.

Object Styles panel is also used to create, name, and apply object styles. For each new document, the panel initially lists a default set of object styles. Object styles are saved with a document and display in the panel each time you open that document. The Text Frame icon marks the default style for text frames; the Graphics Frame icon marks the default style for graphic frames; the Grid icon marks the default style for frame grid

6.11 Wrap text around objects

1- To display the Text Wrap panel, choose Window > Text Wrap.

2- Using the Selection tool or Direct Selection tool , select the object you want to wrap text around.

3- In the Text Wrap panel, click the desired wrap shape.

6.12 Clipping Path

Clipping paths are silhouettes around portions of images. They can be used to mask out opaque white backgrounds, as well as create contours around portions of an image for text wraps to follow. Clipping paths are often created using Photoshop, but InDesign can do it too, when there is enough contrast between the image edges and the background.

1- For example, a clipping path will be used to remove the white background from the photo of a tea set.

Figure 6.14
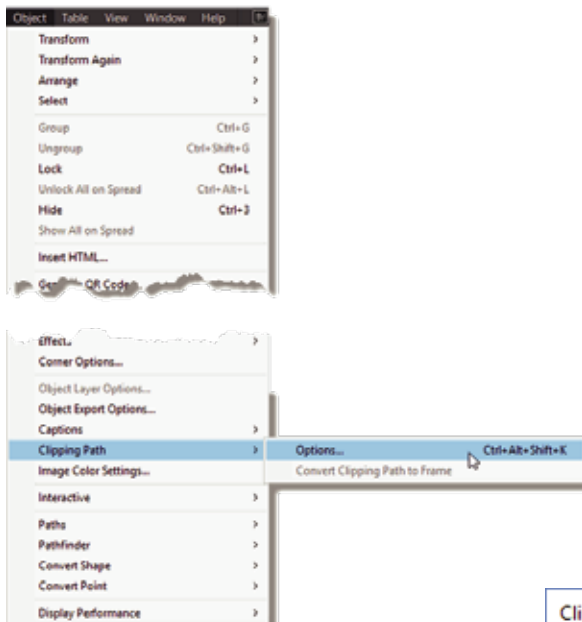
Figure 6.15

2- To create the clipping path, select the image, then go to the Object menu. Scroll down to Clipping Path and choose Options.

3- In the dialog box, check Preview, then go to the Type menu and choose Detect Edges. If there are areas inside the silhouette of the image that should be clipped, check Include Inside Edges. Tolerance can be used to adjust the tightness of the fit of the path. Threshold is used to set the levels of color contrast in the image to be included or ignored.
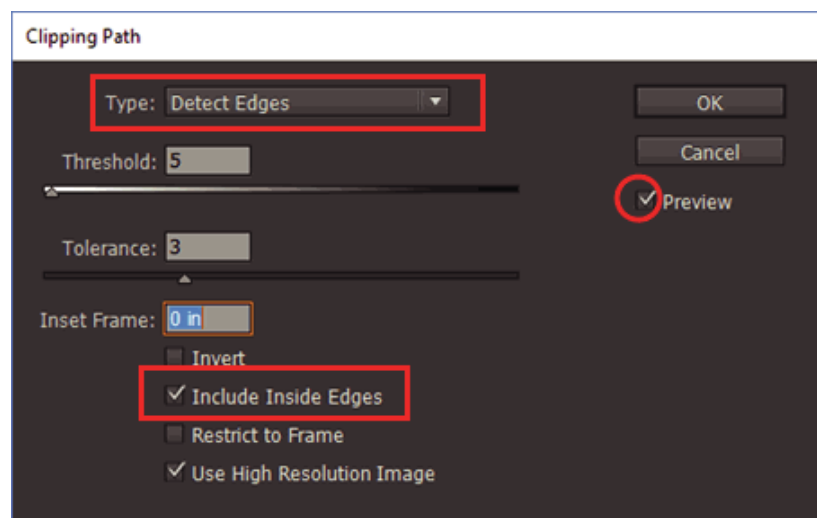
Figure 6.16

4- The white background is now removed.

6.13 Alpha Channel

An alpha channel is an invisible channel that defines transparent areas of a graphic. It's stored inside a graphic with the RGB or CMYK channels. Alpha channels are commonly used in video-effects applications. InDesign automatically recognizes Photoshop's default transparency (the checkerboard background) as an alpha channel. If the graphic has an opaque background, you must use Photoshop to remove the background, or create and save one or more alpha channels with the graphic. You can create alpha channels Background Eraser, or the Magic Eraser. Result of Alpha Channel and Embedded path can be seen in figure.
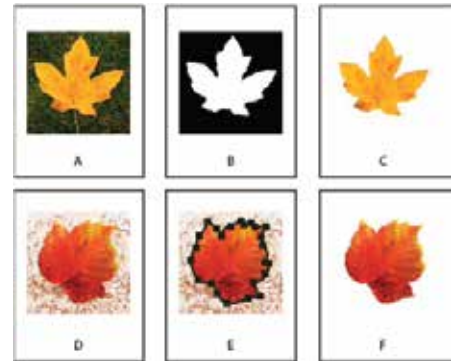
Figure 6.17

6.14 Importing files from Photoshop

1- Have a layered Photoshop file ready to place.
2- Using InDesign, choose File Place.
3- Browse to the location of a layered image file, select the file you want to import, select the Show Import Options check box, and then click Open. A dialog box appears.

Figure 6.18

4- Click the Layers tab and turn off and on the visibility of the layers you want to change or select a saved layer comp from the Layer Comp drop-down list.
5- Click OK to close the Image Import Options dialog box.

Section-III

After completing this section, Students will be able to: -

• *understand table creation, copy/paste information into tables, converting text to table and table to text.*
• *understand formation of row/column, and borders*
• *know formation of cells, text alignment, merging cells, and header cells.*
• *comprehend working with tables in story editors.*

6.15 Table

A table consists of rows and columns of cells. A cell is like a text frame in which you can add text, inline graphics, or other tables. You can create tables from scratch or by converting them from existing text.You can also embed a table within a table.

When you create a table, the new table fills the width of the container text frame. A table is inserted on the same line when the insertion point is at the beginning of the line, or on the next line, when the insertionpoint is in the middle of a line.

Tables flow with surrounding text just as inline graphics do. For example, a table moves through threadedframes when the text above it changes in point size or when text is added or deleted. However, a tablecannot appear on a text-on-path frame.

6.16 Create a table

To create a table we will use insert text option.
1- To draw a table within an existing text frame use the Type tooland place the insertion point where you want the table to appear.
2- Choose Table > Insert Table.
3- Specify the numbers of rows and columns.
4- If your table contents will continue on more than one column or frame, specify the number of header or footer rows in which you want the information to be repeated.
5- Click OK.
The new table fills the width of the text frame.

6.17 Inserting Information (Text) into table

You can add text, anchored objects, XML tags, and other tables to table cells. The height of a table row expands to accommodate additional lines of text, unless you set a fixed row height. You can not add foot notes to tables.
1- Using the Type tool, do any of the following:
2- Position the insertion point in a cell, and type text. Press Enter or Return to create a new paragraph in the same cell. Press Tab to move forward through cells (pressing Tab in the last cell inserts a new row). Press Shift+Tab to move backwards through cells.
4- Copy text, position the insertion point in a cell, and then choose Edit > Paste.
5- Position the insertion point in a cell where you want to add text, choose File > Place, and then double click a text file.

6.18 Add information (graphics) to a table

1-Place the insertion point in the table cell into which you want to add the image.

- Choose File > Place, and select one or more graphic files.

- Select and drag-and-drop one or more graphic from the Graphics category in the CC Libraries panel.

2-To place the image or images, click inside each table cell.

Note:

You cannot drag-and-drop InDesign snippets from the Graphics category in the CC Libraries panel.

When you add a graphic that is larger than the cell, the cell height expands to accommodate the graphic, but the width of the cell doesn't change—the graphic may extend beyond the right side of the cell. If the row in which the graphic is placed is set to a fixed height, a graphic that is taller than the row height causes the cell to be overset.

Convert tables to text

1-Using the Type tool , place the insertion point inside the table, or select text in the table.

2-Choose Table > Convert Table To Text.

3- For both Column Separator and Row Separator, specify the separators you want to use.

4- For best results, use a different separator for columns and rows, such as tabs for columns and paragraphs for rows. Click OK.

6.19 Convert text to table

The text that needs to go in a table often already exists, usually in a tab-delimited format (meaning that the cells of information for the table are separated by tabs and paragraph returns). You do not need to retype this text into a new table; you can easily convert it into a table. To do this:

1- If necessary, import the text into a text frame.

2-Choose Type > Show Hidden Characters to determine how the text is currently separated Usually, you will see tabs between "columns" of information and paragraph returns between "rows" of information.

Check that all the columns have the same number of tabs between them; it doesn't matter if the tab don't line up and the text looks messy. All that matters is consistency in the separation characters used.

3-Select the Type tool and select the text to convert to a table.

4-Choose Table > Convert Text to Table.

5-In the Convert Text to Table dialog box, confirm the selections for the Column Separator and Row Separator.

If necessary, you can change the separators by choosing Tab, Comma, or Paragraph from the menus or entering a different separation character (such as a semicolon) in the fields.

6.20 Insert a column

1-Place the insertion point in a column next to where you want the new column to appear.

2-Choose Table > Insert > Column.

3-Specify the number of columns you want.

4-Specify whether the new column or columns should appear before or after the current column, and then click OK.

