CS6501 - INTERNET PROGRAMMING

UNIT-II
WEBSITE BASICS : HTML , CSS

CSS SELECTORS
CSS POSITIONING ELEMENTS
CSS BOX MODEL
BORDER, PADDING & MARGIN

ID SELECTOR

```
<html><head><style>
#m1
        {
        color:blue;  font-size:20;
#m2
        {
        color:red;  font-size:10;
        }
p
        {
        color:green;   font-size:16;
        }
h3
        {
        color:yellow;
        }
</style></head>
<body>
<p>HAI WELCOME</p>
<p id="m1"> HAI WELCOME</p>
<p id="m2" > HAI WELCOME</p>
<p><h3>END</h3></p>
</body></html>
```

Class Selector

```
<html><head><style>
.m1
        {
        color:green;  font-size:20;
        }
.m2
        {
        color:red;              font-size:14;
        }
p
        {
        color:blue;  font-size:16;
        }
h3
        {
        color:yellow;
        }
</style></head>
<body>
<p>HAI WELCOME</p>
<p class="m1"> HAI WELCOME</p>
<p class="m2" > HAI WELCOME</p>
<p><h3>END</h3></p>
</body></html>
```

HAI WELCOME

HAI WELCOME

HAI WELCOME

END

Positioning Element

- The position property specifies the type of **positioning method**

- There are five different position values:
  - static
  - relative
  - fixed
  - absolute
  - sticky

Position - Static

- position: static;
  - Default position is static
  - always positioned according to the normal flow of the page
  - Display the elements in Sequential order

```
<html><head><style>
    img
    {
      position: static; left:100px; top:200px;
    }
</style></head><body>
<h2>My Page</h2>

<p>An element with position: static; is not positioned in any
special way; it is always positioned according to the normal flow
of the page:</p>

<img src="a1.jpg"      height"200"      width="200">

<p>An element with position: static; is not positioned in any
special way; it is always positioned according to the normal flow
of the page:</p>
</body></html>
```

My Page

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:
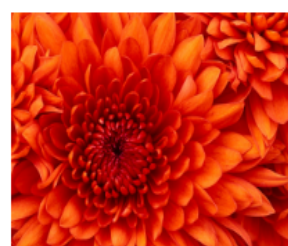
position: relative;

- An element is positioned relative to its normal position.
- top, right, bottom, and left properties can be used to position that element
- Element is adjusted away from its normal position.
- The gap left by that element will not be filled by next element.

```
<!DOCTYPE html><html><head><style>
    #id1
    {
      position:relative;  top:200px; left:500px;
      border:3px solid #73AD21;
    }
</style></head><body>
<h2>My Page</h2>
<p>An element with position: static; is not positioned in any
special way; it is always positioned according to the normal flow of
the page:</p>
    <p  id="id1">
    This div element has position relative;
    </p>
<p>An element with position: static; is not positioned in any
special way; it is always positioned according to the normal flow of
the page:</p>
</body></html>
```

My Page

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

This div element has position: static;

```
<style>
        Img
        {
        position: relative; left:100px; top:200px;
         }
</style>
</head>
<body>
<h2>My Page</h2>

<p>An element with position: static; is not positioned in any special way; it
is
always positioned according to the normal flow of the page:</p>

<img src="a1.jpg"      height"200"        width="200">

<p>An element with position: static; is not positioned in any special way; it
is
always positioned according to the normal flow of the page:</p>

</body></html>
```
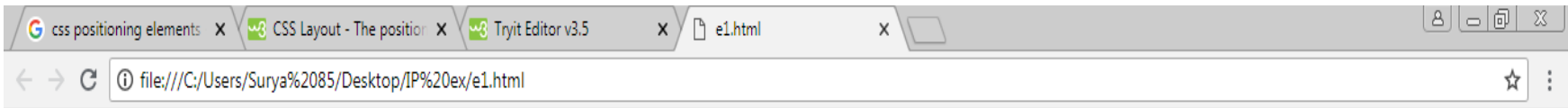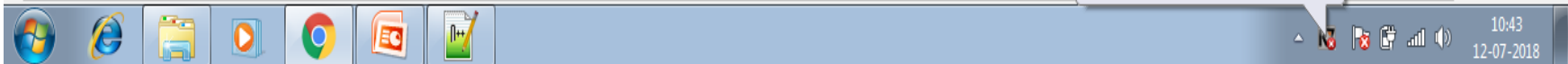
My Page

