6. LINKING DOCUMENTS

LINKS

HTML allows *linking* to other HTML documents as well as images. Clicking on a section of text or image in one web page will open an entire web page or an image. The text or an image that provides such linkages is called *Hypertext,* a *Hyperlink,* or a *Hotspot.*

The browser distinguishes Hyperlinks from normal text. Every Hyperlink,

- Appears blue in color
  - *The default color setting in a browser for Hyperlink text or image*
  - *The color can be set dynamically via an HTML program if required*
- The hyperlink text / image is underlined
- When the mouse cursor is placed over it, the standard arrow shaped mouse cursor changes to the shape of a hand

The blue color, which appears by default, can be over-ridden. To change these link colors, there are three attributes that can be specified with the **<BODY>** tag. These are:

css\style a:link	Changes the default color of a Hyperlink to whatever color is specified with this tag. The user can specify the color name or an equivalent hexadecimal number.
css\style a:active	Changes the default color of a Hyperlink to whatever color is specified with this tag. The user can specify the color name or an equivalent hexadecimal number.
css\style a:visited	Changes the default color of a Hyperlink to whatever color is specified with this tag. The user can specify the color name or an equivalent hexadecimal number.

Table 6.1

Links are created in a web page by using the **<A> . . . </A>** tags. Anything written between the **<A> </A>** tags becomes a hyperlink/hotspot. By clicking on the hyperlink navigation to a different web page or image takes place.

The document to be navigated needs to be specified. By using the HREF attribute of the **<A>** tag the next navigable web page or image can be specified.

Syntax:

<A href = "*filename.htm*">

Hyperlinks can be of two types:

- Links to an external document
- Links (jumps) to a specific place within the same document
  Generally done in case of a web page containing a large amount of text

External Document References

Example:

```
<A href = "details.html">Visit my Home Page</A>
```

Here, *Visit my Home Page* becomes a *hyperlink*, and links to another document, **details.html**, which is present in the current working **directory**. If the file is not present in the current directory, *a relative or absolute path can be specified.*

By default, a hyperlink takes a user to the beginning of the new web page. At times, it might be necessary to jump to a *particular location* within the new web page. To enable a jump to a specific location on a web page, *named anchors* can be set up. Anchors target hyperlinks to a specific location point on a web page.

Jumping to a particular location on a web page can be summarized in two steps:

- **Step One:**

Mark the location to be jumped to i.e. Identify the location in a web page to jump to by giving the location a name.

Using the NAME attribute of the <A> tag does this.

Syntax:

<A Name = "*location_name*">

Example:

<A Name = "*point1*">

This identifies a location to be jumped to as *point1*.

- **Step Two:**

While jumping to a specific web page and a specific location on the web page, in addition to the name of the web page to be jumped to, the name of the location on the web page to go to is required.

Hence the web page to jump to, requires a *filename*.htm, together with the name of the location to jump to in the HTML file.

This is done as follows:

Syntax:

<A href = "*file_name*.html # *location_name*"> . . . </A>

Example:

<A href = "details.html# point1">Visit My Home Page</A>

Visit my Home Page becomes a Hotspot and leads to a location named *point1* in the file *details.html*.

Internal document references

Sometimes, a jump is required to a different location in the same document. Since the jump has to be targeted to a specific location, the same two steps need to be performed as before, i.e. identify a location with a name and then jump to that location using the name. The only difference is that the *filename*.htm now will be the **current** *filename*.htm.

Syntax:

<A Name="*location_name*">
<A href ="# *location_name*"> . . . </A>

Note

The absence of the *filename*.html before the # symbol indicates that a jump is required within the same document.

Example:

<A Name="*point1*">
<A HREF = "# *point1*"> Visit My Home Page </A>

Visit my Home Page becomes a Hotspot and leads to a location named *point1* in the same document.

Note

Ensure that the named location is specified in the HTML file where a jump is being made.

Hyper Linking To A HTML File (Starting At The Beginning Of The Document)

Example 1:

The Web Page shown in diagram 6.1 presents SCT as an institute for Corporate Training. The subjects, undertaken for Corporate Training are listed, each of which is a Hyperlink, and clicking on the hyperlink will lead to a different document, showing a syllabus for the corresponding subject.

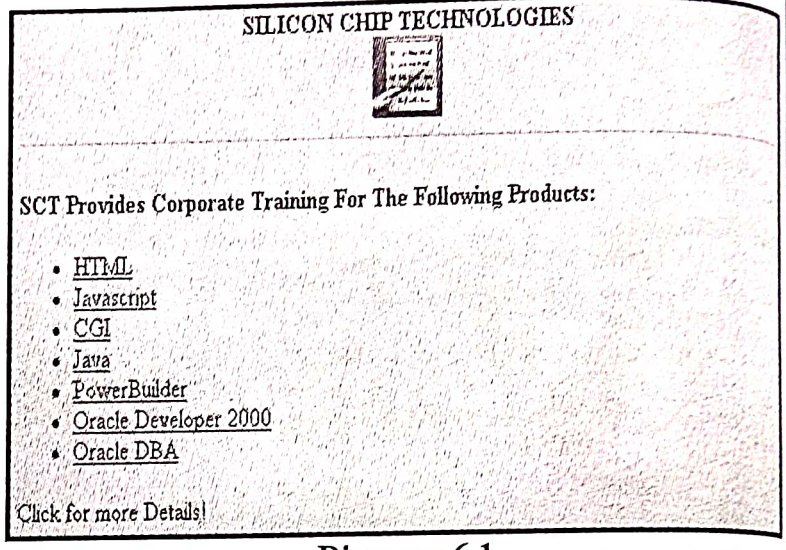

Diagram 6.1

Clicking on *HTML* will show the syllabus of HTML, clicking on *Javascript* will show the syllabus of Javascript, and so on.

The syllabus for each subject is coded within separate files. The HTML syllabus is within a file called *HTMLSyl.html*. Thus, clicking on the *HTML* hyperlink opens a file, *HTMLSyl.html* that gives a listing of the syllabus of HTML.

The file Index.htm is the one that displays the hyperlinks to the syllabi of various subjects.

Code for Index.html

```
<HTML>
    <BODY Background="../images/texture1.gif">
        <SPAN STYLE="font-family: LatinoPalSH; text-align:center;">
            <B>SILICON CHIP TECHNOLOGIES</B><BR/>
            <IMG WIDTH="50" HEIGHT="50" SRC="../images/traing31.gif">
        </SPAN><HR/>
        <H4>SCT Provides Corporate Training For The Following Products :</H4>
        <UL>
            <LI><A href="HTMLSyl.html">HTML</A>
            <LI><A href="JsSyl.html">Javascript</A>
            <LI><A href="CGISyl.html">CGI</A>
            <LI><A href="JvSyl.html">Java</A>
            <LI><A href="PBSyl.html">PowerBuilder</A>
            <LI><A href="OraSyl.html">Oracle Developer 2000</A>
            <LI><A href="DbaSyl.html">Oracle DBA</A>
        </UL><SPACER Size=275>Click for more Details!
    </BODY>
</HTML>
```

Subsequently, when the 'HTML' hyperlink is clicked on the Htmlsyl.html is navigated to.