5-The new cells have the same formatting as the text in the column in which the insertion point was placed

6.21 Insert multiple rows and columns

1-With the insertion point in a cell, choose Table > Table Options > Table Setup.

2-Specify a different number of rows and columns, and then click OK.

6.22 Insert Table strokes (Border)

1-With the insertion point in a cell, choose Table > Table Options > Table Setup.

2-Under Table Border, specify the desired weight, type, color, tint, and gap setting.

3-Under Stroke Drawing Order, select the drawing order from the following options:

Best Joins

If selected, row strokes will appear to the front at the points where strokes of different colors cross. In addition,when strokes such as double lines cross, the strokes are joined and the crossing points are connected.

Row Strokes In Front

If selected, row strokes appear in front.

Column Strokes In Front

If selected, column strokes apear in front.

6.23 Text Alignment

With Adobe InDesign, you can align text horizontally as well as vertically within a text frame on the page. Aligning text horizontally gives you the ability to justify the text to the left, center or right of the frame, while vertical alignment pushes text to the top, center or bottom of the frame. Use InDesign's "Text Frame Options" tool to achieve the text alignment that you require for your document.

Align Text Vertically

1. Launch Adobe InDesign. Open the document containing the text that you want to align vertically.

2. Click the "Type" tool, which is represented by the "T" icon in the toolbar. Click on a text frame to highlight the item. Alternately, click the "Selection" tool, represented by the bar icon in the toolbar, and then select and highlight the text in a text frame.

3. Click "Object" in the main menu. Select "Text Frame Options" from the context menu to open the Text Frame Options dialog. Locate the "Vertical Justification" section in this box.

4 Click the "Top" option to vertically align the text from the top of the text frame. Select the "Center" option to vertically align text in the center of the frame. Choose the "Bottom" option to align the text from the bottom of the frame. To evenly space text lines between the top and bottom of the frame, click the "Justify" option.

5 Click the "OK" button to save your changes.

Align Text Horizontally

1 Select the text frame with the "Type" tool or "Selection" tool from the toolbar.

2 Click the button for the preferred alignment from the options in the "Control" or "Paragraph" panels. Select from any of the standard horizontal alignment options of "Align Left," "Align Center" and "Align Right." You can also use the text alignment and justification options to align and justify text. Options include "Left Justify," "Center Justify," "Right Justify" and "Full Justify." Additional options include "Align Toward Spine" or"Align Away From Spine" to align the text flow toward or away from the spine edge of the page.

3 Click "OK" to save your changes.

Merge Cells

You can combine two or more cells in the same row or column into a single cell. For example, you can merg the cells in the top row of the table to create a single cell to be used for the table title.

1- Using the Type tool , select the cells you want to merge.

2- Choose Table > Merge Cells.

6.24 Unmerge cells

Place the insertion point in the merged cell and choose Table > Unmerge Cells.

Header Cells

When you create a long table, the table may span more than one column, frame, or page. You can use header rows to repeat the information at the top or bottom of each divided portion of the table.

You can create Header Rows in InDesign when you insert a table:

1-Place your cursor where you'd like to add the table

2-Table > Insert Table

3-Choose how many Header Rows you'd like and click OK

Or you can convert Body Rows to Header Rows once the table has been imported into InDesign from Word Select the rows at the top of the table to create header rows, or at the bottom of the table to create footer rows Choose Table > Convert Rows > To Header

Story Editor

When you choose Edit > Edit In Story Editor, tables and their contents appear in Story Editor. You can edit tables in Story Editor.

Figure 7.19

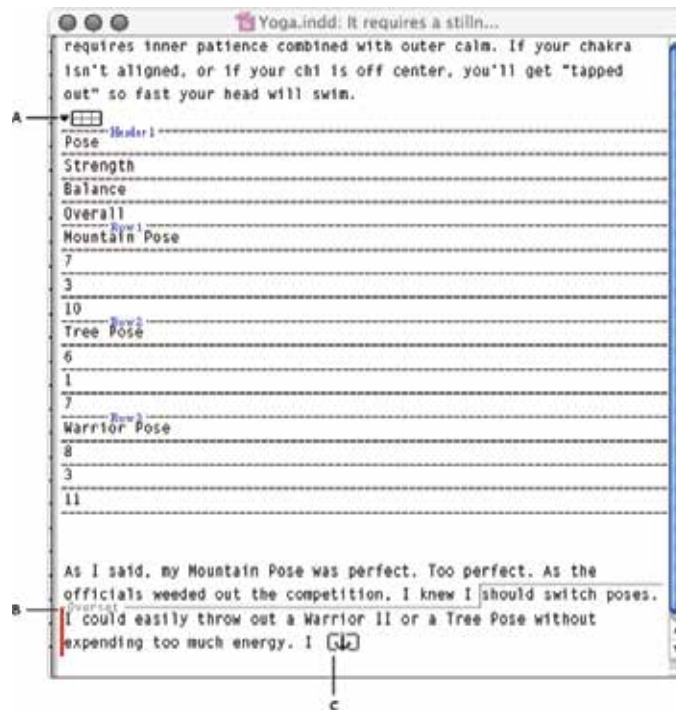1-To expand or collapse the table in Story Editor, click the triangle to the left of the table icon at the top of the table.

2-To determine whether the table is sorted by rows or columns, right-click (Windows) or Ctrl-click (Mac OS) the table icon and choose Arrange By Rows or Arrange By Columns.

3-Use Layout view to modify and format the table. You cannot select columns or rows in Story Editor.

Section-IV

After completing this section, Students will be able to: -

• *comprehend coloring to frame and text, live corner effects, new swatch creation, and tint reduction*
• *explain gradient (radial/ linear)*
• *know use of eyedropper tool to copy frame attribute*
• *Export files in different formats.*

6.25 Color to Text Frame

Adobe InDesign provides a number of tools for applying color, including the Toolbox, the Swatches panel, the Color panel, the Color Picker, and the Control panel.
When you apply a color, you can specify whether the color applies to the stroke or fill of an object. The stroke is the border or frame of an object, and the fill is the background of an object. When you apply a color to a text frame, you can specify whether the color change affects the text frame or the text inside the frame.
1-Select the object you want to color by doing one of the following:
For a path or frame, use the Selection tool or the Direct Selection tool , as necessary.
For a grayscale or monochrome (1-bit) image, click the Content Grabber or use the Direct Selection tool. You can apply only two colors to a grayscale or monochrome image.
For text characters, use the Type tool to change the text color of a single word or the entire text within a frame.
2-In the Toolbox or in the Color or Swatches panel, select the Formatting Affects Text or Formatting Affects Container to determine if color is applied to the text or the text frame.
3-In the Toolbox or in the Color or Swatches panel, select the Fill box or the Stroke box to specify the fill or stroke of the object. (If you selected an image, the Stroke box has no effect.)

6.26 Live Corner Editing

Use Live Corner Editing
1. Select View>Extras>Show Live Corners.
2. Select a rectangular frame with the Selection tool. A yellow square will appear on the upper right side of the frame edge.
3. Click the yellow square to enter Live Corner Editing mode. You'll see yellow diamonds at each corner.
4. Drag any of the yellow diamonds to change the frame's corner effect. Dragging away from the corner reduces the size, while dragging toward the frame center increases the size.
Live Corner Editing screenshot
5. Hold the Shift key while dragging to change the radius of a single corner. OPT-click (ALT-click on a PC) on a yellow diamond to toggle among the available corner shapes.
When you're done editing the corner, click away from the frame to exit Live Corner Editing mode, and the yellow squares will disappear.

6.27 Swatches panel overview

The Swatches panel (Window > Color > Swatches) lets you create and name colors, gradients, or tints, and quickly apply them to your document. Swatches are similar to paragraph and character styles; any change you make to a swatch affects all objects to which the swatch is applied. Swatches make it easier to modify color schemes without having to locate and adjust each individual object.

Create color swatches

1- Choose New Color Swatch in the Swatches panel menu.

2- For Color Type, choose the method you'll use to print document colors on a printing press.

3- For Swatch Name, do one of the following:

If you chose Process as the color type and you want the name always to describe the color values, make sure that Name With Color Value is selected.

If you chose Process as the color type and you want to name the color yourself, make sure that Name With Color Value is deselected, and type a Swatch Name.

If you chose Spot, type a Swatch Name.

4-For Color Mode, choose the mode you want to use in defining the color. Avoid changing the mode after you define a color.

5-Do one of the following:

Drag the sliders to change the color values. You can also enter numeric values in the text boxes next to the color sliders.

For spot colors, choose from color libraries in the Color Mode menu.

6-If an out-of-gamut alert icon appears, and you want to use the in-gamut color closest to the color you originally specified, click the small color box next to the alert icon.7-Do one of the following: Click Add to add the swatch and define another one. Click Done when finished.Click OK to add the swatch and exit the dialog box. (Referrence present in Figure 6.20)

6.28 Gradient

A gradient is a graduated blend between two or more colors or tints of the same color or different colors. You can use gradients to create color blends, pie-charts, add volume to vector objects, and adda light and shadow effect to your designs.

Linear gradient

Indesign shades from the starting point to the ending point in a straight line.

Radial gradient

Indesign shades from the starting point to the ending point in a circular pattern.

Angular gradient

Indesign applies a fill with color gradients that sweep around a shape from the center of a circle.

