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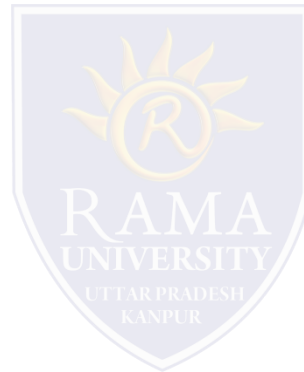
BCS -504 Computer Graphics & Multimedia

Lecture-26

Mr. Dilip Kumar J Saini

Assistant Professor
Computer Science & Engineering

➢ **HYPERTEXT & HYPERMEDIA**

Hypertext

Hypertext is text which is not constrained to be linear.Hypertext is text which contains links to other texts. The term was coined by Ted Nelson around 1965.

Hypertext is text that links to other information. By clicking on a link in a hypertext document, a user can quickly jump to different content. Though hypertext is usually associated with Web pages, the technology has been around since the 1960s. Software programs that include dictionaries and encyclopedias have long used hypertext in their definitions so that readers can quickly find out more about specific words or topics.   Apple Computer's HyperCard program also used hypertext, which allowed users to create multi-linked databases. Today, the Web is where hypertext reigns, where nearly every page includes links to other pages and both text and images can be used as links to more content.
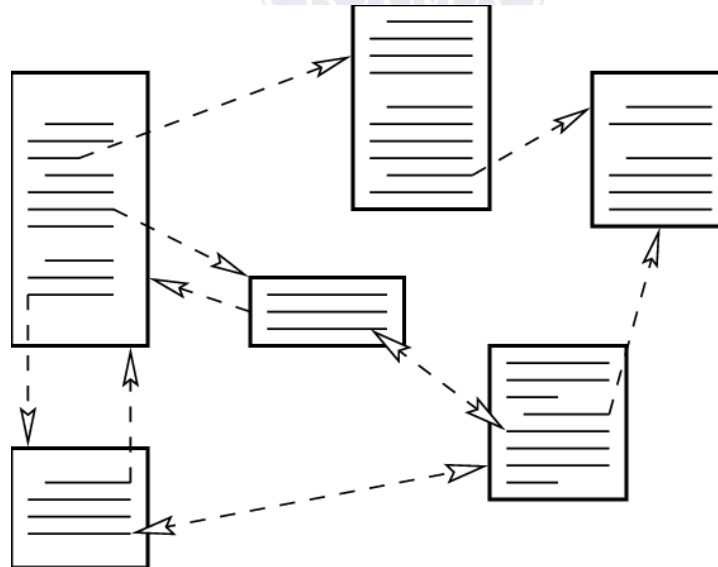
Hypertext and Hypermedia

Example Of Hypertext

Hypertext Application Language (HAL) is an Internet Draft (a "work in progress") standard convention for defining hypermedia such as links to external resources within JSON or XML code (however, please note that the latest version of HAL Internet-Draft expired on November 12, 2016.). The standard was initially proposed in June 2012 specifically for use with JSON and has since become available in two variations, JSON and XML. The two associated MIME types are media type: application/hal+xml and media type: application / hal+json.

HAL was created to be simple to use and easily applicable across different domains by avoiding the need to impose any requirements on how the project be structured. Maintaining this minimal impact approach, HAL has enabled developers to create general-purpose libraries which can be easily incorporated on any API that uses HAL.[citation needed]

APIs that adopt HAL simplify the use of open source libraries and make it possible to interact with the API using JSON or XML. The alternative would be having to develop a proprietary format which in turn forces developers to learn how to use yet another foreign format.

```
{
    "links": {
        "self": { "href": "http://api.com/items" },
        "item": [
            { "href": "http://api.com/items/1" },
            { "href": "http://api.com/items/2" }
        ]
        "data": [
            {"itemName":"a"},
            {"itemName":"b"}
        ]
}
```
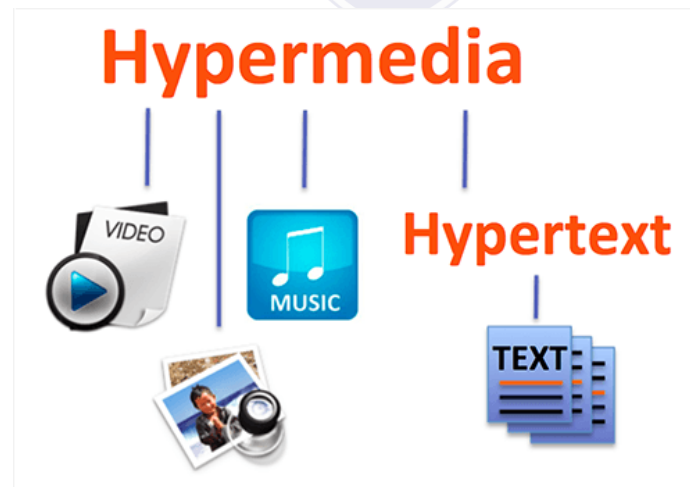
Hypermedia