Code for HTMLSyl.html

```
<HTML>
<BODY STYLE="background-image: url(../images/texture1.gif);"><BR/><B>
        <SPAN STYLE="text-align:center">
        <H3>We Cover The Following Topics . . . </H3><HR/></SPAN><BR/>
                <OL>
                        <SPACER Size = "200"><LI>Text Formatting<BR />
                        <SPACER Size = "200"><LI>Creation Of Lists<BR />
                        <SPACER Size = "200"><LI>Creation Of Tables<BR />
                        <SPACER Size = "200"><LI>Creation Of Graphics<BR />
                        <SPACER Size = "200"><LI>Creation Of Hyperlinks<BR />
                        <SPACER Size = "200"><LI>Creation Of Imagemaps<BR />
                        <SPACER Size = "200"><LI>Creation Of Forms<BR />
                </OL>
        </B></BODY>
</HTML>
```

Similarly, different files can be created for each syllabus and called from the file Index.html. The HTML file names will have to be the same as the ones specified in Index.html.

Linking To A Particular Location In A Separate Document

Example 2:

The Web page shown in diagram 6.2.1 informs a reader about guidelines should be followed while developing web sites. This information is grouped into sections. Clicking on an appropriate section will display specific information.

Information about individual sections is held in one file called as **sections.htm**. Depending upon the section that a reader user clicks on, information about *only that particular section* will be seen on the reader's VDU.

For instance, clicking on **Section 2** will display to the user, the output as shown in diagram 6.2.2.

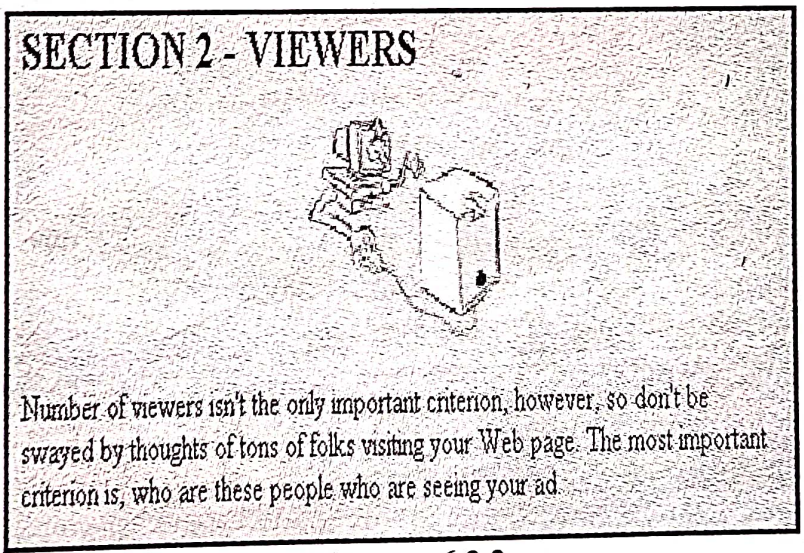

Diagram 6.2.2

Code for Index.html

```
<HTML>
        <HEAD><TITLE>Links To A Particular Location In A Separate Document</TITLE></HEAD>
        <BODY Background = "../images/texture1.gif">
                <SPAN STYLE="font-family: LatinoPalSH; text-align:center;">
                        <H1>Web Guidelines</H1>
                </SPAN>
```

```
There are several guidelines that can be followed when creating and developing Web Sites. The user needs to be familiar with the working of the Internet, several terms like Web Server, Web Pages and so on. Information about hosting a Web Site needs to be understood. These and more information has been segregated into sections and listed below. Clicking on any of these sections will lead to a detailed explanation of the section.<BR/><BR/><B>These are References a Section in Another Document.</B><BR/><BR/><UL>
                    <SPAN STYLE="font-family: LatinoPalSH;">
                        <LI><A HREF = "Sections.html#SECTION1">Section 1</A>
                        <LI><A HREF = "Sections.html#SECTION2">Section 2</A>
                        <LI><A HREF = "Sections.html#SECTION3">Section 3</A>
            </UL></SPAN>
        <BODY>
</HTML>
```

Code for Sections.html

```
<HTML>
    <HEAD>
        <TITLE>Document With Targets For Links To Particular Locations</TITLE>
    </HEAD>
    <BODY STYLE="background-image: url(../images/texture1.gif);">
        <A Name="SECTION1"><H2>SECTION 1 - INTRODUCTION</H2></A>
        <SPAN STYLE="text-align:center">
        <IMG SRC="../images/intro.gif" /></SPAN><BR/> Internet has a growing importance in today's life. It provides us with a vast variety of information including educational stuff, Political comments, Current affairs, Technological Advancements, Social and Cultural information etc. Besides it offers mailing facilities and also provides with facilities wherein a user can demand for anything and be sure that his requirements will be met.<P>With so much to give, its importance is flashing and more and more people are attracted towards this giant network.</P>
        <P>Thus, developing information and hosting it on the Web is of prime importance in the current century.</P><BR/><BR/>
        <A Name="SECTION2"><H2>SECTION 2 - VIEWERS</H2></A>
        <SPAN STYLE="text-align: center">
        <IMG HEIGHT=100 SRC="../images/computer.gif" WIDTH=100 /> </SPAN> <BR/> Number of viewers isn't the only important criterion, however, so don't be swayed by thoughts of tons of folks visiting your Web page. <BR /><BR / >
        <A Name="SECTION3"><H2>SECTION 3 - LANGUAGES</H2></A>
        <SPAN STYLE="text-align: center">
        <IMG HEIGHT =150 SRC="../images/corp.gif" WIDTH =150 /></SPAN><BR />
        The Language That Is Used To Develop Web Pages Is Called HTML Which Stands For
        <I><B>HyperText Markup Language</B></I> Which Is A Linking And Formatting Language, which Is The Only Language That Is Understood By a Browser.
    </BODY>
</HTML>
```

IMAGES AS HYPERLINKS

Just as text can act as a hyperlink, so also images can act as hyperlinks. Anything included within <A>...</A> tags becomes a Hotspot. Thus, an image can be made a Hotspot by enclosing an <IMG> tag within the <A>...</A> tags. The <IMG> tag places the image on the screen, and because the <IMG> tag is enclosed within the <A>...</A> tags, it becomes a Hotspot.

Example:

```
<A href="details.html"><IMG SRC="mickey.gif" /></A>
```

Here, the picture mickey.gif acts as a Hotspot, and navigates to a file **details.html**.

Image Maps

When a hyperlink is created on an image, clicking on any part of the image will lead to opening of the document specified in the **<A href ...>** tag. If the image is a large image and there is a need to link multiple documents to the same image, there has to be a technique that divides the image into multiple sections and allows linking of each section to a different document.

