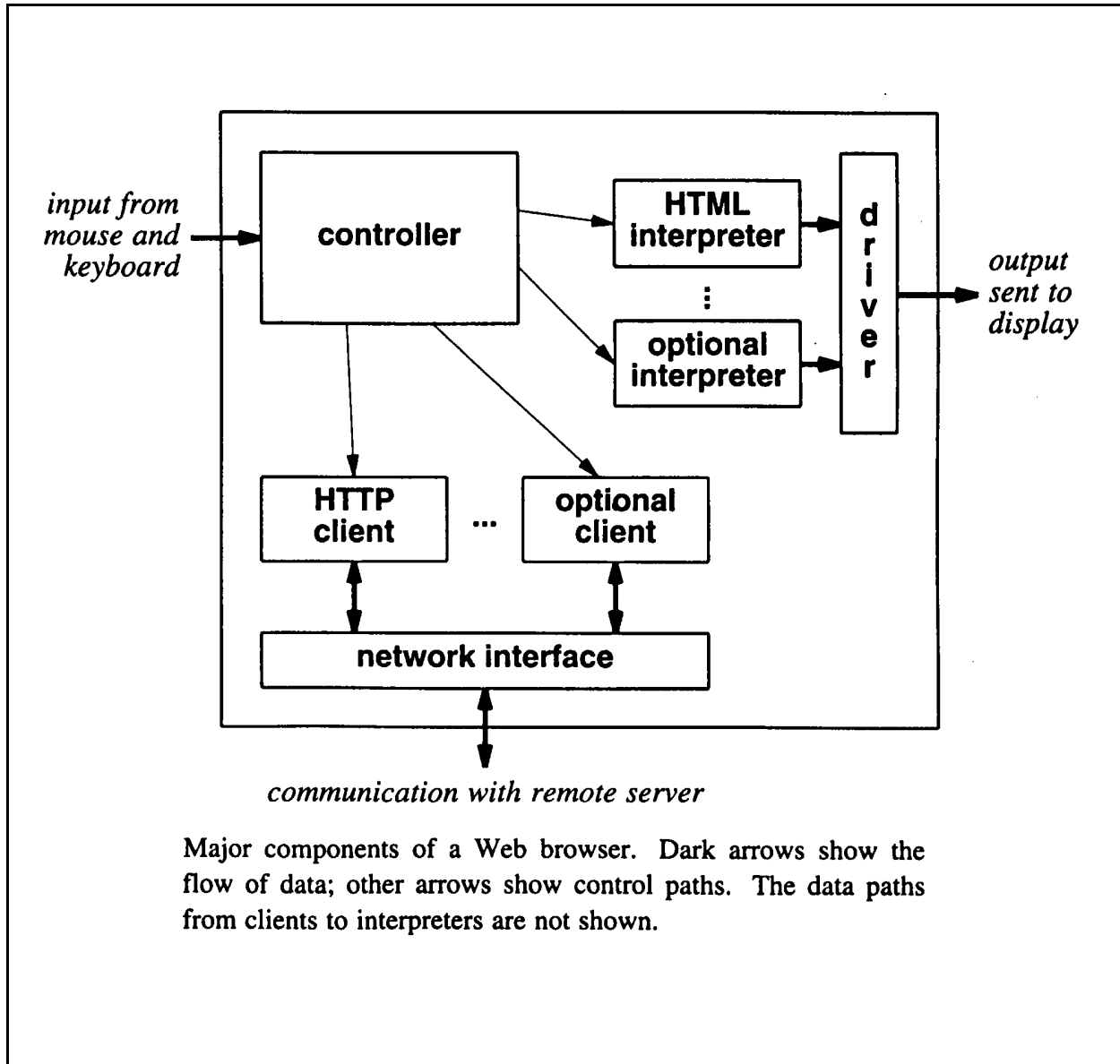


The World Wide Web (WWW)

- The World Wide Web is a large scale, on-line repository of information that users can search using an interactive application program called a **browser**.
- Technically, the web is a distributed **hypermedia** system that supports interactive access.
- Information is stored in a set of documents.
- Besides the basic information, a document can contain pointers to other documents in the set.
- A hypermedia document available on the Web is called a **page**. The root page for an organization or individual is called the **homepage**.
- Each Web page that contains a hypermedia document uses a standard representation known as **Hypertext markup language (HTML)**.
- HTML allows an author to give general guidelines for display and to specify the contents of the page. (Consequently, two browsers may display a page differently.)

Browser Architecture

- A browser interacts with a Web server using HTTP.
- A browser consists of a set of clients, a set of interpreters, and a controller that manages them.



HTML Format and Representation

- Each HTML document consists of two parts: a **head** followed by a **body**.
- Each HTML document is represented as a text file that contains **tags** along with other information.
- HTML tags provide structure for the document as well as formatting hints.