Hypermedia is an extension to what is known as hypertext, or the ability to open new Web pages by clicking text links on a Web browser. Hypermedia extends upon this by allowing the user to click images, movies, graphics and other media apart from text to create a nonlinear network of information. The term was coined by Fred Nelson in 1965. HyperMedia is not constrained to be text-based. It can include other media, e.g., graphics, images, and especially the continuous media - sound and video. Apparently, Ted Nelson was also the first to use this term

Hypermedia allows links to be embedded in multimedia elements like images and videos. You can tell if something is hypermedia by hovering the mouse cursor over the image or video - if the element is hypermedia, the cursor changes, usually into a small hand.

Although the Internet is the best example of the use of hypermedia, there is a lot of software that makes use of both hypermedia and hypertext. A lot of word processing, spreadsheet and presentation software like Microsoft Office allow hypermedia and hypertext to be embedded into the documents created. For example, in Microsoft Word, users can add hyperlinks to any word and even add links to pictures. Microsoft PowerPoint has the same feature for hypermedia.

Example of Hypermedia

The WWW. (World Wide Web) is a classic example of hypermedia, whereas a non-interactive cinema presentation is an example of standard multimedia due to the absence of hyperlinks. The first hypermedia work was, arguably, the Aspen Movie Map.

Accessing information is basically different when using hypermedia than when using traditional database technology. Typical traditional database access is via direct inquiry using unique keys, or queries in the information database. In hypermedia, information access is handled through structuring the information. Users access new information by following links from existing information to new information.

Simply put, information in hypermedia databases has three typical features. Firstly, the information is not homogenous. Different forms of information objects such as text, audio and pictures may be used alone or together, and information which is semantically different is tied together. Secondly, hypermedia systems have a high degree of user interaction.
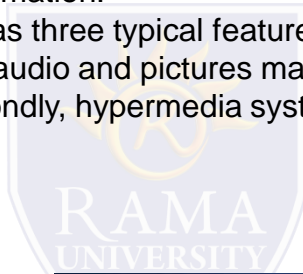
Hypertext and Hypermedia

Hypertext vs Hypermedia

HYPERTEXT	HYPERMEDIA
It is a text that links to the other chunks of the text under the same or separate document	It can be considered as the enhanced version of hypertext where other graphics is also the part of the link
It Involves only Text	It Involes Graphics, image, audio, video, etc.
Is a part of hypermedia	Comes in the superior level entity.
Multimedia content present in the electronic text format.	It can contain various multimedia elements which are linked with each other non-linearly.
Hypertext refers to text which links to other blocks of text within the same document or a different document.	Hypermedia is an extension of hypertext but not limited to text elements.
Hypertext allows the users to navigate through text in a non-linear way	Hypermedia includes multimedia elements to improve the multimedia experience.

Hypertext vs Hypermedia

Hypertext	Hypermedia
It refers to text which links to other chunks of text within same or different document.	It is an extension of hypertext which is not constrained to be text-based.
It is an interconnected network of documents linked together via strong cross referencing tools called hyperlinks.	It refers to a non-linear presentation of content that includes plain text, images, audio, video, and still or moving graphics.
It simply allows users to jump from one document to another by clicking on "go to" links.	It extends the ability of hypertext to include links within all sorts of multimedia objects.
Hypertext technology is based on effective human-computer interaction and relevant cross referencing of related items.	Hypermedia technology extends the use of multimedia elements to create clickable links that readers can both access and interact with.
It represents multimedia content in electronic text format.	It combines both hypertext and multimedia to represent a wealth of information.

Difference Between net

MUTIPLE CHOICE QUESTIONS:

Sr no	Question	Option A	Option B	OptionC	OptionD
1	One type of……..is graphics tablet which input two dimensional coordinates by activating hand cursor or stylus at selected position on a flat surface	digitizers process	digitiz	digitizers	none of these
2	Image Scanner scan drawing, graph, color, & black and white photos or text and can ……. for computer processing	stored	collected	bug	none of these
3	We can also apply various image processing methods to modify the picture	altering	Image Scanner	update	none of these
4	Electrical method An electrical touch panel is constructed with ……. transparent plates separated by small distance	1	2	3	4
5	Touch input can be recorded with following methods are….	Optical methods	Electrical method	Acoustical method	none of these

- http://www.engppt.com/search/label/Computer%20Graphics