

core
WEB
programming

HTML Frames

Agenda

- **Advantages and disadvantages of frames**
- **FRAME template**
- **Defining rows and cols in a FRAMESET**
- **Common FRAME and FRAMESET attributes**
- **Nested frames**
- **Targeting a document to a named FRAME cell**

Frame Advantages

- **Certain parts of the interface (e.g., a TOC) are always on the screen**
- **Can avoid retyping common sections of multiple Web pages**
- **Consistent use across a large site sometimes simplifies user navigation**
- **A convenient way to mix text-oriented HTML with Java applets**
- **Image maps are more convenient if the map image remains on screen and only the results section changes**

Frame Disadvantages

- **The meaning of the “Back” and “Forward” buttons can be confusing**
- **Poorly designed frames can get the user lost**
- **Hard to find real URL of a page you want**
 - Printing problems!
- **Hard to bookmark "configuration"**
- **Some very old browsers do not support frames**
- **Security**
 - Hackers can insert frame cells into your pages in some circumstances, perhaps stealing information intended for your site

Frame Template

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Frameset//EN">
<HTML>
<HEAD><TITLE>Document Title</TITLE></HEAD>

<FRAMESET ...>
  <!-- FRAME and Nested FRAMESET Entries -->
  <NOFRAMES>
    <BODY>
      <!-- Stuff for non-Frames browsers -->
    </BODY>
  </NOFRAMES>
</FRAMESET>
</HTML>
```

FRAMESET Attributes

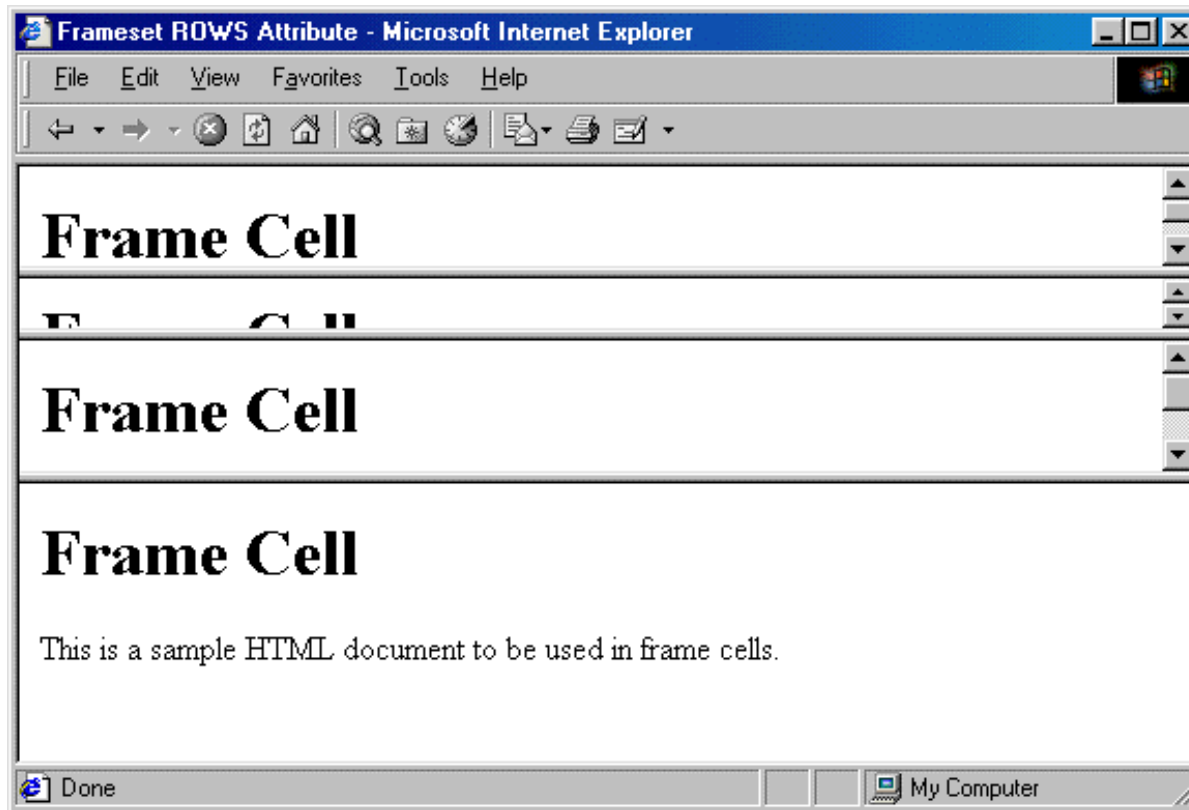
- **COLS, ROWS**

- A comma-separated list of pixel values, percentages, and weighted remainders
- FRAMESET entries should *always* specify at least two rows or columns. Netscape problems if not!
- Examples