Example of Gradients can be seen in figures below:

Figure 6.20

Figure 6.21: Radial Gradient   *Figure 6.22: Linear Gradient*
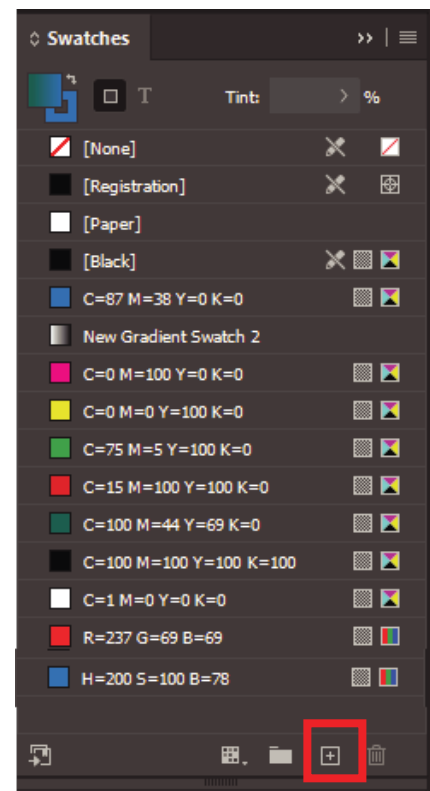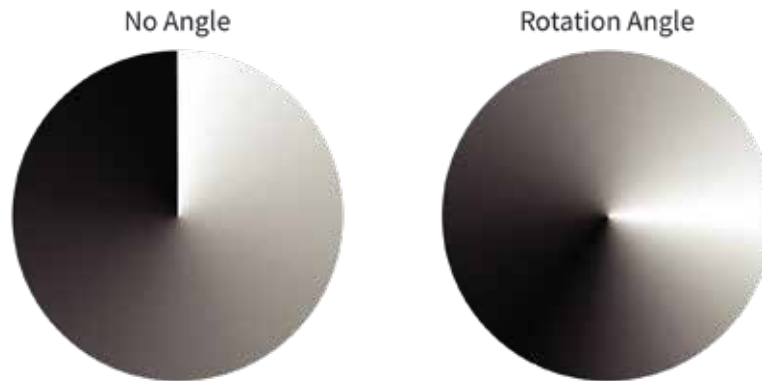
Figure 6.23: Angular Gradient

6.29 Tints

A tint is a screened (lighter) version of a color. Tinting is an economical way to make additional spot color variations without having to pay for additional spot color inks. Tinting is also a quick way to create lighter versions of process colors, although it doesn't reduce the cost of printing process colors. As with non-tinted colors, it's best to name and store tints in the Swatches paneso that you can easily edit all instances of that tint in your document, Referrence in figure.

Figure 6.24

Create and edit tints

You can adjust the tint of an individual object, or create tints by using the Tint slider in the Swatchespanel or Color panel. The tint range is from 0% to 100%; the lower the number, the lighter the tint will be.

Because colors and tints update together, if you edit a swatch, all objects that use a tint of that swatch update accordingly. You can also edit the base swatch of a named tint using the Swatch Options command in the Swatches panel menu; this updates any other tints based on the same swatch.

Create a tint swatch using the Swatches panel

1- In the Swatches panel, select a color swatch.
2- Select the arrow next to the Tint box.
3- Drag the Tint slider, and click the New Swatch button or select New Tint Swatch in the Swatches panel menu.
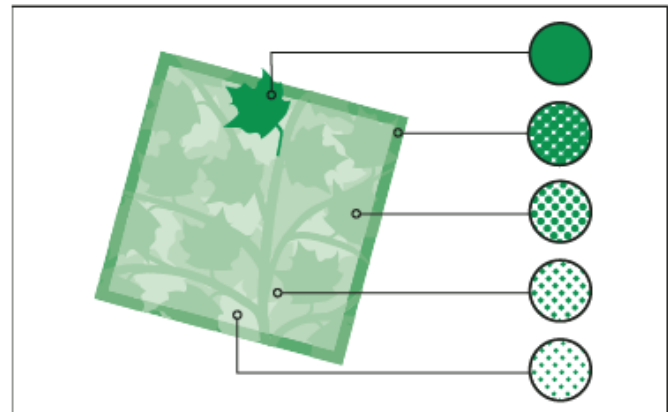
6.30 Eyedropper

Eyedropper tool is used to copy type attributes such as character, paragraph, fill, and stroke settings, and then apply those attributes to other type. By default, the Eyedropper tool copies all type attributes. To customize the attributes you want to copy with the Eyedropper tool, use the Eyedropper Options dialog box.

The Eyedropper tool is available only in Layout View.

Copy type attributes to unselected text

1-With the Eyedropper tool , click the text that is formatted with the attributes you want to copy. (The text can be in another open document.) The eyedropper pointer reverses direction, and appears full , to indicate that it's loaded with the attributes you copied. When you position the eyedropper pointer over text, an I-beam appears next to the loaded eyedropper.

Figure 6.25

2-With the Eyedropper tool, select the text you want to change.

The selected text takes on the attributes loaded in the eyedropper. As long as the Eyedroppe tool is selected, you can continue to select text to apply formatting.

3-To deselect the Eyedropper tool, click another tool. (Referrence can be seen in figure below)
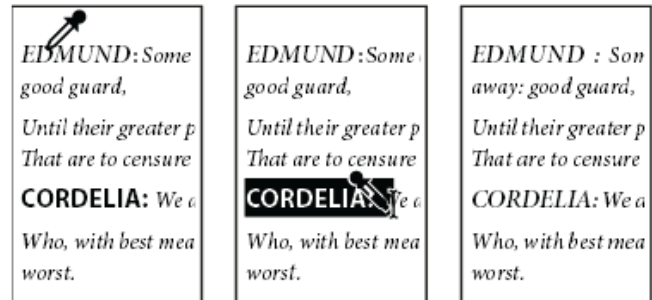
6.31 Exporting files

You can save all or part of an InDesign story in file formats that you can open later in other applications. Each story in a document exports to a separate document.

InDesign can export text in several file formats, which are listed in the Export dialog box. The formats listed are used by other applications, and they may retain many of the type specifications, indents, and tabs set in your document.

You can save sections of commonly used text and page layout items as snippets.

1- Using the Type tool , click in the story you want to export.

2- Choose File > Export.

3- Specify a name and location for the exported story, and select a text file format under Save as Type (Windows) or Format (Mac OS).

If you don't see a listing for your word-processing application, you can save the document in a format the application can import, such as RTF. If your word-processing application doesn'tsupport any other InDesign export formats, use a text-only format. Note, however, that exportingin text-only format removes all character attributes from the text.

4- Click Save to export the story in the format you've selected.

EXERCISE

Select the most suitable option.

1. Adobe InDesign is used to create_____.
a) Newsletter   b) Vectors Images   c) Logo   d) 3D Objects

2. The pre-built preset workspace is_____.
a) News Publishing   b) Web Publishing   c) Digital Publishing   d) none

3. Each Document Contains_____.
a) One Layer   b) Two Layers   c) Three Layers   d) Four Layers

4. A Master Page is
a) First Page   b) Last Page   c) Background   d) None

5. Text Formatting contains_____.
a) Word formatting   b) Character Formatting   c) Paragraph Formatting   d) B and C

6. Text Frames Contains_____.
a) Frame Grids   b) Frame Patterns   c) Frame Border   d) Outlines

7. Page Size refer to_____.
a) Publication Area   b) Printing Area   c) UI Design   d) Resolution

8. Each Document has a_____.
a) Disclosure Triangle   b) Disclosure Circle   c) Disclosure Square   d) None

9. Objects on Masters Appear At the_____ of each layer.
a) Top   b) Middle   c) Bottom   d) None

10. Character Styles Allow you to save and re-use specific_____.
a) Text Formatting   b) Font Face   c) Font Style   d) Font Color1

11. Paragraph Formatting Allow you to Save and re-Use_____.
a) Tabs   b) Indents   c) Font Styling   d) A and B

12. _____ Tool is used to select individual points on a path
a) Selection Tool   b) Direct Selection Tool   c) Position Tool   d) None

13. Objects on Master Page will appear on_____.
a) First Page   b) Last Page   c) All Pages   d) none

14. Merging Master Items will move master items
a) Behind Document Page Object   b) On Top of The First Layer
c) Behind Second Layer   d) None

15. A paragraph in InDesign is any text that ends with_____.
a) Full Stop   b) Hard Return   c) Question Mark   d) Semi Colon

Answer the following questions briefly.
1.What are tints and Gradients? Differentiate.
2. What are different File Formats that Indesign can support?
3. Which paragraph styles are present in adobe InDesidgn?
4. Which character styles are available in InDesign?
5. What do you mean by color to text frame in InDesign?
6. Define gradient, How many types of gradients there are?

Write answers of the following questions in detail.
1. What is Adobe InDesign ? Explain it's workspace.
2. What are different Paragraph and Character Styles and also name them?

ACTIVITIES

1. Design a 10 pages fashion magazine by using different style, text, and format.
2. Design a magazine by customizing the link panels, locate missing images, and adding.
3.Design a table of content for a book.
4. Make a colorful magazine keeping in mind color harmony.
5. Create a Workspace in Indesign.
6. Edit Corners of a Square using Live Corners.
7. Create a Color Swatch of five different colors.
8.Create a Table and merge two cells.
9.Use eyedropper tool to copy a style of frame.
10.Make different color gradients.
11.Export files in different formats.

Chapter 7: Freelancing

After completing this section, Students will be able to: -

• *define freelancing*
• *understand importance of freelancing*
• *enlist top freelancers worldwide in graphic designing and media production*

7.1 Freelancing

Freelancing means to work as an independent company or professional rather than be employed by someone else. Freelancers are self-employed and often referred to as independent contractors.Freelancers are hired by other companies on a part time or short-term basis.

