

Introduction To Web Graphics Skm 1383

Lecture 2



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Internet



The Internet History

1960:

Internet was just an **experimental research** program used by the **American** military.

This project named *Arpanet (Advance Research Project)* and fully paid by the **US government** to conduct military research. **connected** with some **universities** and libraries only.

The Internet History

1974:

the first workable and **independent** communication hardware was created.

1980:

these experimental programs (*Arpanet*) changed shape and named **Internet**.

The Internet





The Internet **simply refers** to the **network** of the
networks.

All the networks are related and **connected to**
each other and it is reachable
by anyone in the **globe**.

The Internet

These interconnected networks or
computers
transmit information using
a special Internet Protocol (IP).

What Is Internet?

1. Computer networks
2. Single computer at home
3. Telephone system
4. Television system
5. Hand sets

The Internet And the Web



The Internet

The Internet is the **infrastructure**: such
as the **cables**, the **telephone** lines
and the **computer**
networks itself.

The Web

The Web is just one **application** of the Internet.

Other Internet **applications** include **e-mail**, **chat** rooms and **newsgroups**.

The Web

The Web is made up of **information**
on Web sites.

The Web sites are **stored** on
computers linked to
the **Internet**.

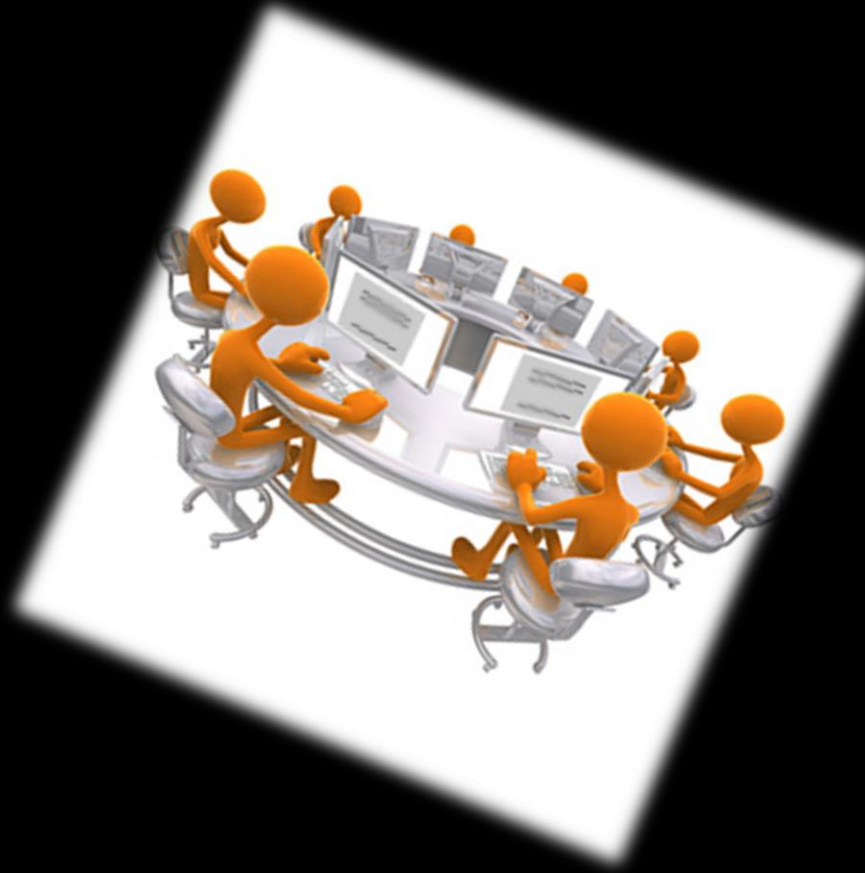
The Web

This **information** can be sent from computer to computer via the **Internet**.

Your Web browser **interprets** this information and

displays it on your computer **screen**.

What is Intranet?



It refers to a **collection**
of individualized networks to suit only
within an **organization**.

In an organization, these **private**
networks are used to **communicate**
with all who works
within that organization.

What is Intranet?

Thus making **communication** and
data sharing easier.

It all so helps **employees** to
communicate with the
organization.

What is Intranet?

Intranet uses **standard hardware and software** such as **Ethernet, WIFI** (*Wireless*), **web browsers, servers and IP.**

In order to **communicate** with the **staff,** organizations still **utilize** internet.

What is Intranet?

It is protected with a **firewall** so that those who are not related to the organization will not be reached to **sensitive information.**

What is Intranet?

It is a **physical transmission medium.**
It is a **physical data link**
for **Local Area Networks.**





What Is Graphic?