The technique that is implemented to achieve this is an **Image Map**. Image maps can be created and applied to an image so specific portions of the image can be linked to a different file/image.

Linked regions of an image map are called **hot regions** and each hot region is associated with a *filename*.htm document that will be loaded into the browser (*navigated to*) when the hot region is clicked.

Creating an image map is a two-step process:

Step One:

Create an image map, i.e. divide the image into various areas. This is done using the <MAP> </MAP> tags. The <MAP> tag takes an attribute, **Name**, via which the map can be referenced in an HTML file.

Syntax:

```
<MAP Name="map name">
```

Within the **<MAP>. . . </MAP>** tags the <AREA> tag is specified. This tag defines the specific region within the image. The <AREA> tag takes certain attributes. The attributes are:

Shape	The shape of a region can be one of the following: Rect, Circle, Polygon, Default
Coords	Each of the above shapes takes different coordinate parameters. A **Rectangle** will take four coordinates: **x1, y1, x2, y2** A **Circle** will take three coordinates: **centerx, centery** and **radius.** A **Polygon** will take three or more pairs of coordinates denoting a polygonal region. A **Default** shape will not take any parameter and it indicates the portion of the image not specified under any Area tag.
HRef	Takes the name of the .htm file that is linked to the particular area on the image.

Table 6.2

If specific areas within an image have to be linked to different documents, these areas will have to be identified on the image and linked to different documents. These areas can be in the shape of a rectangle, circle or a polygon. For each, coordinates need to be specific to mark an appropriate area on the image. For instance, a rectangle needs 2 points of specification, the upper left corner and the lower right corner. Consider the following image, which offers more knowledge about a company called SCT and provides two options.

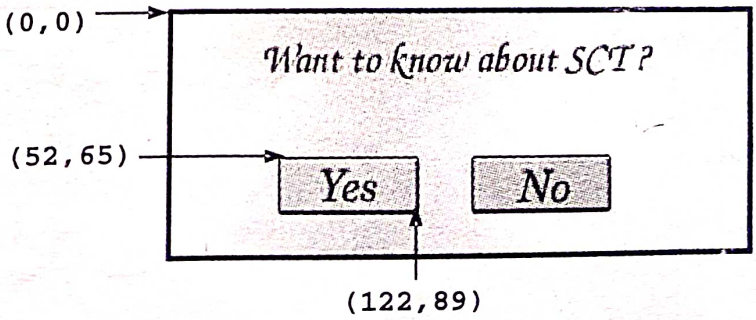

Diagram 6.3

Clicking on Yes will display information about SCT and clicking on No could lead back to a start page. Thus, area on the image that displays the buttons Yes and No need to be mapped to two different HTML files. These areas are in the shape of a rectangle and will be identified by means of top/left and bottom/right **coordinates**, i.e. Yes can be marked as (52,65,122,89).

Similarly, the coordinates of No can be obtained and marked.

Example:

```
<MAP Name="Sct_map">
    <AREA Shape="rect" Coords="52,65,122,89" HRef="sct.htm">
    <AREA Shape="rect" Coords="148,65,217,89" HRef="no.htm">
</MAP>
```

Step Two:

Deals with applying the image map to a particular image. For this purpose, the <IMG> tag takes an attribute called **UseMap** that takes the name of the image map as a value, and applies the map specifications to the respective image. The value is always preceded with the # sign.

Syntax:

```
<IMG UseMap = "#map_name">
```

Example:

```
<IMG src="question.gif" UseMap="#Sct_map">
```

Example 3:

To create an HTML web page that offers an opportunity to get information about Travel & Tourism. Clicking on Yes will display the required information. Clicking on No displays another HTML file.

The startup HTML Page should be as shown in diagram 6.4.1.

Clicking on Yes will displays the output as shown in diagram 6.4.2.

Clicking on No will display to the user the output as shown in diagram 6.4.3.