7.2 Importance of freelancing

Following is the importance of freelancing:
Freelancing is one of the most rewarding things you can ever do. It brings a lot of freedom, and control over one's own destiny. It's also incredibly challenging, but, nothing beatsyour own business. If you think about Freelancing but something holds you back.

1. You Are Your Own Boss

Being a freelancer you are your own boss. You don't need to work under anyone or follow anyone's instruction. You have control over your working life and can do work anytime according to your ease/schedule.
No more office politics, bad colleagues or annoying people to deal with. Only you,your slippers and

2. No Office Politics

A nice cup of tea – all at home in your home office. You do not have to worry about attracting attention and competing with colleagues. You are alone and that's just great.

3. You Make Decisions

Do you want to change the look and feel of your website? You can. Would you like to decide with which clients you would like to work? You can. As a freelancer, you can make all decisions. You are in control.

4. You Can Always Do What You Want

Freelancing brings a wealth of freedom, if that's important to you. No one can tellyou what to do and no one can stop you from doing anything. You can work as freely as you like.

7.3 Freelancing as a top rated seller

We will use an example of one of the most used freelancing website, **www.fiverr.com.** In order to be a top rated seller you need to fulfill following requirements:
• Be an active seller for at least 180 days.
• Complete at least 100 orders (all time)
• Earn $20,000 or more.
• Maintain a 4.7-star rating over 60 days.

• Deliver a 90% response rate score over 60 days.
• Score a 90% order completion rate over 60 days.
• Achieve a 90% on-time delivery score over 60 days.

There are many Top Rated sellers on the platform, their name and niche is describedbelow (right current/ updated top rated sellers: -

1- **Anniejenkinson** is an outstanding editing for authors.

2- **Alinaserv** is a professional flyer and book cover designer.

3- **Gringlue** is a professional flyer, brochure and social media designer.

4- **Mk_sanwal** is a top rated logo designer.

Section-II

After completing this section, Students will be able to: -
- *define offline freelancing*
- *define online freelancing*
- *describe platforms of freelancing*

7.4 Offline vs Online Freelancing

There are two main approaches to doing your freelance business. Location-based in the physicalenvironment (offline) or online purely digitally. By online freelancing, It means the type of work thatyou can do purely remotely e.g your home offices starting from finding clients to executingthe work and getting paid. LinkedIn and other professional platforms as well as freelance sites such as Fiverr, Upwork, or PeoplePerHour make online freelancing possible.

Offline freelancing is the type of work that you would typically do in the physical world, i.e. meeting clients for coffee and lunch, going to meetings, perhaps even doing the work in the client's location too.

In this brief comparison, I list the differences as a guy who has done both kinds of businesses. Several aspects affect how each type of business needs to be run, what potential they offer, and what risks are involved.

7.5 Difference between online and offline freelancing.

Difference between Online and Offline freelancing is described in table below:

	Online	Offline
Marketing Requirements	Online Presence	Networking skills
Speed of getting contracts	Hours or days	Days or weeks
Competition	Global, tough	Local, easy
Required expertise	Very high	High
Skillset type	Specialist	Generalist
Payscale maximum	Global top pay	Local top pay

Table 7.1

7.6 Best Freelance Platforms

Freelance platforms help companies find and hire independent professionals for temporary job roles or special projects. These platforms offer a marketplace for businesses to browse profiles of freelancer candidates based on skills, experience, location, or other criteria. Alternatively, companies can also post a project description and solicit proposals from freelancers. These capabilities help companies of all sizes outsource work on projects that require specialized skills or additional man power, freeing up full-time employees to focus on other business activities. Some platforms focus on sourcing freelancers with certain skills, such as writing, design, or programming, while others provide marketplaces for professionals with a wide variety of skills. Following are some of the most popular freelancing platform:

Upwork is the world's largest work marketplace connecting million of business with independent talent around the globe. We serve everyone from one-person start-ups to 30% of the Fortune 100 with a powerful trust-driven platform that enables companies and freelancers to work together in new ways that unlock their potential. Our talented community earned over $2 billion on Upwork in 2019 across more than 8,000 skills, including website and app development, creative writing, design and customer support etc.

Fiverr concept of a marketplace that would provide a two sided platform for people to buy and sell a variety of digital services typically offered by freelance contractors. Services offered on the site include writing, translation, graphic design, video editing and programming etc. Each service offered is called a "gig". Fiverr's services start at US$5, and can go up to thousands of dollars with gig extras.

Freelancers is the world's largest freelancing and crowdsourcing marketplace by number of users and projects. Itconnect over 55,493,150 employers and freelancers globallyfrom over 247 countries, regions and territories. Through marketplace, employers can hire freelancers to do work in areassuch as software development, writing, data entry and design right through to engineering, the sciences, sales and marketingaccounting and legal services.

Section-III

After completing this section, Students will be able to: -
• *understand about portfolio*
• *know about creating Facebook pages/ Instagram account/ Bedance profile /*
Flicker profile

7.7 Portfolio

A portfolio is a purposeful collection of a person's work that exhibits a person's effort, progress, achievements and competencies.
A portfolio for a freelancer may include a reflective account of a practice placement, presentation, learning experience or group experience. The person is able to:

- Accumulate and store evidence (in one central online area) of the many transferable skills persons develop.
- Self assess and monitor their own learning development.
- Develop and present a portfolio of work or reflective account on an aspect of person's learning as part of course assessment.

Augusto Garcia

Sr. Product & UX Designer

I am a driven and thorough designer who thoroughly enjoys engaging in all steps of the product life-cycle. My main goal is to create products that look beautiful and function intuitively for the user.

ABOUT   CONTACT   RESUMÉ

- Build a resume for employment applications and as evidence of learning achievements for a professional body.
- Apply for jobs by showing evidence of relevant work experience and suitable 21st century skills.
- We can referr the below figure as an example of portfolio:

7.8 Creating Social Accounts
Facebook
Before you can sign up for your Facebook Business Page, you need to log into your personal Facebook account. Don't worry—the information from your personal account will not be publicly visible on your business Page.
Step 1: Sign up
Go to facebook.com/pages/create.
Enter your business information in the panel on the left. As you do so, the page preview will update in real time on the right, as can be seen in figure below:
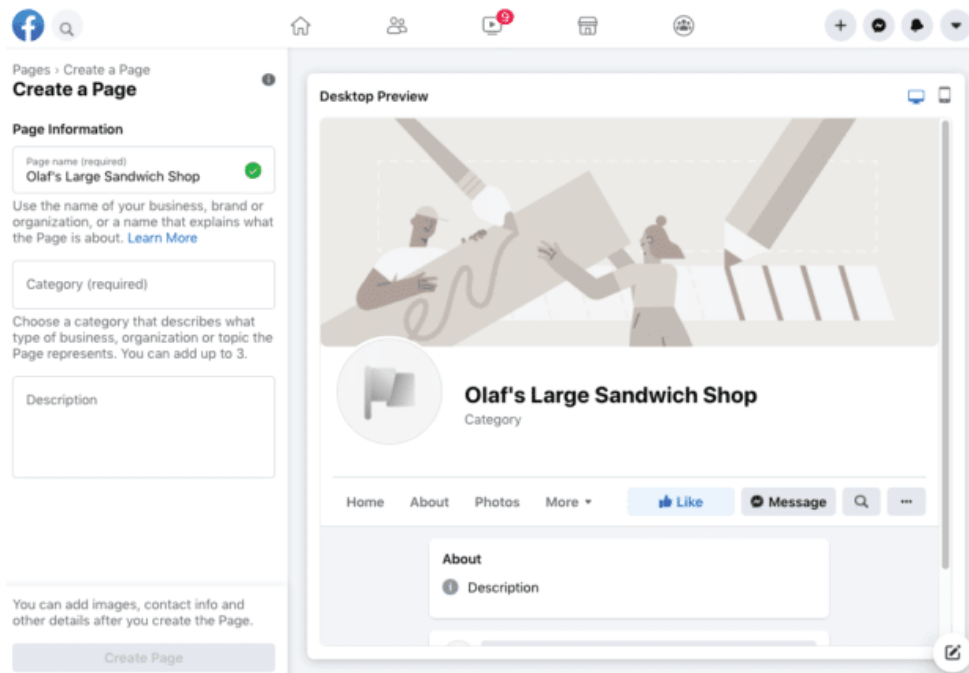
Figure 7.2

For your page name, use your business name or the name people are likely to search for when trying to find your business.

For category, type a word or two that describes your business and Facebook will suggest some options. You can choose up to three of the suggestions, refer to image.

Figure 7.3

Next, fill in the Description field. This is a short description that appears in search results. It should be just a couple of sentences (maximum 255 characters).

When you're happy with your description, click Create Page.

Figure 7.4

Instagram

Unlike other social networks, posting content on Instagram can only be done using the mobile app. So step 1 is to pull out your smartphone, find Instagram in your app store and download.

Note: We're using iPhone screenshots throughout this post, but the layout should look almost the same on Android devices.