```
<FRAMESET ROWS="50,10%,*,2*">  
  ...  
</FRAMESET>
```

```
<FRAMESET COLS="25%,*,*">  
  ...  
</FRAMESET>
```

FRAMESET ROWS, Example



```
<FRAMESET ROWS="50,10%,*,2*">
```

```
...
```

```
</FRAMESET>
```

FRAMESET Attributes (Continued)

- **FRAMEBORDER**

- Indicates whether borders will be drawn *between* frame cells
- YES or 1 specifies borders; NO or 0 specifies no border
- Can be overridden by FRAMEBORDER settings in individual FRAME entries
- Often used in conjunction with BORDER=0 and FRAMESPACING=0

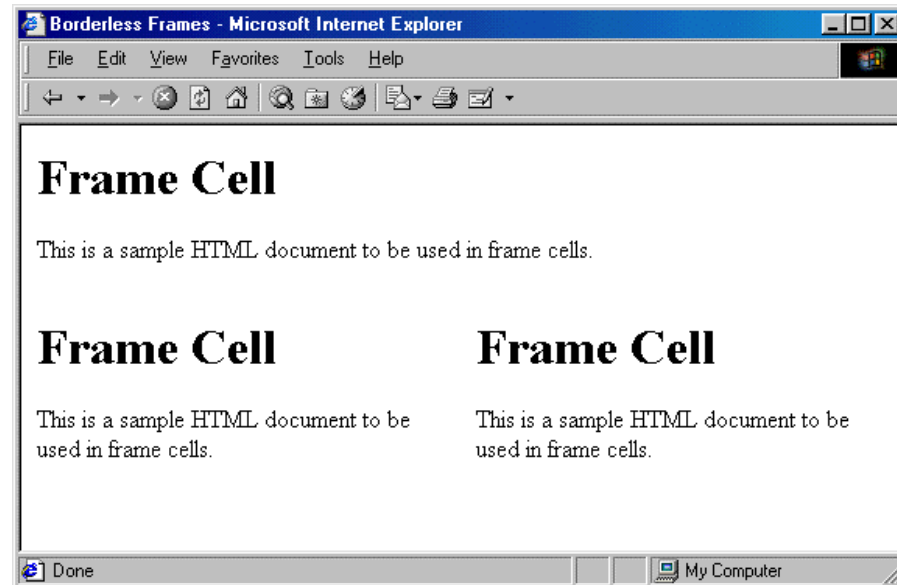
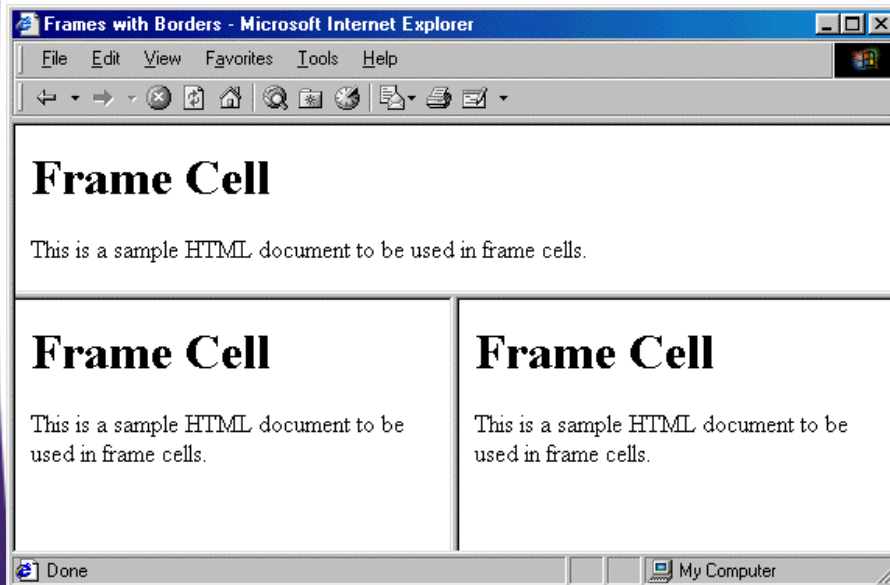
- **BORDER (Netscape), FRAMESPACING (IE)**

- Specify the thickness of the border between cells
- Apply to outermost FRAMESET only

- **BORDERCOLOR**

- Sets the color of the border between cell, using either a hex RGB value or color name

Frame Border, Examples



FRAME: Specifying Content of Frame Cells

- **SRC**
 - URL of the document to place in the frame cell