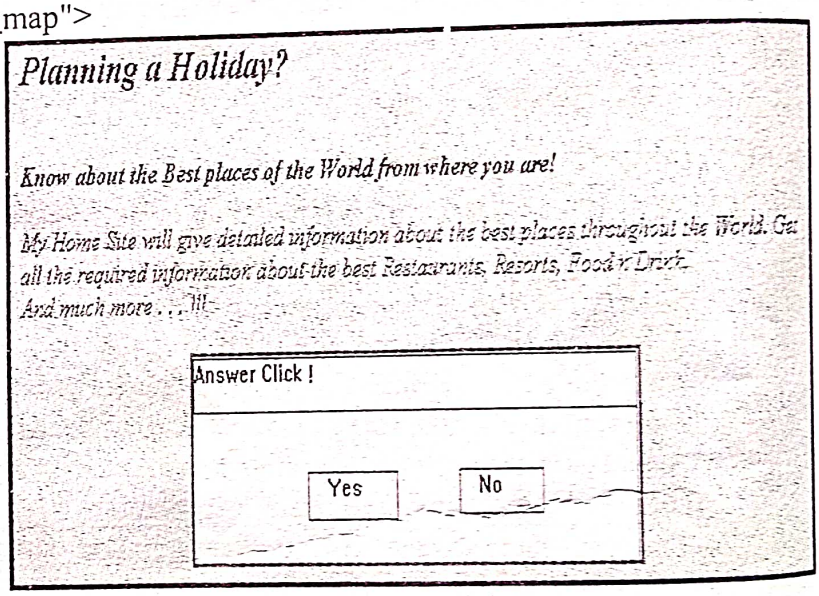

Diagram 6.4.1

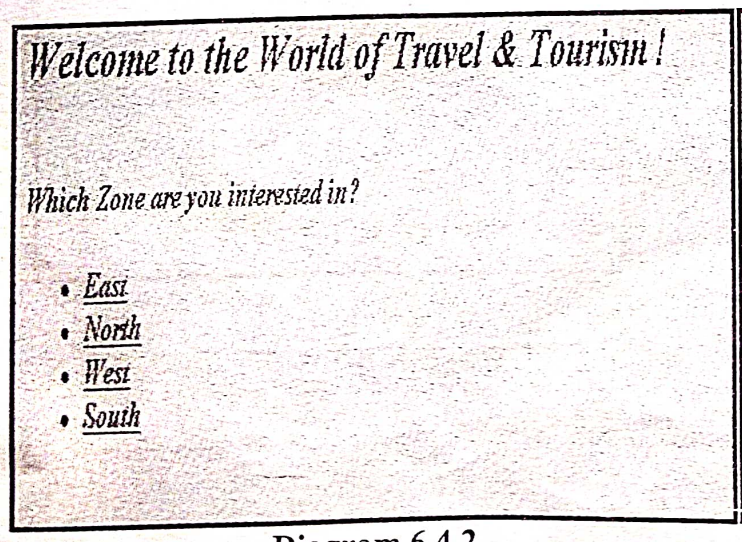

Diagram 6.4.2

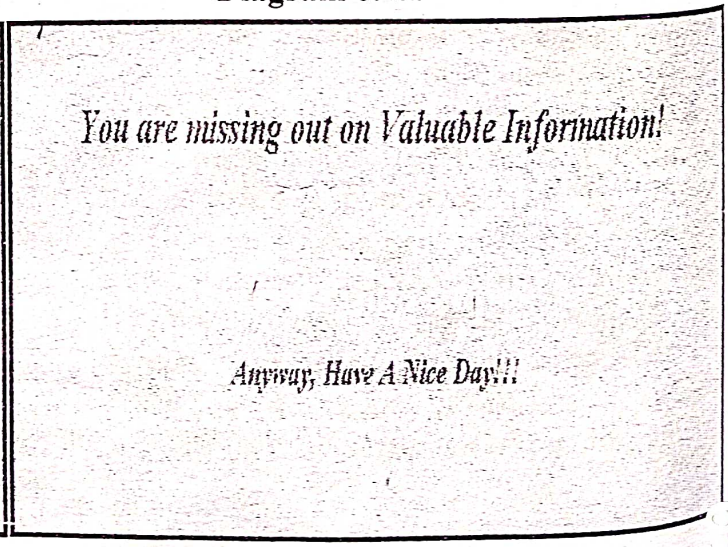

Diagram 6.4.3

Code for ImgMap.html

```
<HTML>
        <HEAD><TITLE>Using Image Maps!!</TITLE></HEAD>
        <BODY STYLE="background-image: url(../images/texture1.gif);">
                <MAP Name="Alert_Map">
                        <AREA Shape="Rect" Coords="102,74,164,96" href="Travel.html">
                        <AREA Shape="Rect" Coords="209,74,272,96" href="Missing.html">
                </MAP><BR/>
                <H2><SPAN STYLE="font-style: italic" >Planning a Holiday?</SPAN></H2>
                <BR/>
                <SPAN STYLE="font-weight:bold;" ><I>Know about the Best places of the World from
where you are!<I></SPAN><P><I>My Home Site will give detailed information about the best places
throughout the World. Get all the required information about the best Restaurants, Resorts, Food n
Drink.<BR/>And much more . . . !!!</I><BR/><BR/>
                <SPAN STYLE="text-align: center;" >
                        <IMG src="../images/alert.gif" UseMap="#Alert_Map" />
                </SPAN>
        </BODY>
</HTML>
```

Code for Travel.html

```
<HTML>
        <HEAD><TITLE>Using Image Maps!!</Title></HEAD>
        <BODY STYLE="background-image: url(../images/texture1.gif);"><BR/>
                <H2><I> Welcome to the World of Travel & Tourism ! </I></H2><BR/>
                <I><B>Which Zone are you interested in?<UL>
                        <LI><A HRef="East.html"> East </A>
                        <LI><A HRef="North.html"> North </A>
                        <LI><A HRef="West.html"> West  </A>
                        <LI><A HRef="South.html"> South </A>
                </UL></B></I>
        </BODY>
</HTML>
```

Code for Missing.html

```
<HTML>
        <HEAD><TITLE>Using Image Maps!!</TITLE></HEAD>
        <BODY STYLE="background-image: url(../images/texture1.gif);">
        <SPAN STYLE="text-align: center;"><BR/><BR/>
                <H2><I>You are missing out on Valuable Information! </I></H2>
                <BR/><BR/><BR/><BR/>
                <H3><I>Anyway, Have A Nice Day!!!</I></H3>
        </SPAN>
        </BODY>
</HTML>
```

FOCUS

Make use of Hyperlinks to provide navigation through the DEPL Web Site. Provide an index, each entry of the index leads to different blocks of information.

7. FRAMES

INTRODUCTION TO FRAMES

Until now each web page when opened takes over the entire browser screen. The browser screen could not be split into separate (unique) sections, showing different but related information.

The HTML tags that divide a browser screen into two or more HTML recognizable unique regions is the <FRAMESET> </FRAMESET> tags. Each unique region is called a frame. Each frame can be loaded with a different document and hence, allow multiple HTML documents to be seen concurrently.

The HTML frame is a powerful feature that enables a web page to be broken into different unique sections that, although related, operate independently of each other.

The <FRAMESET> Tag

The splitting of a browser screen into frames is accomplished with the <FRAMESET> and </FRAMESET> tags embedded into the HTML document. The **<FRAMESET> . . . </FRAMEST>** tags require one of the following two attributes depending on whether the screen has to be divided into rows or columns.

Rows	This attribute is used to divide the screen into multiple rows. It can be set equal to a list of values. Depending on the required size of each row. The values can be: ❑ A number of pixels ❑ Expressed as a percentage of the screen resolution ❑ The symbol *, which indicates *the remaining space*.
Cols	This attribute is used to divide the screen into multiple columns. It can be set equal to a list of values. Depending on the required size of each column. The values can be: ❑ A number of pixels ❑ Expressed as a percentage of the screen resolution ❑ The symbol *, which indicates *the remaining space*.

Table 7.1

Example:

```
<FRAMESET Rows="33%,33%,33%">      -- Divides the browser screen into 3 equal Horizontal
                                      sections.
    <FRAMESET Cols="50%,50%">      -- Splits the 1st Horizontal Section into 2 equal Vertical
                                      sections.
    </FRAMESET>
    <FRAMESET Cols="50%,50%">      -- Splits the 2nd Horizontal section into 2 equal Vertical
                                      sections
    </FRAMESET>
</FRAMESET>
```

The <FRAME> Tag

Once the browser screen is divided into rows (Horizontal Sections) and columns (Vertical Sections), each unique section defined can be loaded with different HTML documents. This is achieved by using the <FRAME> tag, which takes in the following attributes:

SRC="url"	Indicates the URL of the document to be loaded into the frame.
MarginHeight="n"	Specifies the amount of white space to be left at the top and bottom of the frame.
MarginWidth ="n"	Specifies the amount of white space to be left along the sides of the frame
Name="name"	Gives the frame a unique name so it can be targeted by other documents. The name given must begin with an Alphanumeric character
Noresize	Disables the frames resizing capability.
Scrolling	Controls the appearance of horizontal and vertical scrollbars in a frame. This takes the values YES / NO /AUTO.