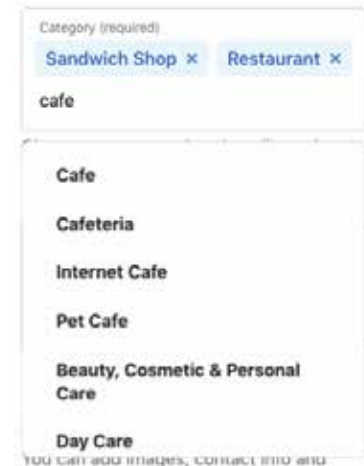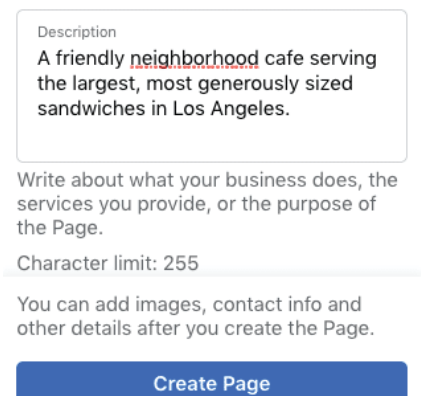2. Create an account using an email address while it might seem easiest to use your personal Facebook account…don't do it! That will create an account based on your personal Facebook page. Since this is for your business, you should use your business email address.

Figure 7.5

3. Instagram profile

If you're setting up Instagram for a company, the username should be the company's name, or as close as you can get it. If you're a real estate agent, insurance agent, or the like, choose a variation of your name, business, location. You need something that distinguishes you from a personal account.

For example, janejones_NYC_realtor or janejones_insta will work.
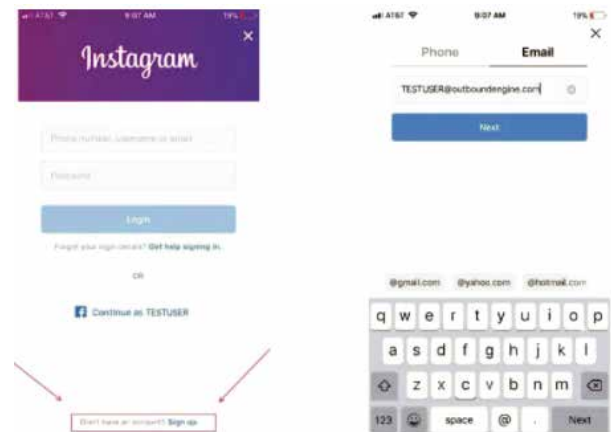
Figure 7.6

4. Picking the right profile photo

Picture time! Your profile picture will be your logo or something recognizable that's associated with your brand if you don't have a logo. Remember, this is your Instagram business account, not a personal page. Avoid the selfies or group pics. If you're the face of your business, use a professional headshot you like or take a new one.
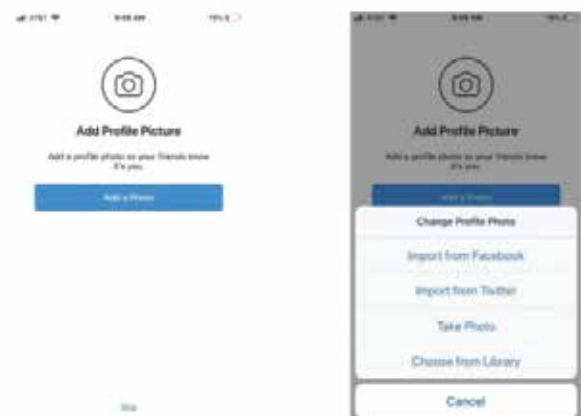
Figure 7.7

After that, you'll see a page with suggested accounts to follow. You don't have to follow any of them – and you shouldn't if they don't fit your strategy. For example, don't follow Entertainment Weekly if you're setting up a business account for a real estate company. Click "Done" in the top right corner to move to the next step.
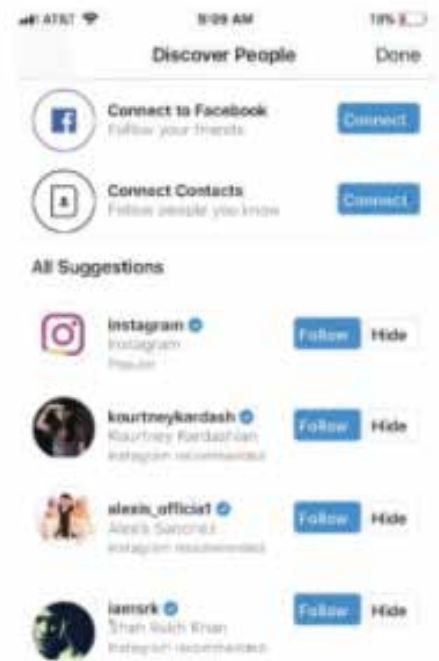
Figure 7.8
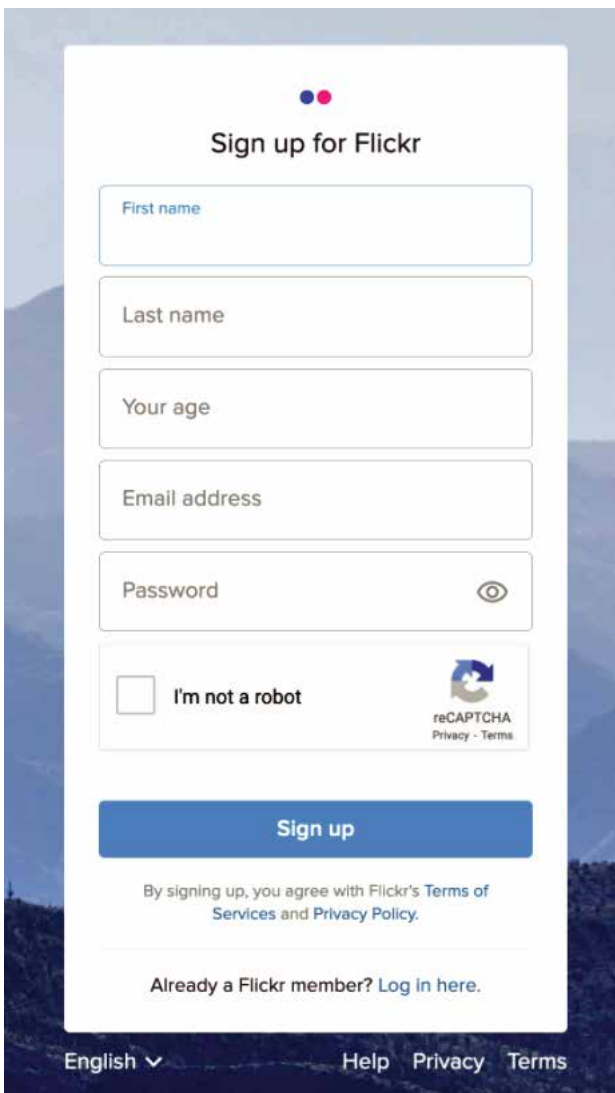
Flickr

What is flickr for freelancers ?

1- Go to our sign up page.
2- Enter your information.
3- Click Sign Up.
4- Check your email for a Verification Link.
5- Click Confirm my Flickr account.
6- Sign in to your account.

Figure 7.9

Section-IV

After completing this section, Students will be able to: -

• *learn about creating profile on different freelancing platforms*
• *understand gig creation in Fiverr*
• *understand Niche selection*
• *understand the process of bidding*