- **NAME**
 - Supplies destination for TARGET attribute of hypertext links
- **FRAMEBORDER, BORDERCOLOR**
- **MARGINWIDTH, MARGINHEIGHT**
 - Specifies the left/right and top/bottom cell margins, respectively
- **SCROLLING**
 - Indicates whether cells should have scrollbars
- **NORESIZ**
 - Disables the ability to resize the frame cells

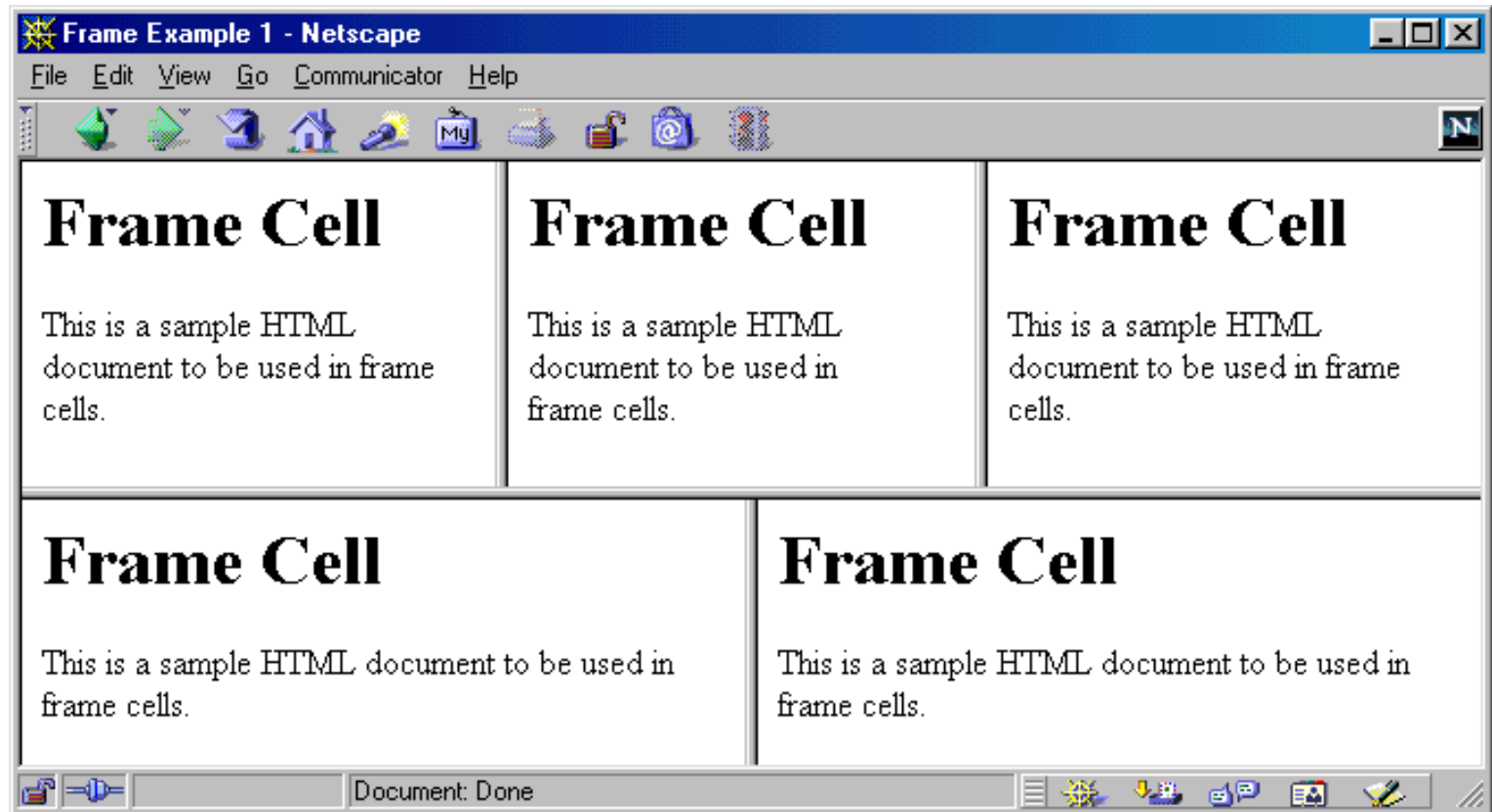
Frame Example 1

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Frameset//EN">
<HTML>
<HEAD><TITLE>Frame Example 1</TITLE></HEAD>
<FRAMESET ROWS="55%,45%">
  <FRAMESET COLS="*,*,*">
    <FRAME SRC="Frame-Cell.html">
    <FRAME SRC="Frame-Cell.html">
    <FRAME SRC="Frame-Cell.html">
  </FRAMESET>

  <FRAMESET COLS="*,*">
    <FRAME SRC="Frame-Cell.html">
    <FRAME SRC="Frame-Cell.html">
  </FRAMESET>

<NOFRAMES>
  <BODY>
    Your browser does not support frames. Please see
    <A HREF="Frame-Cell.html">non-frames version</A>.
  </BODY>
</NOFRAMES>
</FRAMESET>
</HTML>
```