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

position: fixed;

- Element is positioned relative to the viewport,
- it always stays in the same place even if the page is scrolled.
- The top, right, bottom, and left properties are used to position the element.
- A fixed element does not leave a gap
- Next element is placed behind the fixed element

```
<html><head>
<style>

    img

    {

        position: fixed;

        left: 300px;

        top: 300px;

        border: 3px solid #73AD21;


    }
</style>
</head>
<body>
<h2>My Page</h2>
<p>An element with position: static; is not positioned in any special way; it is

    <img  src="a1.jpg"     height"200"      width="200">
<p>An element with position: static; is not positioned in any special way; it is
```
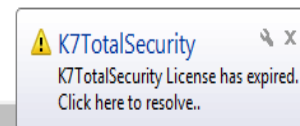
My Page

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

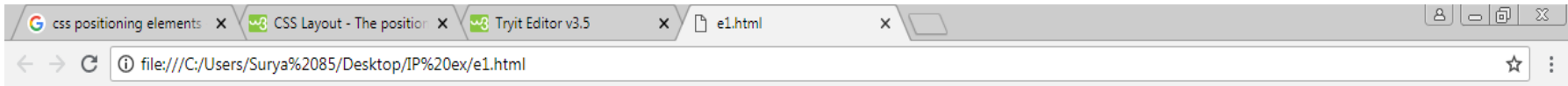An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

An element with position: static; is not positio   ays positioned according to the normal flow of the page:An element with position: static; is not positioned   positioned according to the normal flow of the page:An element with position: static; is not positioned   positioned according to the normal flow of the page:An element with position: static; is not positioned   positioned according to the normal flow of the page:An element with position: static; is not positioned   positioned according to the normal flow of the page:An element with position: static; is not positioned   positioned according to the normal flow of the page:An element with position: static; is not positioned   positioned according to the normal flow of the page:An element with position: static; is not positioned   positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An

position: absolute;