**Graphic is a visual
representation:**

**Line Art, photographs, drawings,
graphs, diagrams, typography,
numbers, symbols, maps, or
illustration**

Graphics Exercise

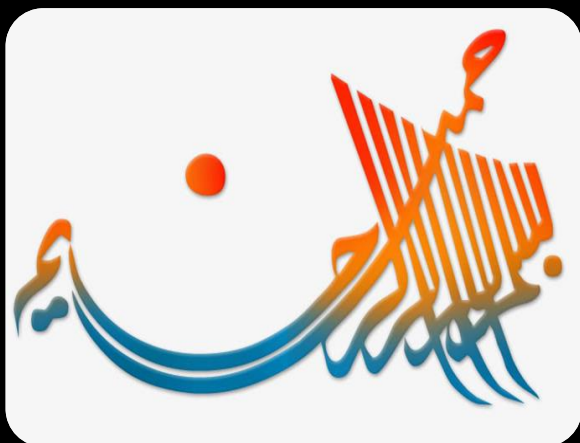
photographs, drawings, graphs,
typography, numbers, symbols, map

High Resolution picture

Low Resolution picture

Still Image

Animation Image



There are **two types** of
graphics

1. Bitmap graphics
2. Vector graphics.

What are Bitmap Graphics?

Bitmap graphics are made up of pixels of different colors.

Digital camera or scan an image

It is a bitmap graphic.

A bitmap graphic is made
of many small parts,
called pixels,
Computer remembers all
the parts
Files size is very big

What is Pixel?



Mixture of two words
pix and **el**.

Pix means **picture**

And **el** means **element**.

The pixel is the smallest
element of a picture or the
smallest dots of colors.

(**red**, **green** or **blue**)

Quality of Picture

Based on dpi

Dots per inch

Called Pixel

300 dpi print

Scaling picture

From big to small

From small to big

If you want to make it big
It loses its quality



The clarity of bitmap is
based on dots or pixels

If more dots

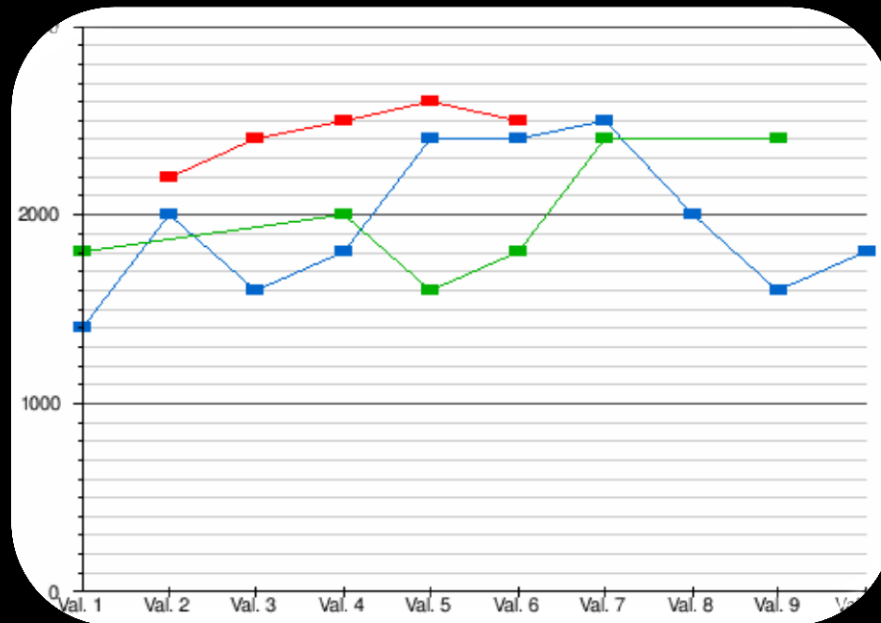
The picture is more clear.

Resolution good

What is Vector Graphics?



Is based on
mathematical
representation
Such as **shapes** and **lines**
Created using adobe
illustrator



Differences:

Bitmap created by camera
(Picture/**Photo**)

Vector created by
software

(Lines/curves and shapes)

Differences:

Vector does not depend on the
dpi of the output device
the resulting image is **clear** and
crisp

Good for **logo**

Not good for **web site**

Unless **convert** it into a bitmap
image

Differences:

Vector is not realistic

It is drawing

Bitmap is real picture

Vector graphics are easily scalable
to any size you like

Vector is smaller in size than
bitmap

Differences:

Size of vector graphics is
depend on

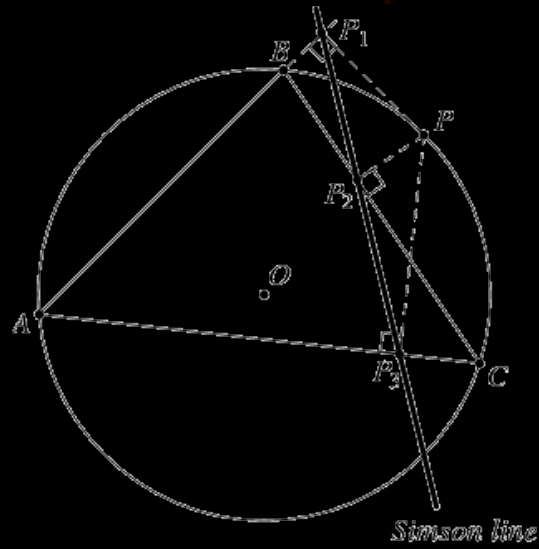
Lines and objects

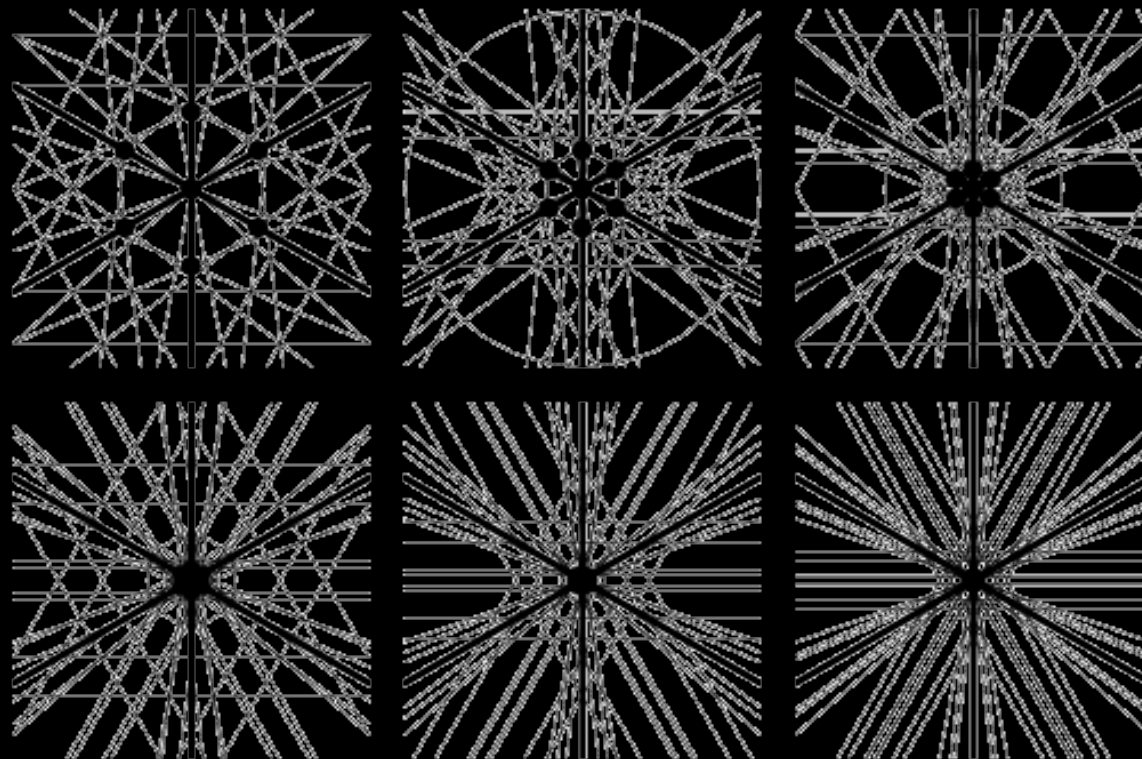
Size of bitmap is based on
pixel or dots per inch

What are the
elements of
graphics?

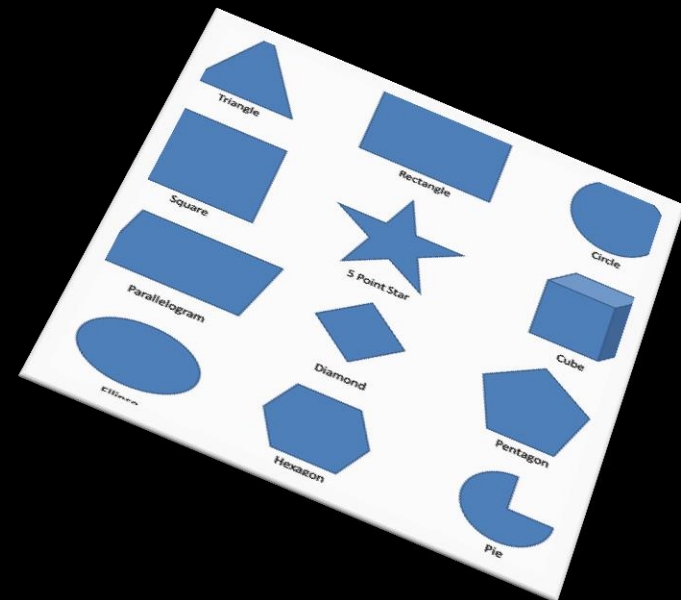


Line, Shapes
Text, Image
Colour, Texture
Format and layout
All these elements create
graphic as a whole