Frame Example 1, Result



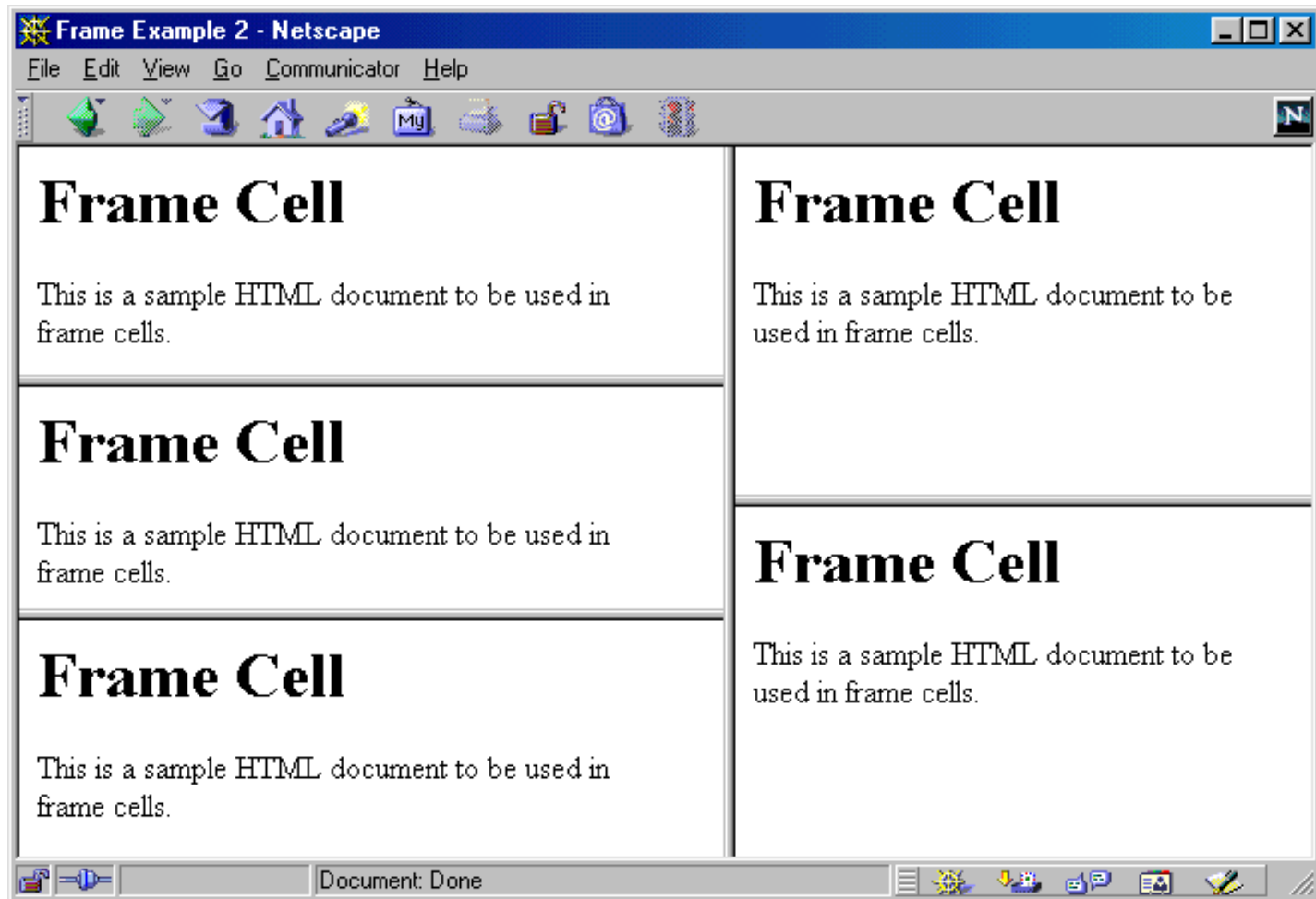
Frame Example 2

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Frameset//EN">
<HTML>
<HEAD><TITLE>Frame Example 2</TITLE></HEAD>

<FRAMESET COLS="55%,45%">
  <FRAMESET ROWS="*,*,*">
    <FRAME SRC="Frame-Cell.html">
    <FRAME SRC="Frame-Cell.html">
    <FRAME SRC="Frame-Cell.html">
  </FRAMESET>

  <FRAMESET ROWS="*,*">
    <FRAME SRC="Frame-Cell.html">