Table 7.2

Example 1:

```
<HTML>
    <FRAMESET Rows = "30%, *">                  -- Divides the screen into 2 rows, one occupying 30%of
                                                   the screen, and the other occupying the remaining
                                                   space, i.e. 70% of the screen.
        <FRAMESET Cols  = "50%, 50%">           -- Divides the 1st row into 2 equal columns, each 50% of
                                                   the screen.
            <FRAME Src="File1.html">            -- Loads the 1st frame with file1.html.
            <FRAME Src="File2.html">            -- Loads the 2nd frame with file2.html.
        </FRAMESET>
        <FRAMESET Cols="50%, 50%">              -- Divides the 2nd row into 2 equal columns, 50% of the
                                                   screen
            <FRAME Src="File3.html">            -- Loads the 1st frame with file3.html.
            <FRAME Src="File4.html">            -- Loads the 2nd frame with file4.html.
        </FRAMESET>
    </FRAMESET>
</HTML>
```

Output For Example 1:

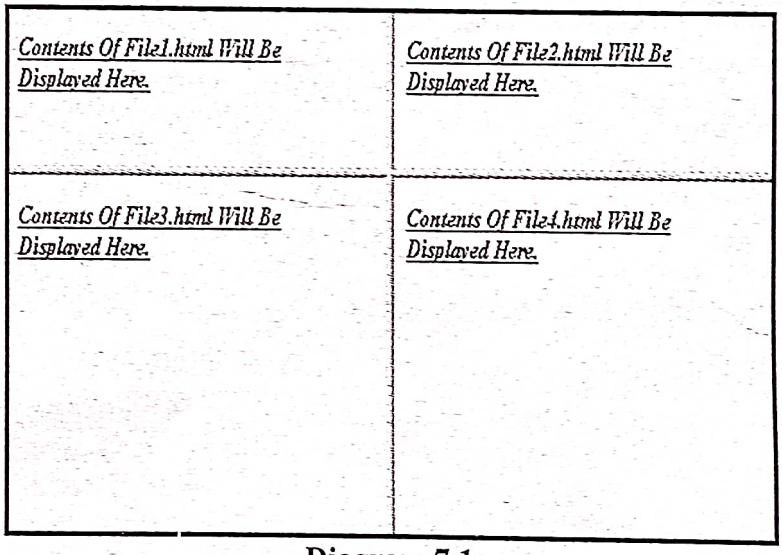

Diagram 7.1

Targeting Named Frames

Whenever a hyperlink, which loads a document in a frame is created, the file referenced in the hyperlink will be opened and will replace the current document that is in the frame.

In a situation where the new document needs to be opened in a different frame while keeping the document from which the new document was navigated open in a different frame, a simple HTML coding technique must be used.

Since the hyperlink must open an HTML file in another frame, the frame in which the HTML file is to be opened needs to be named. This is done by using the NAME attribute of the **<FRAME> . . . </FRAME>** tags. The NAME takes one parameter, which is **its** frame name.

The hyperlink tag will have to be supplied with the following information

1. The *filename*.htm file that has to be opened (*navigated to*).
2. The name of the frame where the *filename*.htm file has to be opened.

The attribute, via which the frame name is specified is the **Target** attribute, which is a part of the <A>...</A> tag. This information is given as:

Target ="<Frame_Name>"

The attribute, via which the HTML file name is specified is the **HRef** attribute which is a part of the <A>...</A> tag. This information is given as:

<A href="index.html" Target="Main">Visit us</A>

Example:

Frame Identification:

```
<FRAMESET Cols = 30%, 70%>
    <FRAME Name="Part">
    <FRAME Name="Main">
</FRAMESET>
```

The above command will divide the browser screen into two vertical frames the first frame called **Part** that will occupy 30% of the browser area and the second frame called **Main** will occupy 70% of the browser area.

Hyperlink Specification:

```
<A href="Index.html" Target="Main">Visit us</A>
```

Here, an HTML file called **Index.html** is loaded into the frame named **Main** when the hyperlink Visit us is clicked.

Note

While specifying the name of the target frame in the TARGET attribute, the **case must be same as specified in the NAME attribute** of the <A> </A> tag.

Example 2:

The following example divides the browser screen into 3 frames. The need is to give information about SCT staff. The startup file is **frames.html,** which loads three different documents in the three different frames. These documents are **header.html, sctfamil.html** and **desc.html.**

Code Listing For frames.html

```
<HTML>
    <FRAMESET ROWS = "70, *">
        <FRAME src="header.html" MarginHeight=0 MarginWidth=0 Name="FRAME1">
        <FRAMESET Cols="35%, *">
            <FRAME src="sctfamil.html" Name="FRAME2">
            <FRAME src="desc.html" Name="FRAME3">
        </FRAMESET>
    </FRAMESET>
</HTML>
```

Note

When <FRAMESET> is being coded within an HTML document, the <BODY> </BODY> tags are not used.

Code Listing For header.html

```
<HTML>
<BODY STYLE="background-image: url(../images/texture1.gif);text-align: center;
font-family: Comic Sans MS;">
<P><BR/>
<H2>The SCT Family</H2></P>
</BODY>
</HTML>
```

Code Listing for sctfamil.html

```
<HTML>
        <BODY STYLE="background-image: url(../images/texture1.gif);text-align: center;">
<BR/><BR/>
        <IMG Height="175" Src="../images/sctfamil.gif" Width="150" />
        </BODY>
</HTML>
```

Code Listing for desc.html

```
<HTML>
        <BODY STYLE="background-image: url(../images/texture1.gif);"><BR/><BR/>
                <B><UL>
                        <LI>Mr Ivan Bayross (CEO)</LI>
                        <LI>Mrs Cynthia Bayross (MD)</LI>
                        <LI>Miss Mita Engineer (GMS)</LI>
                        <LI>Mrs Melba Mehta (Sr. Admin Executive)</LI>
                        <LI>Miss Vaishali Bhayani (Programmer)</LI>
                        <LI>Mr Ajay Lulia (Programmer)</LI>
                        <LI>Miss Shilpa Ratwani (Programmer)</LI>
                        <LI>Miss Jyoti V. (HR Manager)</LI>
                        <LI>Mr Milind Parab (Marketing Executive)</LI>
                </UL></B>
        </BODY>
</HTML>
```

Output For Example 2:

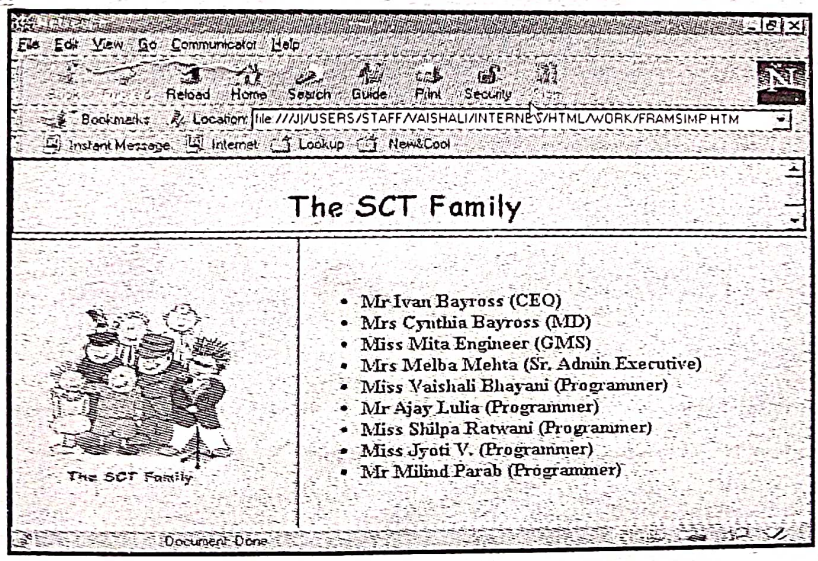

Diagram 7.2

FOCUS

The DEPL site will now have a starting page as a brief introduction of the company, consisting of Logo, Name and what the company does in a few words. The starting page should provide hyperlinks, which give more detailed information about a topic. The Company Logo, Name and the site index must always be visible when the site is navigated through.