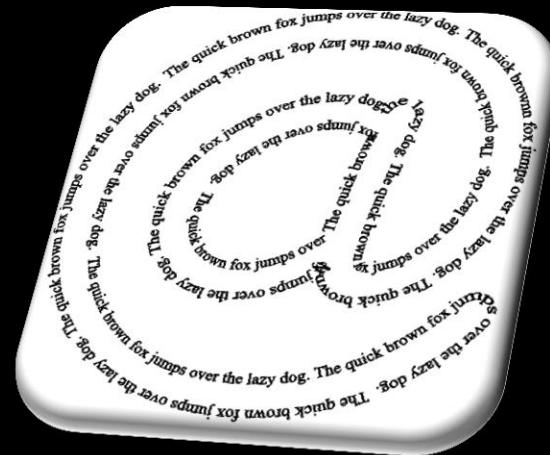




Shapes



Text



What is Image?



The word image comes from the
Latin word
Used in Roman Empire
Long history
Image exists in the history
Before computing

Advanced technology
Now handles image
Creates and edit it
User is more comfortable
Efficient and beautiful

Types of images

1. Still images
2. Animation images

Still images

We all know still
images, we take picture
of our friends

Picture of mountain.

Painting, Drawing,

Icons

Most our images are made
up by still image

Why?

Small size, quality

No special software

Can be opened by any
computer

What is File Format?



File format **indicates** the way
a **particular** information is
encoded for **storage**.
Without **relevant format** the
computer
can not display data

File format:

Is a **Specific structure** or **arrangement** of data that can be recognized by computer programs. File format **instructs the computer** how to **display, print, and process** and finally how **to save** back the data.

File format is a standard way of matching file with the program

Example:

Microsoft: (.DOC)

Microsoft Office Excel

Worksheet (.xlsx)

Flash: .fla

PowerPoint: .pptx

Some File Formats

JPEG, PNG,
TIFF
BMP, PSD, GIF, PICT
GRAYSCALE

JPEG

JPEG means **J**oint **P**hotographic **E**xperts **G**roup.
It is about compressing photographic images.

PNG

Portable **N**etwork **G**raphics

TIFF

Means **T**agged **I**mage **F**ile **F**ormat
is a file format.

GIF

Graphics Interchange Format

PSD

Adobe Photoshop Document

GRAY SCALE

Changing color to grayscale

Still Pictures



Grayscale cat



Color cat

Animation Images



It **introduced** to computer
after still images

It is made of **still images**
with

fast movements

Animated GIF files

It is a **short files**

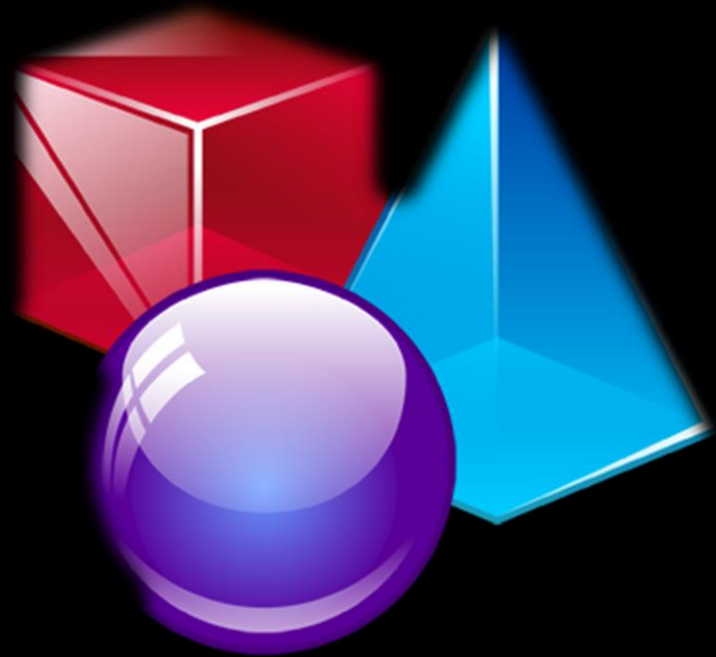


Computer Generated Images



Computer Programming Languages Software Flash Macromedia director Authorware

What is 3D Objects?



3-D:

Images have **three dimensional** look and **exterior**.

It has **width, height and depth**

We can see

The **world in 3D**



If we have a 3D house

We are able to see:

1. Front
2. Back
3. Side







شُكْرًا جَزِيلًا



تشكر