    <FRAME SRC="Frame-Cell.html">
  </FRAMESET>
</NOFRAMES>
<BODY>
  Your browser does not support frames. Please see
  <A HREF="Frame-Cell.html">nonframes version</A>.
</BODY>
</NOFRAMES>
</FRAMESET>
</HTML>
```

Frame Example 2, Result



Targeting Frame Cells

- Specify the cell in which to place a page referenced by a hyperlink

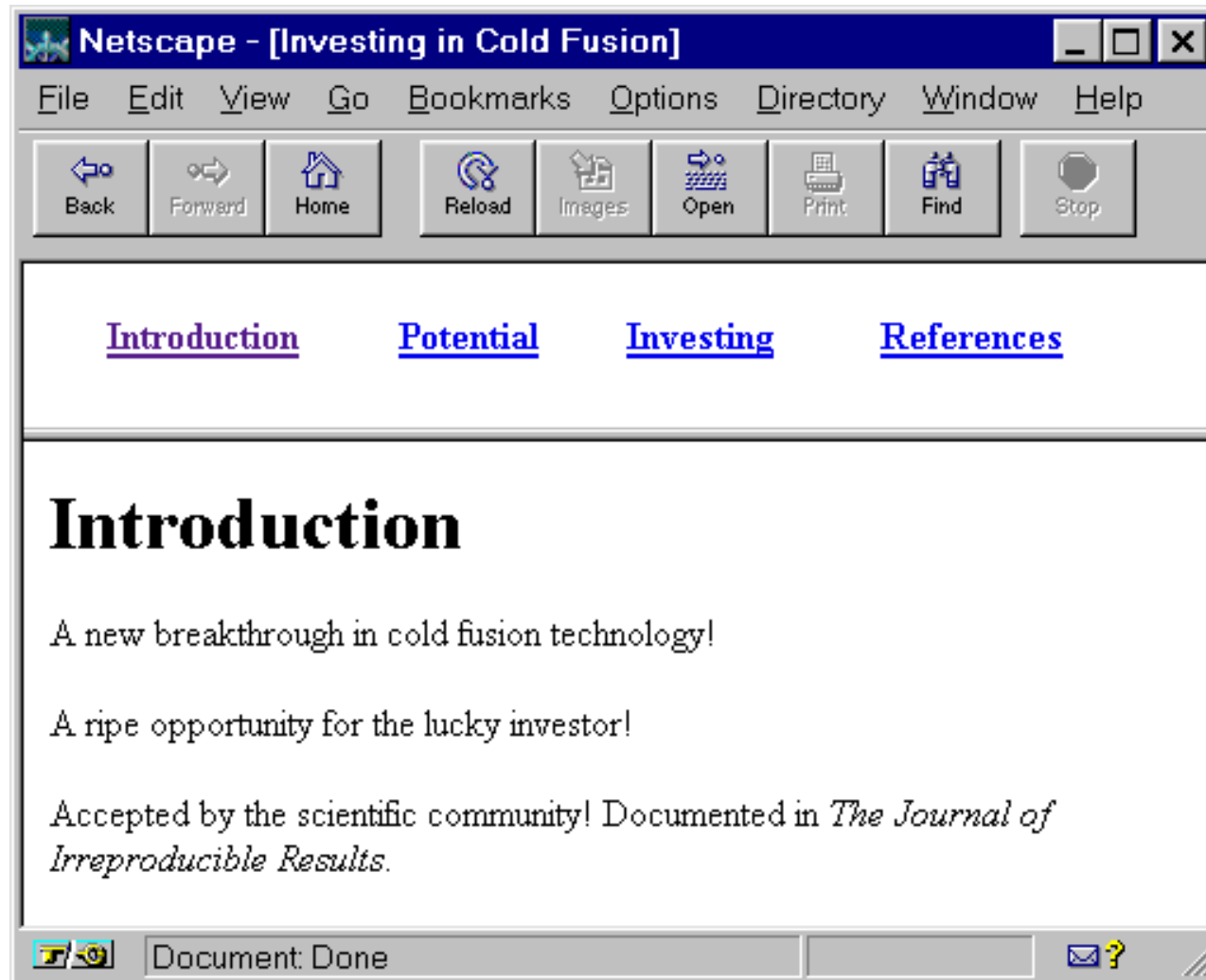
- The NAME Attribute of FRAME