This is achieved by the use of frames. Various HTML files required are as listed in table 7.3:

File Name	Functionality
Frames.htm	This file divides the screen into 3 frames as follows: ❑ One frame on top, loaded with the file - Header.htm ❑ Second frame on the left, loaded with the file - *Index.htm* ❑ Third Frame occupying the remaining area on the screen, initially loaded with the file. *Intro.htm*
Header.htm	Displays Header Information like company name and logo.
Index.htm	Provides an Index, consisting of the following 4 *Image Hyperlinks*: ❑ Profile ❑ Barbed Wire ❑ Barbed Tape ❑ Animal Fencing These Hyperlinks, when clicked, open different files in the third frame on the screen.
Profile.htm	Gives the company profile
BWire.htm	Gives a description about the product - Barbed Wires
BTape.htm	Gives a description about the product - Barbed Tapes
AniFenc.htm	Gives a description about the product - Animal Fencing

Table 7.3

Code for Frames.html:

```
<HTML><FRAMESET Rows="30%, *" Framespacing="0">
    <FRAME Name="Header" src="Header.html" FrameBorder="0" Scrolling=NO>
    <FRAMESET Cols="25%, *">
        <FRAME Name="Index" src="Index.html" FrameBorder="0" Scrolling= NO>
        <FRAME Name="Details" src="Intro.html" FrameBorder="0">
    </FRAMESET>
</FRAMESET></HTML>
```

Code listing for Header.html:

```
<HTML>
    <BODY STYLE="background-image: url(../images/pinkwhit.gif);text-align:center;font-family:Brus
Script MT;font-size:25px;color:#008000">
        <IMG STYLE="vertical-align:middle;" Src="../images/logo.gif" />
        <SPACER Size="30" />
        <I>Delta Engineering Pvt. Ltd.</I>
    </BODY>
</HTML>
```

Code listing for Index.html:

```
<HTML>
        <BODY STYLE="background-image: url(../images/pinkwhit.gif);">
                <A HRef="Profile.html" Target="Details">
```

```
            <IMG Alt="Profile" Height="35" Src="../images/profile.gif" Style="border:0px solid"
Width="101" /></A><BR/><BR/>
            <A href="BWire.html" Target="Details"><IMG Alt="Barbed Wire" Height="35"
Src="../images/conwire.gif" Style="border:0px solid" Width="101" /></A><BR/><BR/>
            <A href="BTape.html" Target="Details"><IMG Alt="Barbed Tapes" Height="35"
Src="../images/contape.gif" Style="border:0px solid" Width="101" /></A><BR/><BR/>
            <A href="AniFenc.html" Target="Details"><IMG Alt="Fencing" Height="35"
Src="../images/anifenc.gif" Style="border:0px solid" Width="101" /></A>
        </BODY>
</HTML>
```

Code listing for Intro.html:

```
<HTML>
    <BODY STYLE="background-image: url(../images/pinkwhit.gif);">
        <P STYLE="text-align: center; font-family: Brush Script MT; font-size: 22px;color:#008000;">
            <BR/><I>
            Delta Engineering Pvt. Ltd. is a specialist manufacturer of wire and wire products. DEPL
            established in Mumbai, India is ideally located for shipments to any part of the world. The
            main items of manufacture, in collaboration with Gulf Fencing Industry (GFI) include
            protector gabions and protector fencing systems.
        </I>
        </P>
    </BODY>
</HTML>
```

Output For Frame.html:

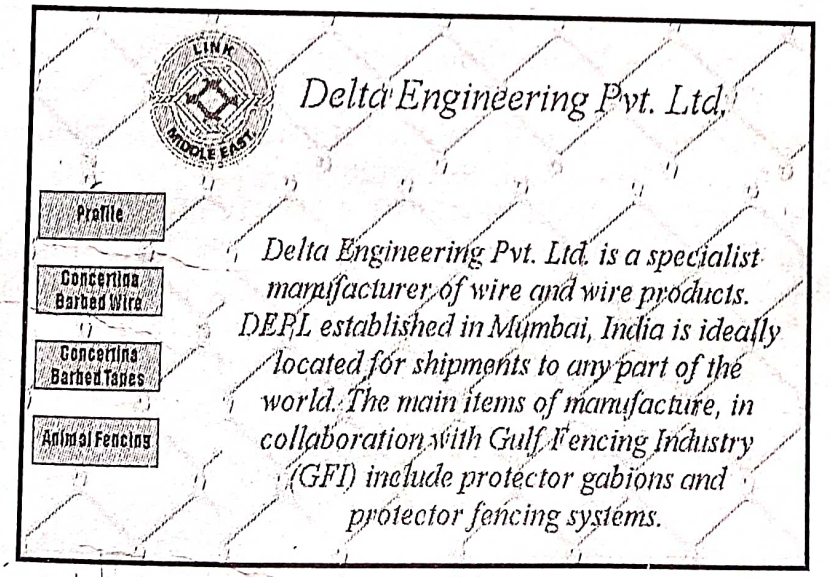

Diagram 7.3.1

Code For Profile.html:

```
<HTML>
    <HEAD><TITLE> Delta Engineering Pvt. Ltd. </TITLE></HEAD>
    <BODY STYLE="background-image: url(../images/pinkwhit.gif);">
        <P STYLE="font-family:Brush Script MT;font-size:30px;color:#008000;"><I>Our Profile</I>
        <BR/><HR Size="3" />
```

```
<IMG Height="40" Src="../images/intro.gif" Width="120" /><BR/>
<P STYLE="font-family:Times Roman;font-size: 12px;color: #008000;text-align: center;">Delta
Engineering Pvt. Ltd. is a specialist manufacturer of wire and wire products. DEPL established in Mumbai,
India is ideally located for shipments to any part of the world. The main items of manufacture, in
collaboration with Gulf Fencing Industry (GFI) include protector gabions and protector fencing
systems.</P><P STYLE="font-family:Times Roman;font-size: 12px;color: #008000;text-align:
center;">Protector fencing systems offer a wide range of solutions to all security problems on any terrain
and under extreme climatic conditions. The protector fencing system has been used extensively in Europe,
America and the Far East, and this has helped formulate a package especially suited to Middle East
requirements.</P><P STYLE="font-family:Times Roman;font-size: 12px;color: #008000;text-align:
center;">DEPL is equipped to offer comprehensive packages including design, material and
installation.</P><P STYLE="font-family:Times Roman;font-size: 12px;color: #008000;text-align:
center;">Products strictly adhere to BS, ASTM and DIN international specifications. Quality control is
guaranteed by independent laboratory test certificates from India.</P><P STYLE="font-family:Times
Roman;font-size: 12px;color: #008000;text-align: center;">Quality control is implemented without
sacrificing economy and efficiency. DEPL is dedicated to technical services and problem solving.</P><P
STYLE="font-family:Times Roman;font-size: 12px;color: #008000;text-align: center;">DEPL is following
quality methods and is accredited with ISO 9002.</P><P STYLE="font-family:Times Roman;font-size:
12px;color: #008000;text-align: center;"><IMG Height="40" Src="../images/planning.gif" Width="120"
/><BR/>DEPL can provide planning support by offering design, technical specifications, drawings,
foundation plans and installation instructions, together with a personalized service. The company's
technical sales engineers keep in constant touch with all clients. Utmost importance is given to optimum
design, versatility, durability and economy backed by the DEPL guarantee for work
undertaken.</P><BR/><HR/>
        <P STYLE="font-family:ZappedChancellorSH;font-size: 15px;color: green;">

            <SPACER Type="Horizontal" Size="20" />
                Please forward any enquiries to enq_depl@bom2.vsnl.net.in
            </P>
            <P STYLE="font-family:ZappedChancellorSH;font-size: 15px;color: green;"><I>
                <SPACER Type="Horizontal" Size="120" />
                    <B>DELTA ENGINEERING PVT. LTD.</B><BR/>
                <SPACER Type="Horizontal" Size="120" />502, 5th Floor, Tejas Building,<BR/>
                <SPACER Type="Horizontal" Size="120" />Andheri (W), Mumbai<BR/>
                <SPACER Type="Horizontal" Size="120" />INDIA<BR/>
                <SPACER Type="Horizontal" Size="120" >Telephone : 91-022-8210050
            </I></P>
        <HR/>
    </BODY>
</HTML>
```