- The element is positioned relative to its first positioned (not static) ancestor element
- if it has no positioned ancestors, then it uses the document body, and moves along with page scrolling.
- Gap left by the element is filled by next elements
- Best positioning method. Affects normal flow of positioning

```html
<!DOCTYPE html>
<html><head>
<style>
h2
{
        position:absolute; left:0px;  top: 0px;
        border: 3px solid #73AD21;
        color:yellow;         font-size:30;
}


img
{
        position:absolute;  left:0px;              top: 0px;
        border: 3px solid #73AD21;
}
p
{
        position:absolute;  left: 400px;  right:600px;
        top: 0px;             border: 3px solid #73AD21;
}
</style>
</head>
```

```
<body>
<img src="a1.jpg"      height"400"       width="300">

<h2>My Page</h2>

<p>An element with position: static; is not positioned in any special way; it is
always positioned according to the normal flow of the page:An element with
position: static; is not positioned in any special way; it is always positioned
according to the normal flow of the page:An element with position: static; is not
positioned in any special way; it is always positioned according to the normal flow
of the page:An element with position: static; is not positioned in any special way;
it is always positioned according to the normal flow of the page:</p>

</body>
</html>
```
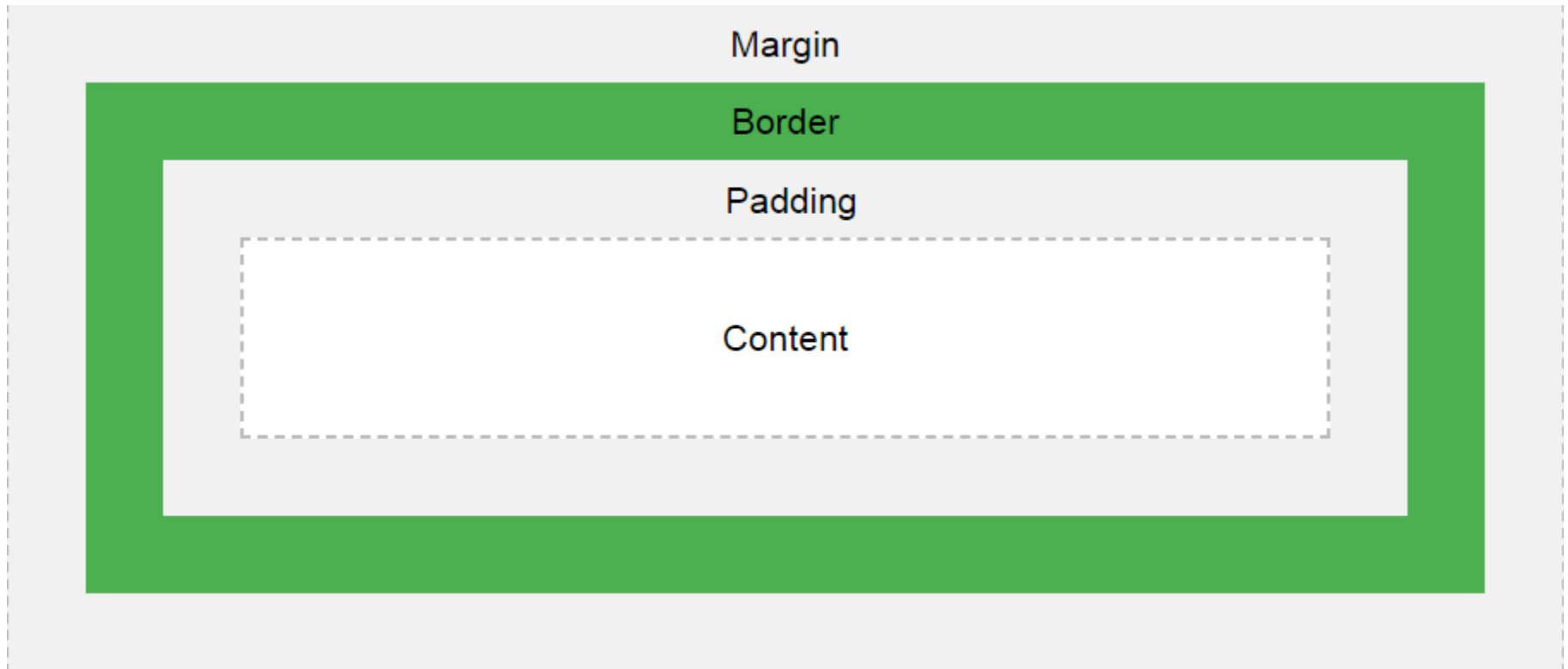
My Page

An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page:

BOX MODEL

- All HTML elements can be considered as boxes.

- The CSS box model is essentially a box that wraps around every HTML element.

- Virtual box

- It consists of: margins, borders, padding, and the actual content.

Virtual box around HTML element

Margin

Border

Padding

Content

Border properties

- The border property is a shorthand property for:
  - border-width
  - border-style (required)
  - border-color

  ```
  h2
    {
        border: 4px dotted blue;
    }
  ```

padding property

- An element's padding is the space between its content and its border.

- Padding creates extra space within an element, while margin creates extra space around an element.

- The padding property is a shorthand property for:

- [padding-top](#)

- [padding-right](#)

- [padding-bottom](#)