7.9 Signing Up on Freelancing Platform

1. From Fiverr's homepage, click Join.
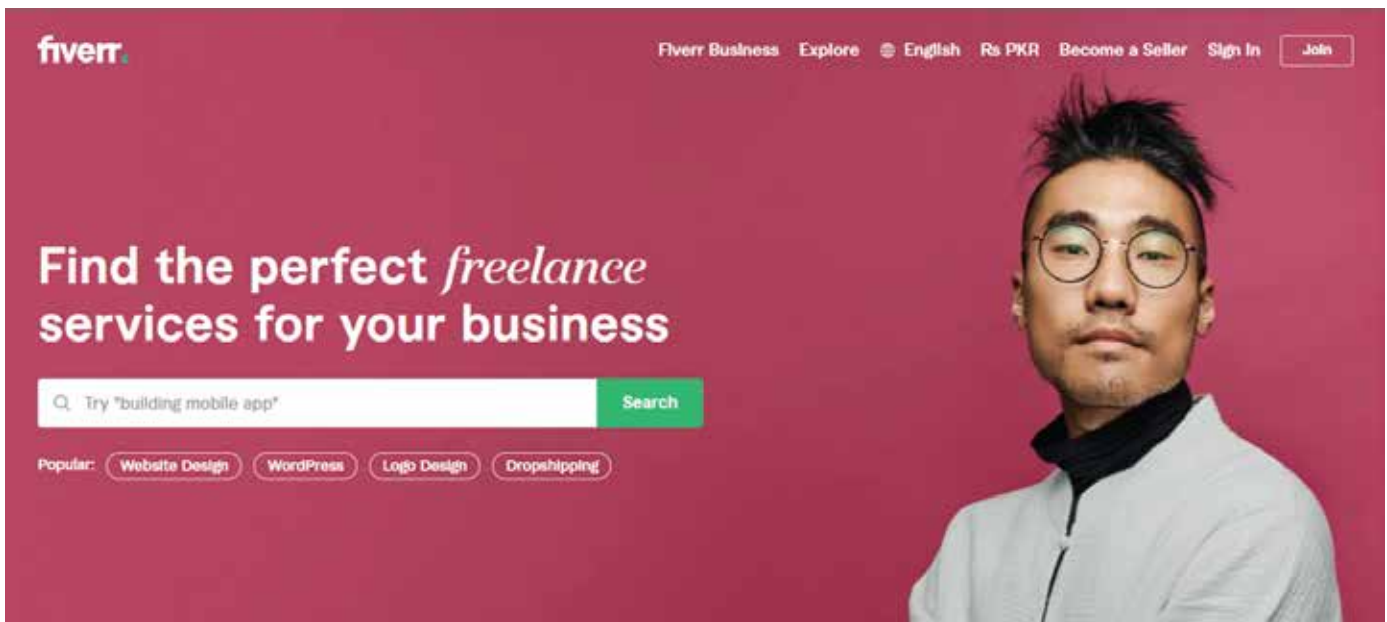
Figure 7.10

2. Enter your email address and click Continue.
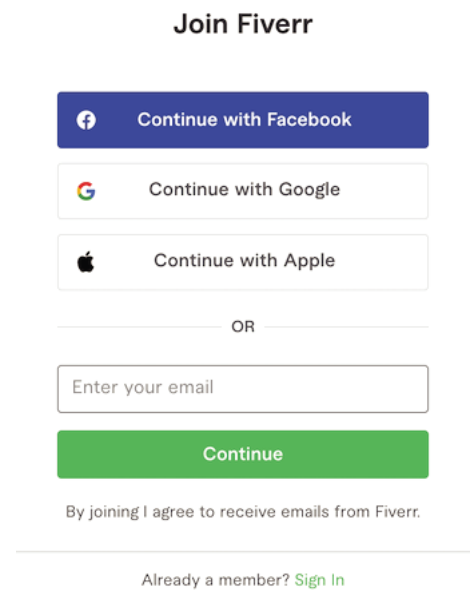
Figure 7.11

Note: You can also join with Facebook, Google Connect, and Apple Connect.

3. Choose your username!

Notes:

- Once you've successfully created your account, your username can't be changed.
- Your username is your display name (and is within your Fiverr URL), so think long and hard, and choose wisely!

4. Choose your password and click Join.

5. You are now registered on Fiverr! Please check your registered email address as you will receive an email to activate your account.

Note: The activation link in the email is only valid for 30 days.

6.Within the activation email you receive from Fiverr, click Activate Your Account.

7.10 Choosing a Niche/Field to work on

1. Find All Your Skills

To get started, first write down all the skills in which you're an expert. You can get help from your friends and family members too. There must be many skills in which you're an expert but you may not know about it.

All you have to do is just to find out all these untapped skills.

2. Competition Level

Now, you have a list of skills that you can offer to your clients on Fiverr. It's time to check which one will perform best and which not. To check this, you have to analyze the competition level for every particular skill.

You have to check whether a Gig on this skill will rank higher in search results or not. If there are too many Gigs to that particular niche then the competition would be high.

3. Trend

Now it's time to check if the keyword that you picked will work for a long time or not. This step is also very important to clear before starting a gig. To clear this point, you can analyze how many reviews popular gigs have and the number of orders in queue.

More reviews and more order in the queue means this keyword is trending and you can start here. More accurate results you get for the Fiverr niche.

7.11 Creating a gig on Fiverr

Although Fiverr has an iOS app, gig creation can only be completed using a computer. The fiverr mobile app doesn't have a built-in feature for gig creation. So you need to log in into your Fiverr account using a computer.

Step #1: On your Fiverr homepage, click on Selling and then on Gigs.

Step #2: Click on create a new gig
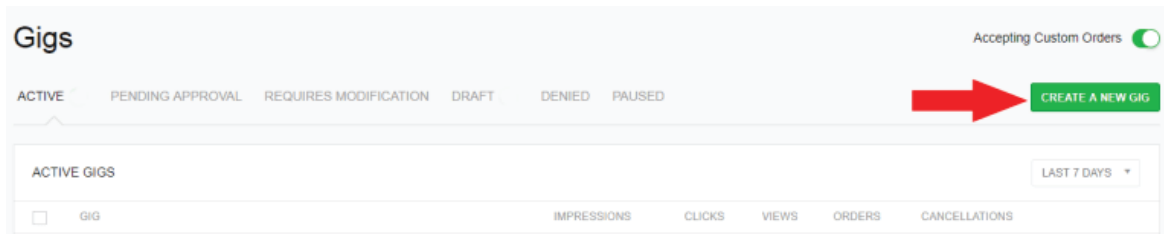
Figure 7.12

If you've not created one, you'll be prompted to do so. Click on 'create a new gig', found at the top-right corner.

Step #3: Create a Gig title, select category and meta tags.
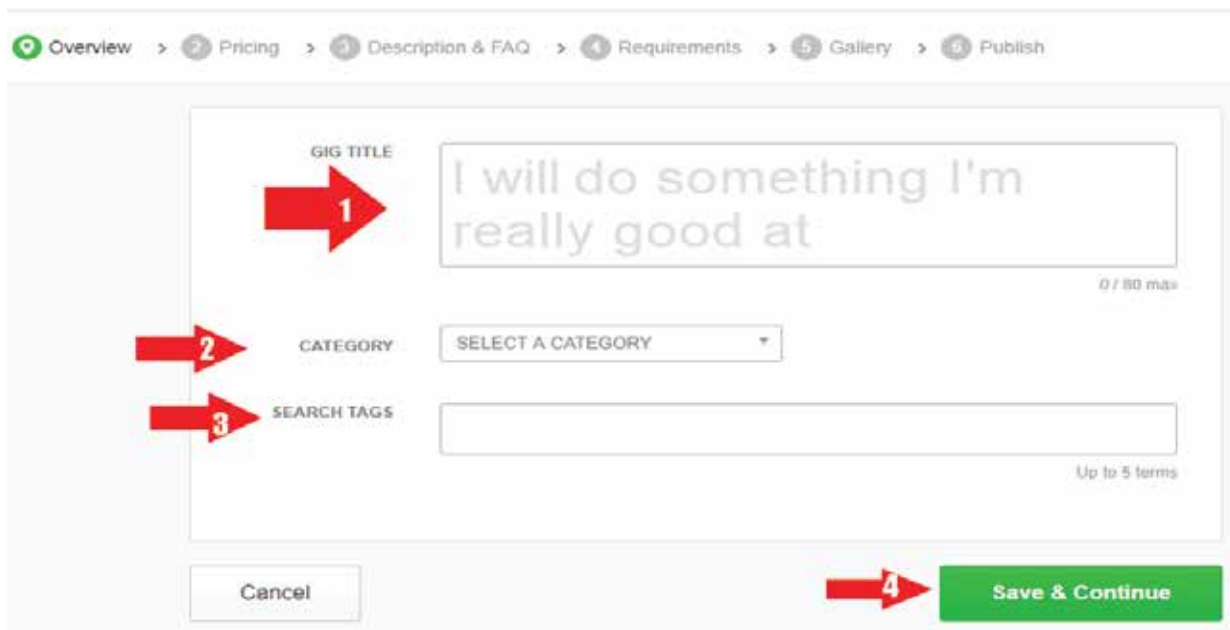
Figure 7.13

Step #4: Set your gig pricing.
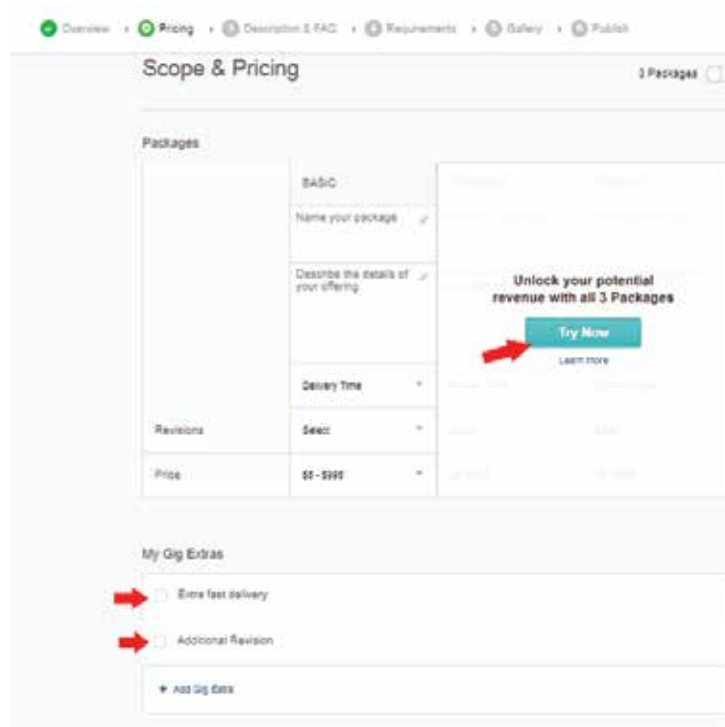
Figure 7.14

Your gig pricing has a base price of $5 and can be set to as high as $995. Also, you can unlock other packages for the same gig. If you wish to, click on 'Try Now'.

Figure 7.15

With the Standard and Premium package unlocked, you can set a different prices for all the same gigs, depending on the extra services you want to render.

For instance, if your basic plan is set at 5 dollars, and the delivery date is set at 3 days, you could decide to set your standard price to $10, for a two days delivery.

Your gig revisions are the number of times you intend to revise the finished work, should in case a buyer complains and requests for a review.

Depending on your Category and Sub-category, other options may be provided in your gig pricing.