- General Form of an HTML Document:

```
< HTML>
  < HEAD>
    < TITLE>
      text that forms the document title
    < /TITLE>
  < /HEAD>

  < BODY>
    body of the document appears here
  < /BODY>
< /HTML>
```

- Equivalent Document:

```
< HTML> < HEAD> < TITLE> text that forms the
document title< /TITLE> < /HEAD> < BODY> body
of the document appears here< /BODY> < /HTML>
```

Example HTML Formatting Tags

- Line Breaks:

Hello there.< BR> This is an example< BR> of HTML

Hello there.
this is an example
of HTML

- Headings:

Hello.< BR> < H1> Heading< /H1> < BR> normal

Hello.
Heading
normal

- Unordered Lists:

Here is a list of 4 names:

```
< UL>  
< LI> Scott  
< LI> Sharon  
< LI> Jan  
< LI> Rebecca  
< /UL>
```

This text occurs after the list

Here is a list of 4 names:

- Scott
- Sharon
- Jan
- Rebecca

This text occurs after the list.

- Ordered Lists:

Here is a list of 4 names:

```
< OL>  
< LI> Scott  
< LI> Sharon  
< LI> Jan  
< LI> Rebecca  
< /OL>
```

This text occurs after the list

Here is a list of 4 names:

1. Scott
2. Sharon
3. Jan
4. Rebecca

This text occurs after the list.

- Bold, Italic, and Underlined Text:

```
< B> Bold text < /B> < BR> < I> Italic text < /I>  
< BR> < U> Underlined text < /U>
```

Bold text

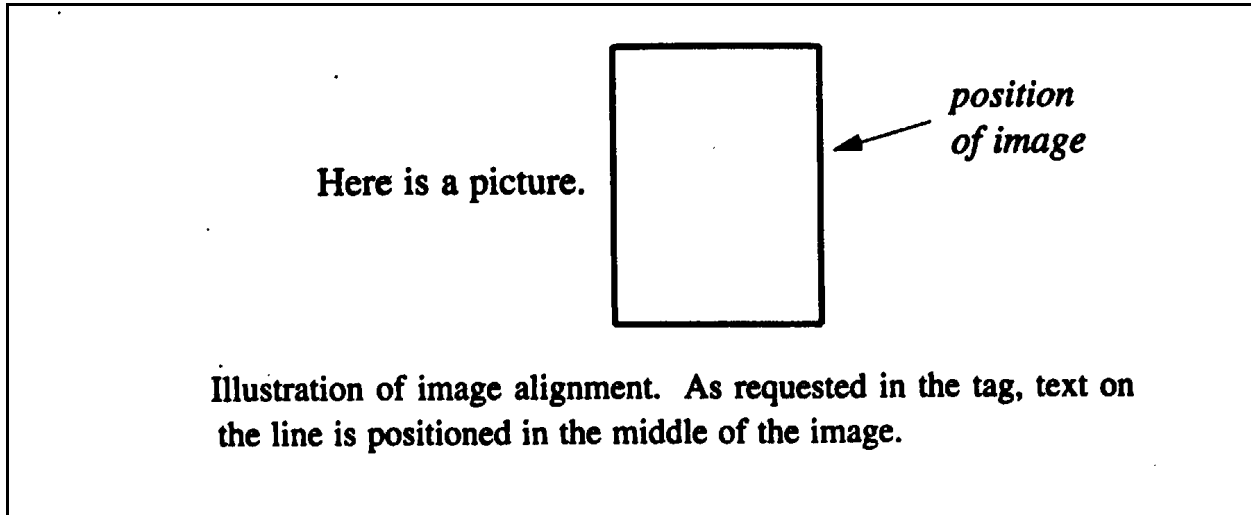
Italic text

Underlined text

Embedding Graphical Images Into a Web Page

- Example:

Here is a picture. < IMG SRC= "myphoto.gif" ALIGN= middle >



Graphics files should be in either .gif or .jpg (or .jpeg) format only. Other formats will not work with all browsers.

- Background picture (wallpaper):

< BODY BACKGROUND= " myphoto.gif" >

Hypertext Links to Other Documents

- The HTML mechanism for specifying a hypertext reference is called an **anchor**.
- Example:
This book is published by
< A HREF= "http://www.prenhall.com" >
Prentice-Hall, < /A> one of the larger publishers of
Computer Science textbooks.
- Example Output:
This book is published by Prentice-Hall, one of the
larger publishers of Computer Science textbooks.

Adding Color to Web Pages

- There are 5 color elements to a Web page:
 - the background color
 - the text color
 - the unvisited link color
 - the visited link color
 - the active link color (sometimes visible when you hold down the mouse button before you release.)

```
< BODY   BGCOLOR= " yellow "   TEXT= " red "  
LINK= " green "  VLINK= " pink "  ALINK= " white " >
```

- Note:
Do not use both BACKGROUND and BGCOLOR. One is like wallpaper and the other is like painting with flat paint. You either wallpaper or paint!