Output For Profile.html:

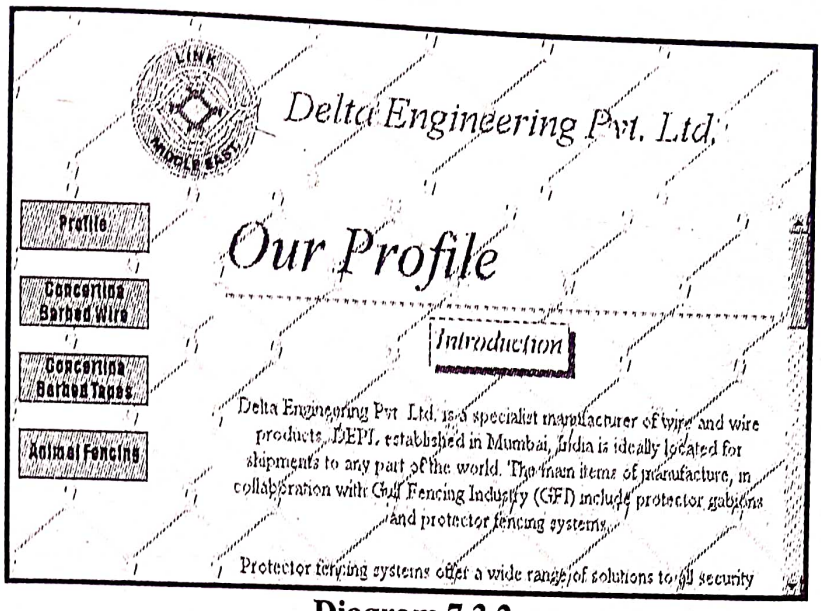

Diagram 7.3.2

Code for BWire.html

```
<HTML>
    <HEAD><TITLE> Delta Engineering Pvt. Ltd. </TITLE></HEAD>
    <BODY STYLE="background-image: url(../images/pinkwhit.gif);">
            <P    STYLE="font-family:Brush    Script    MT;font-size:30px;color:#008000;"><I>Barbed
            Wires</I>
        </P><BR/><HR Size="3" />
        <TABLE CELLPADDING="10"><TR>
            <TD><IMG HEIGHT="200" SRC="../images/barbed1.jpg" style="border:2px solid; vertical-
            align: bottom;" WIDTH="160" /></TD>
            <TD><SPAN STYLE="font-family:Comic Sans MS; font-size:11px; color:#008000;"
            ><B>Concertina Barbed Wire in roll form is used in high security areas to deter trespassing
            men and animals.<P>The effectiveness of this material is proved as it has been in use for
            more than 75 years during war and peace.</B></SPAN></TD>
        </TR></TABLE>
        <OL STYLE="font-family:Comic Sans MS;font-size:11px;color:#008000;" >
            <LI><P><B><I>Line Wire:</I></B><BR/>This is made up of 3.05mm diameter high carbon
            steel wire, with a tensile strength of 170 to 180 kg/mm². The wire is drawn and dressed in
            such a manner that the coils formed will fall naturally into the specified diameter without
            forming a figure eight. Line wire is heavy hot dipped galvanized with minimum inc coating of
            185 gm/mm2.</P></LI>
            <LI><P><B><I>Barbed Wire:</B></I><BR/>This is 2.00mm diameter bright mild steel
            wire with a tensile strength of 38 to 55kg/mm² conforming to BS 1052. The wire is hot dipped
            galvanized with a minimum zinc coating of 20 to 50 gm/mm². The barbs are formed with four
            points. Spacing between the centers of the barbs of every 70mm along the length of the wire.
            The barbs are firmly secured by indentations made on the wire, so that the barbs do not rotate
            or slide along the wire. The four points of the barbs are formed at the right angles to one
            another and project outwards approximately 12mm from the center of the wire.</P></LI>
            <LI><P><B><I>Carrying Handles:</I></B><BR/>Handles are made of mild steel wire of
            3.55mm diameter and are attached to the outer turn of the coil on each side.</P></LI>
        </OL><HR/>
    </BODY>
</HTML>
```

Output For BWire.html:

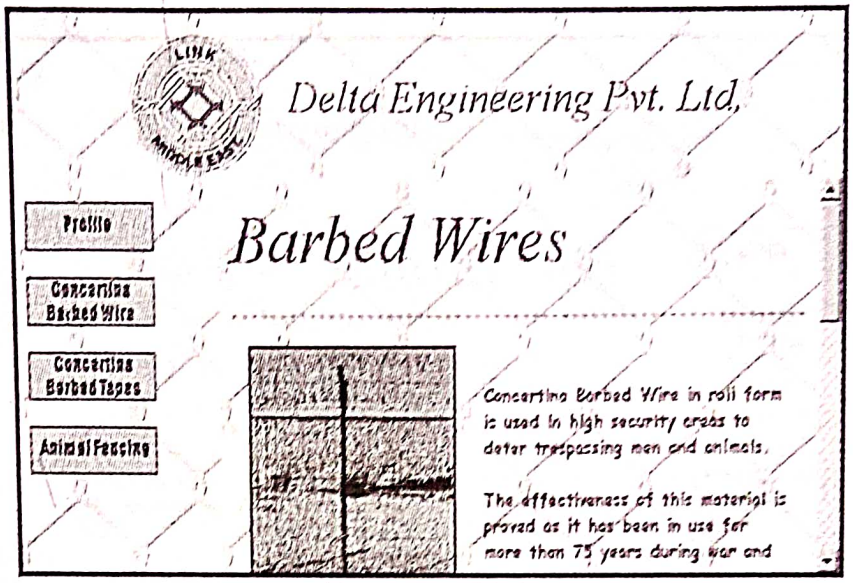

Diagram 7.3.3

Code for BTape.html

```
<HTML>
    <HEAD><TITLE>Delta Engineering Pvt. Ltd.</TITLE></HEAD>
    <BODY STYLE="background-image: url(../images/pinkwhit.gif);">
    <P STYLE="font-family:Brush Script MT;font-size:30px;color:#008000;"><I>Barbed Tapes</I>
        </P><BR/><HR Size="3" />
            <TABLE CellPadding="20"><TR>
            <TD><IMG Height="350" Src="../images/barbed.jpg" style="border:2px solid; vertical-align:
bottom;" Width="200"></TD>
            <TD><SPAN STYLE="font-family:Comic Sans MS;font-size:11px;color:#008000;"
><B>Barbed Tapes are used as psychological and physical deterrent against intrusion by personnel and
animals. Barbed tape barrier systems are more vicious and difficult to tamper with, providing superior
perimeter security. Some of the users are military installations, nuclear energy sites, maximum security
prisons, various petroleum installations, tank farms and other important industrial
facilities.</B></SPAN></TD>
        </TR></TABLE>
        <UL STYLE="font-family:Comic Sans MS;font-size:11px;color:#008000;">
            <LI><DT><P><B><I>Short Blade Barbed Tape (SBBT):</I></B></DT><BR/>
            <DD>To give the maximum tensile strength at the time of the breach hard drawn steel cord is
used (ES1). For camouflage purposes, a coaltar coating can be applied over the entire surface (ES-1), and
to attain the high degree of rust resistance, the core wire is made of galvanized steel (ES-2). Any of the
above three options are available to meet your specific requirements.</DD></P></LI>
            <LI><DT><P><B><I>Medium Blade Barbed Tape (MBBT):</I></B></DT><BR/>
            <DD>The specification of the "ivory" tape is similar to those of ES types. The blades are
sharper and have a greater pricking capacity. The life of this tape is more than three times longer than those
of ES types. Therefore, "ivory" tape is a more effective choice in terrain which has heavy rain or in coastal
areas. The diameter will be similar to ES type.</DD></P></LI>
            <LI><DT><P><B><I>Long Blade Barbed Tape (LBBT):</I></B></DT><BR/>
            <DD>This is the most effective psychological and physical deterrent, ever made as a barrier
obstacle. It is available in authentic stainless steel (SUS 430) and the core wire can be fabricated from
either galvanized carbon steel or stainless steel.</DD></P></LI>
        </UL><HR/>
    </BODY>
</HTML>
```

Output For BTape.html:

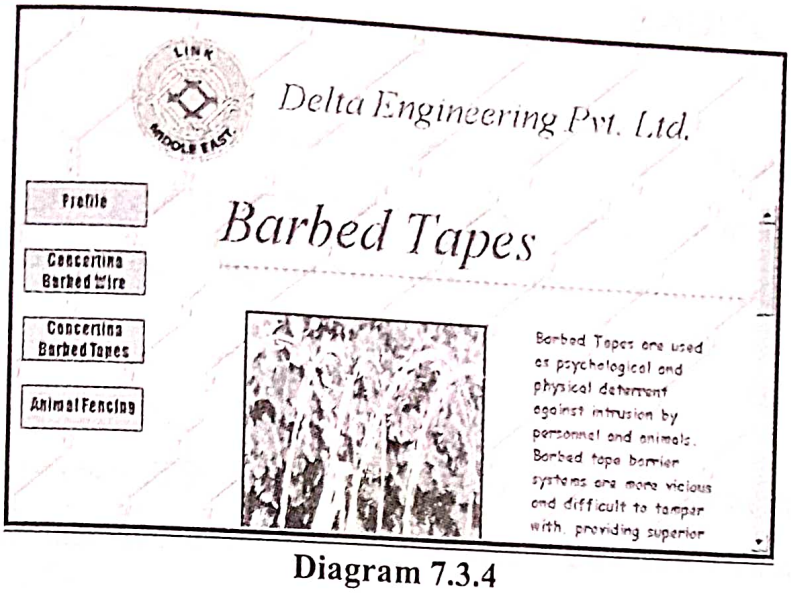

Diagram 7.3.4

Code for Anifenc.html

```
<HTML>
        <HEAD><TITLE> Delta Engineering Pvt. Ltd. </TITLE></HEAD>
        <BODY STYLE="background-image: url(../images/pinkwhit.gif);">
        <P STYLE="font-family:Brush Script MT;font-size:30px;color:#008000;">
        <I>Animal Fencing</I>
        </P><BR/><HR Size="3" />
        <TABLE CellPadding="20"><TR>
        <TD><IMG Height="240" Src="../images/fence1.jpg" STYLE="border: 2px solid; vertical-align:
bottom;" Width="200" /></TD>
        <TD>
<SPAN STYLE="font-family:Comic Sans MS;font-size:11px;color:#008000;" >
<B>DEPL's animal fencing system is mainly used as an anti-intrusion barrier against any farm and other
animals.<P>The most common use is on highways where vast distances are covered at a very economical
cost.<P>Animal fencing can also be used to enclose areas such as farms, forest areas and national parks,
where security is not crucial.</P><P>This system is easy to install and can be erected in a comparatively
short time.</P></B></SPAN></TD>
        </TR>
</TABLE><HR>
        </BODY>
</HTML>
```

Output:

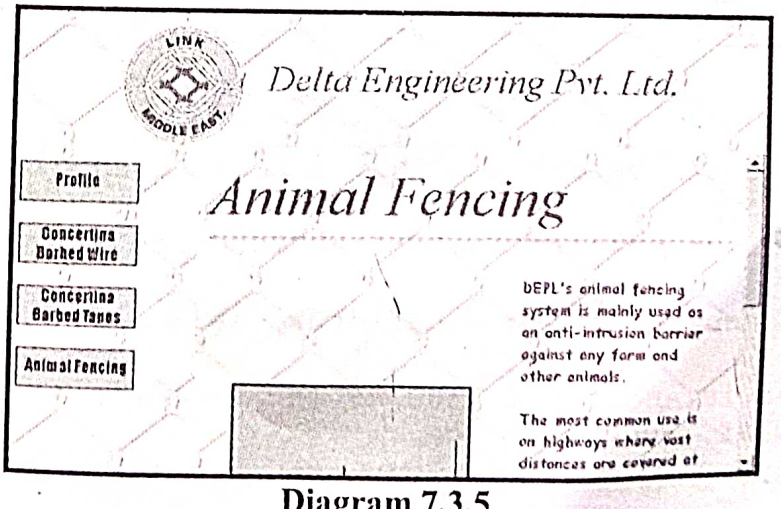

Diagram 7.3.5