Step #5: Add photos or a video to your gig
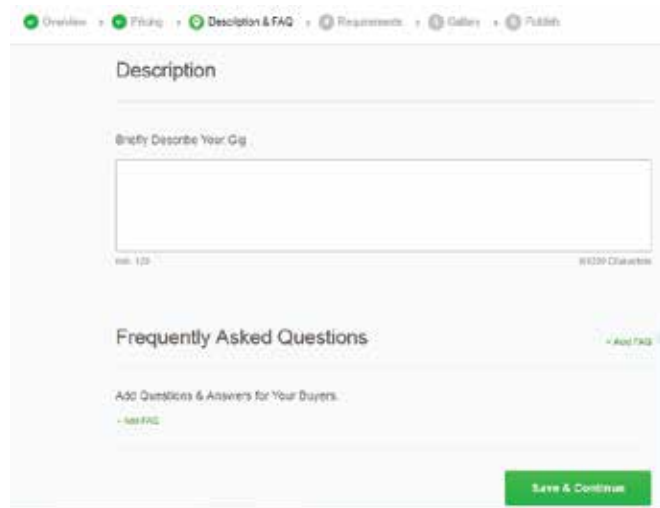
Figure 7.16
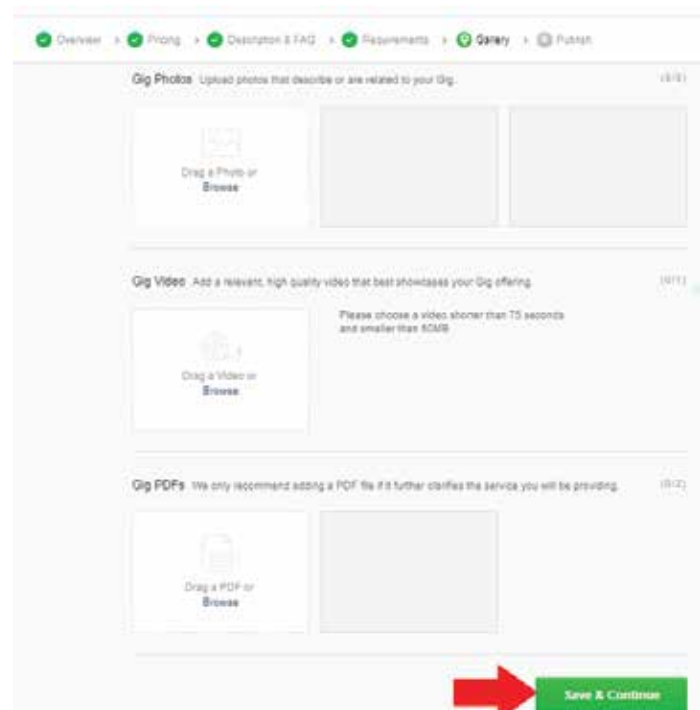
Figure 7.17

Step #6: Publish your gig.
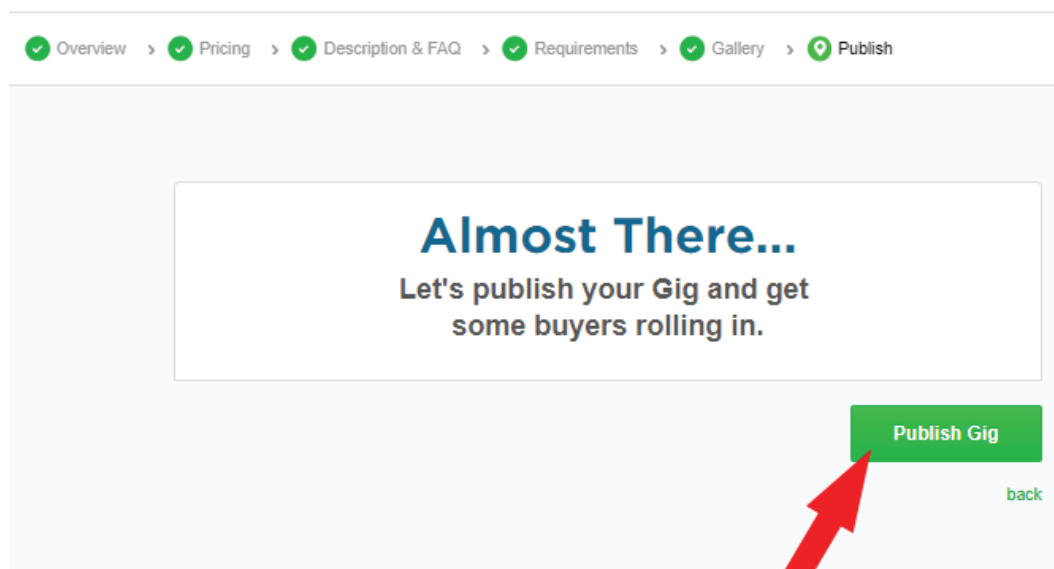
Figure 7.18

EXERCISE

Select the most suitable option.

1.Who is a freelancer?
a) Owner of a Company   b) Self Employed   c) Businessman   d) Employee

2. _____ is a Freelancing Platform:
a) Facebook   b) Youtube   c) Upwork   d) Whatsapp

3. A Portfolio is a person's:
a) Background   b)WorkExperience   c) Personal Detail   d) None of these

4. Most important soft skill to become a freelancer is:
a) Communication   b) Shopping   c) Harvesting   d) Driving

5. What could be the possible opportunities for being a freelancer ?
a) Get a Carrier as an Employee   b) Make Money
c) Health Benefits   d) none of these

6. Which of the following should be included in your freelancer profile ?
a) Your Skills   b) Friends' Name   c) Father's Name   d) Education

7. Which of the following is not compulsory for work-life in freelancing ?
a) Work   b) Staying Healthy   c) Overcommit   d) Go Out

8. What helps the employer understand that you are good at your skills ?
a) Portfolio   b) Profile Description   c) Education history   d) None

9. Which of the following is irrelevant for profile creation ?
a) Picture   b) Video   c) CNIC   d) Profile Description

10. Usually, in freelance marketplaces feedback varies from 1 to _____.
a) 2 Stars   b) 4 Stars   c) 5 Stars   d) 7 Stars

11. _____ Platform enables freelancer to post his/her service as a gig that enables thecustomer to buy his/her services:
a) UPwork   b) Guru   c) Fiverr   d) Freelancer

12. Fiverr gig usually starts at the price of : -
a) 5 Us Dollar   b) 10 US Dollar   c) 15 US Dollar   d) 20 Us Dollars

13. Which of the following is NOT a freelance platform?
a) Facebook   b) Upwork   c) Fiverr   d) Freelancers

14. You can post on Instagram using only: -
a) Mobile Phone   b) Laptop   c) PC   d) Tablet

15. One of the requirement for the top seller on fiverr is to be active for at least: -
a) 10 Days   b) 50 Days   c) 180 Days   d) 100 Days

Answer the following questions briefly.
1. What is Freelancing ?
2. What are requirements for top rated seller on fiverr?
3. Define offline and online freelancing.
4. Describe portfolio in freelancing.
5. What steps are involved in creating a fiverr account?
6. What steps are involved in choosing a Niche?
7. How do you create a gig on fiverr?

Write answers of the following questions in detail.
1. Define freelancing. Also describe importance of freelancing.
2. What are the important platforms available forfreelancing now a days ? Explain atleast 3.

ACTIVITIES

1. Visit the profiles of top-rated freelancer and make a report about their portfolio
(name, skills, earning, star).
2. Prepare a list of top Freelancers worldwide in graphic designing and media production .
3. Presentation on types of freelancing
4. Create gigs on Fiverr.
5. Create a fiverr account and deploy a gig.
6. Create a Niche about your skills.

Chapter 8: Entrepreneurship

After completing this section, Students will be able to: -

• *define entrepreneurship*
• *know key concepts of entrepreneurship*
• *understand main component of entrepreneurship*
• *learn types of entrepreneurship*

8.1 Entrepreneurship

An entrepreneur is an individual who creates a new business, bearing most of the risks and enjoying most of the rewards. The process of setting up a business is known as entrepreneurship. The entrepreneur is commonly seen as an innovator, a source of new ideas, goods, services, and business/or procedures. Entrepreneurs play a key role in any economy, using the skills and initiative necessary to anticipate needs and bringing good new ideas to market.

Entrepreneurship that proves to be successful in taking on the risks of creating a startup is rewarded with profits, fame, and continued growth opportunities. Entrepreneurship that fails results in losses and less prevalence in the markets for those involved.

8.2 Key concept of Enterpreneurship

Key concepts of enternreneurship are dicussed below:

Innovation

An entrepreneur is the key source of innovation and variation in an economy. It is actually one of the most important tools of an entrepreneurs success. They use innovation to exploit opportunities available in the market and overcome any threats.

So this innovation can be a new product, service, technology, production technique, marketing strategy, etc. Or innovation can involve doing something better and more economically. Either way in the concept of entrepreneurship, it is a key factor.

Risk-Taking

Entrepreneurship and risk-taking go hand in hand. One of the most important features of entrepreneurship is that the whole business is run and managed by one person. So there is no one to share the risks with.

Not taking any risks can stagnate a business and excessive impulsive risk-taking can cause losses. So a good entrepreneur knows how to take and manage the risks of his business. But the willingness of an entrepreneur to take risks gives them a competitive edge in the economy. It helps them exploit the opportunities the economy provides.

Vision

Vision or foresight is one of the main driving forces behind any entrepreneur. It is the energy that drives the business forward by using the foresight of the entrepreneur. It is what gives the business an outline for the future the tasks to complete, the risks to take, the culture to establish, etc.

All great entrepreneurs of the world that started with an entrepreneurship business are known to have great vision. This helps them set out short term and long term goals for their business and also plan ways to achieve these objectives.

Organization

In entrepreneurship, it is essentially a one-man show. The entrepreneur bears all the risks and enjoys all the rewards. This requires a lot of organization and impeccable organizational skills.