```
<FRAME SRC="..." NAME="cellName">
```

- The TARGET Attribute of A HREF

```
<A HREF="..." TARGET="cellName">
```

Targeting Example



Cold-Fusion.html

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Frameset//EN">
<HTML>
<HEAD>
  <TITLE>Investing in Cold Fusion</TITLE>
</HEAD>
<FRAMESET ROWS="75,*">
  <FRAME SRC="TOC.html" NAME="TOC">
  <FRAME SRC="Introduction.html" NAME="Main">
  <NOFRAMES>
    <BODY>
      This page requires Frames. For a non-Frames version,
      <A HREF="Introduction.html">the introduction</A>.
    </BODY>
  </NOFRAMES>
</FRAMESET>
</HTML>
```

TOC.html

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML>
<HEAD>
  <TITLE>Table of Contents</TITLE>
</HEAD>
<BODY>
<TABLE WIDTH="100%">
  <TR><TH><A HREF="Introduction.html" TARGET="Main">
    Introduction</A></TH>
  <TH><A HREF="Potential.html" TARGET="Main">
    Potential</A></TH>
  <TH><A HREF="Investing.html" TARGET="Main">
    Investing</A></TH>
  <TH><A HREF="References.html" TARGET="Main">
    References</A></TH></TR>
</TABLE>
</BODY>
</HTML>
```

Targeting Example, Results

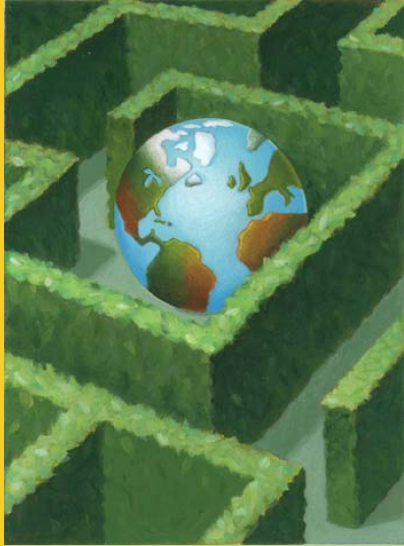


Predefined Frame Names

- **_blank**
 - Load document into a **new browser** window
- **_top**
 - Causes the linked document to take up the whole browser window
 - Document will not be contained in a frame cell
- **_parent**
 - Places document in the *immediate* FRAMESET parent
 - Same as `_top` if no nested frames
- **_self**
 - Place document in current cell
 - Only necessary to override a BASE entry

Summary

- **Frames require a Frameset DOCTYPE for validation**
- **A FRAMESET can be divided either into columns or rows**
 - To create both rows *and* columns use nested FRAMESETs
- **By giving a FRAME a name, documents can be targeted to the named frame cell**
 - `<FRAME ... NAME="...">`
 - ``
- **There are four predefined frame names**
 - `_blank`, `_top`, `_parent`, and `_self`



core
WEB
programming

Questions?