An entrepreneur must be able to manage and organize his finances, his employees, his resources, etc. So his organizational abilities are one of the most important elements of entrepreneurship.

8.3 Types of Entrepreneurship

Here are the different types of entrepreneurship:

1- Small business entrepreneurship
2- Large company entrepreneurship
3- Scalable startup entrepreneurship
4- Social entrepreneurship
5- Innovative entrepreneurship
6- Hustler entrepreneurship
7- Imitator entrepreneurship
8- Researcher entrepreneurship
9- Buyer entrepreneurship

Do you know ?

A business plan is good place to start-defining your skills and weaknesses, What you offer, How it's unique and how you plan on growing your offering.

Section-II

After completing this section, Students will be able to: -
• *know how to identify business opportunity*
• *understand how to develop feasibility and business plan for startup*

8.4 Ways to identify more business opportunities

1. Listen to your potential clients and past leads

When you're targeting potential customers listen to their needs, wants, challenges and frustrations with your industry. Have they used similar products and services before? What did they like and dislike?Why did they come to you? What are their objections to your products or services?

This will help you to find opportunities to develop more tailored products and services, hone your target market and identify and overcome common objections.This valuable customer information will help you identify key business opportunities to expand and develop your current products and services.

2. Look at your competitor

Do a little competitive analysis (don't let it lead to competitive paralysis though) to see what other startups are doing, and more importantly, not doing? Where are they falling down? What are

> **Do you know ?**
>
> A startup resists the temption of splasout on fancy offices, expensive equipment and over-the-top marketing.

they doing right? What makes customers go to them over you?

Analysing your competitors will help you identify key business opportunities to expand your market reach and develop your products and services.s

3. Look at industry trends and insights

Subscribe to industry publications, join relevant associations, set Google alerts for key industry terms and news and follow other industry experts on social media.Involve yourself in your industry and continually educate yourself on the latest techniques and trends.

8.5 Development of Feasibility and Business Plan.

1. Create a strong unique brand

Your business needs to stand out and a strong brand is integral to this. As part of this you'll need to check that your business name doesn't conflict with another business. To do so, check the free online registeratioins provided by the Intellectual Property Office.

2. Have a business plan

A business plan helps you organise your ideas, clarify goals and ensure you have all of your bases covered. It will also improve your chances of success. Your plan should be an evolving document that grows with your business.

3. Know your unique selling points and capitalise on them

Unique Selling Points (USP) are things that differentiate your business from its competitors, such as an exclusive product or exceptional serviceThese USPs provide a solid foundation for your business, giving you a competitive advantage that can be promoted in your marketing and potentially justifying larger profit margins.

4. Budget for ongoing costs

As a business owner, it's important that you have an intimate understanding of the figures. When creating budget, explore different options for fixed and variable costs and ask other experienced owners for advice. Putting together a detailed, accurate cost budget takes time and money but is hugely valuable.

5. Measure, don't assume, demand

You'll need to find out which segments of the market respond most positively to what you're selling Research their purchasing habits and understand why your offering appeals to them more than others. Once you know this you can target these types of clients.

Section-III

After completing this section, Students will be able to: -

• *learn about concept of marketing and marketing mix*
• *understand 6 P's of marketing*
• *calculate costing and pricing*

8.6 Marketing vs Marketing Mix

Both Marketing and Marketing Mix play distinctive roles in governing the marketing of products. The marketing strategy is structured to develop a cost-effective way to generate sales and carve a sustainable competitive position for the company's brands and products wherever they are sold. The product marketing mix becomes the strategic tool to focus on developing best practices and tactics to achieve market place success.

Marketing Mix

If you consider one component to be the boss and the other the employee, the marketing strategy wouldbe the boss and the marketing mix would be the employee. The objectives and goals in the market in strategy define and set measurable results that the company wishes to achieve for the entire range ofbrands and services that it provides. This information is then used to develop a focused, strategic marketingmix to deliver the desired results.

Marketing

The marketing strategy defines goals for the entire scope of products or services that a company provides to consumers and clients. The strategy establishes how brands and services will be positioned in the market place

> **Do you know ?**
> Go for networking it's not just for new business opportunities:It can be a wonderful source of support and fresh idead.

and identifies target consumers, clients and distribution channels to achieve sales.

It establishes the communications platform used for advertising and promotions. For example, a marketing strategy for a laundry detergent company might use research findings to claim that their brand gets outtough grease stains better than the other brands. The company could then use the claim to develop the advertising messaging strategy for commercials to generate preference for the company's brands versus competitors.

8.7 6 P's of Marketing to Grow Your Business

Here are the 6 P's of marketing and how does these help sales?

Product: The product is what is being sold. Fulfilling a market opportunity with a timely product that meets customers' needs will help boost sales.

Price: The price is the cost the customer pays to acquire the product. An effective pricing strategy ensures that customers are willing to buy the product, generating sales for the company.

Place: The place is where customers can buy the product. Whether a brick-and-mortar store, website, or app, proper placement of products creates sales opport-unities.

Promotion: The promotion includes all the tactics used to communicate a product's value. The goal of promotion is to attract a customer's attention and foster interest in learning more about — and eventually buying — the product.

People: The people are the individuals involved in the marketing process on both sides of an exchange. Employees such as salespeople and customer service repre-sentatives influence how customers view a business or product, and customers provide feedback to improve the product. This interaction between internal and external people helps determine success.

Presentation: The presentation is how the product appears in the market. Customers' opinions of how a product is presented (for example, through packaging and messaging) can impact their buying decisions.

Calculating Costing and Pricing

Common business expenses

The first step is to make a list of all the purchases you'll need to make in order to start operating. Categorize your list into expenses that are one-time purchases and those that will be ongoing payments, since both will factor into your calculations.Here are some of the most common expenses in both categories:

One-time expenses

1- Necessary equipment like a cash registers, machinery, or vehicles
2- Incorporation fees
3- Permits and licenses, such as city, county, and state licensing, or those related to your specific industry
4- Computer or technology equipment
5- Down payment for your office or store
6- Initial business cards
7- Initial inventory
8- Initial office supplies
9- Technology, such as computers, tablets, or printers
10- Signage
11- Office or business furniture

Variable expenses	Fixed expenses
1- Inventory	1- Lease or mortgage
2- Payroll	2- Insurance
3- Shipping	3- Utilities
4- Packaging	4- Administrative costs

EXERCISE

Select the most suitable option.

1. People who own, operate and take risk of a business venture are called: -
a) Business Incubator   b) Employee   c) Entrepreneurship   d) Entrepreneur

2. Which one is Not a disadvantage of Entrepreneurship ?
a) Risky   b) Uncertain Income   c) You are the boss   d) Work long hours

3. Which one is Not a advantage of Entrepreneurship ?
a) Can you a business of interest   b) You can be creative
c) Make a lot of money   d) You will make decisions alone

4. What type of entrepreneurial business actually produce the product they sell ?
a) Manufacturing   b) Wholesaling   c) Retailing   d) Service

5. Which of the following is Not required to grow a business ?
a) Product   b) Price   c) Place   d) Practice

6. Which one is Not a problem loving method:
a) Define the problem   b) Gather the information   c) Identify the solutions   d) Ignore the problem

7. What is the fixed cost ?
a) The cost that goes up and down   b) The cost that remains the same
c) Measure the disadvantage of production   d) Measure the advantage of production

8. What is opportunity cost ?
a) Going with your first option   b) Going with the easiest option
c) Choosing the best alternative   d) none of the above

9. All are the typical structure for a business plan except: -
a) Executive summary   b) Financial plan   c) Borrowing plan   d) Operational plan

10. An entrepreneur has the many personal characteristics except ?
a) Self-contained   b) Goal oriented   c) Creative   d) Overambitious

11. _____ is one among the factors that influence entrepreneurship
a) Life path circumstance   b) Economic growth   c) Inheritance   d) Desire

12. Brainstorming new ideas with others is called: -
a) a tasking activity   b) a creative activity   c) an examination   d) all of the above

Answer the following questions briefly.
1. Define Entrepreneurship.
2. What are key concepts of Entrepreneurship?
3. Name different types of Entrepreneurship.
4. What is marketing Mix?
5. Define Marketing.
6. What are different Business Expenses?
7. Write three differences of Marketing and Marketing Mix.

Write answers of the following questions in detail.
1. Discuss different ways to identify more business opportunities.
2. What steps are involved in developing a feasible business plan for startup?
3. Elaborate 6 P's of Marketing.

ACTIVITIES

1. Design a business plan keeping in view skills of cosmetology.
2. Develop a marketing strategy for your business model developed in previous activity.
3. Group discussion on entrepreneurship

Author

Mr. Faisal Riaz

Mr. Faisal Riaz received his Ph.D. from Iqra University, Pakistan in 2018 in the field of Cyber Physical Systems (CPS) and currently serving as an Associate Professor in the Dept. of computer sciences, Mirpur University of Science and Technology. His research interests are Vehicular Cyber- Physical Systems, Cognitive Radio, Affective Computing, and Agent-Based Modelling. He has more than 34 research, publications in various national/international research journals and conferences. He is the author of three books as well. Furthermore, he is heading Control, Automotive and Robotics Lab, National Centre of Robotics, Department of Computer Sciences, Mirpur University of Science and Technology (MUST), AJ&K Pakistan. Under the banner of CAR-lab, he has innovated the world's first-ever cognitive and emotional Autonomous Vehicle. He got the hall of fame award in 2018 in the recognition of his smart innovations. He is the reviewer of many well-reputed journals. He has served as a technical program committee member in many international IEEE conferences.

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