- [padding-left](#)

```
<html><head><style>
ex1 {    border: 1px solid red;    padding: 35px 200px;}
</style></head><body>
<h1>The padding Property</h1>
<p class="ex1">This paragraph has a 35 pixels padding for top and bottom,
and a 200 pixels padding for right and left.</p>
<p><strong>Note:</strong> Padding creates extra space within an element, while
margin creates extra space around an element!</p>
</body></html>
```
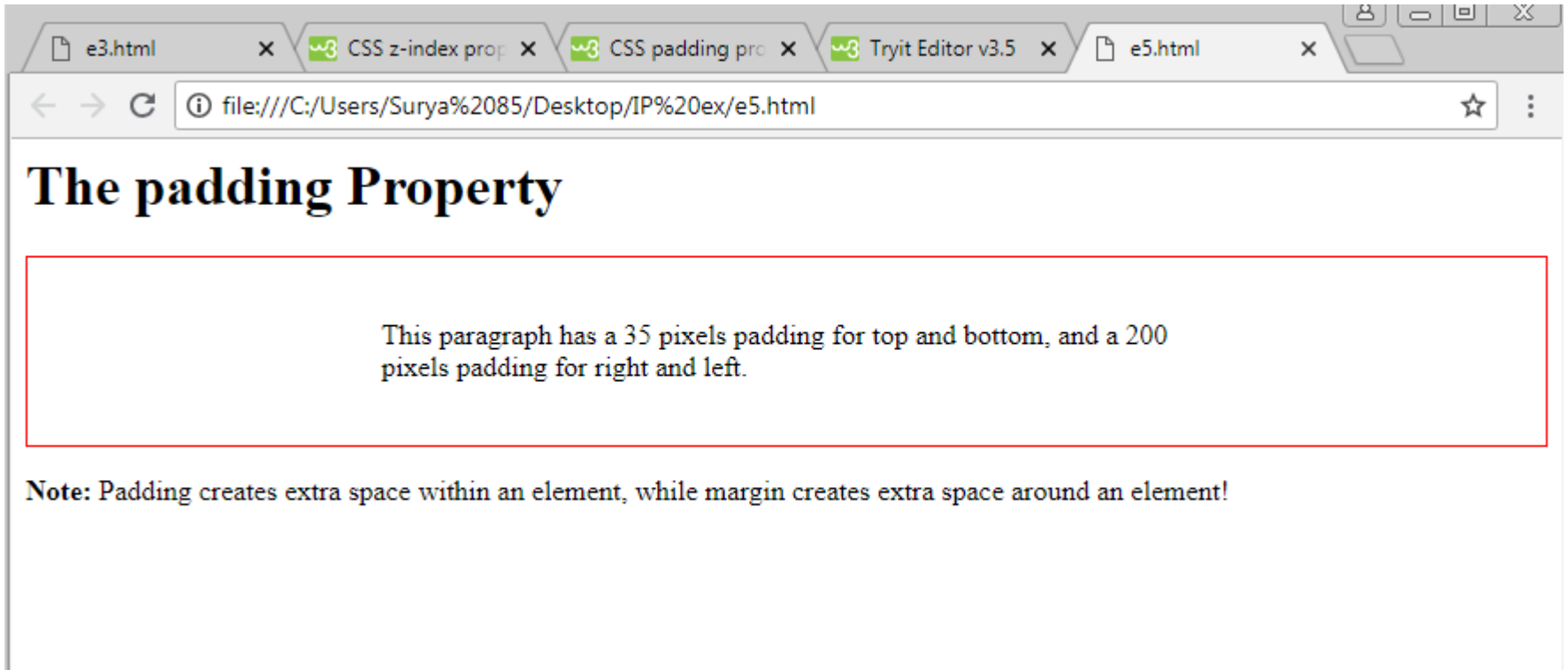
```
p
{
    padding: 35px 70px;          Top/bottom    left/right
}
```

```
p
{
    padding: 35px 70px 50px;     Top  left&right  bottom
}
```

```
p
{
    padding: 35px 70px 40px 50px;   Top  right  bottom  left
}
```

MARGIN PROPERTIES

```html
<html><head><style>
.a {
   margin: 30px 0px 50px 100px;
   color:red;
   }
</style></head>
<body>
<h1>Margin Collapse Example</h1>
<p>Top and bottom margins of elements are sometimes collapsed into a single margin that is equal to the largest of the two margins.</p>
<p class="a">A paragraph with a top 30 right 0 bottom margin of 5 & left 100 pixels.</p>
<p>A paragraph with a top and bottom margin of 20 pixels.</p>

</body>
</html>
```

Margin Properties

- margin creates extra space around an element

- properties:

  - [margin-top](#)

  - [margin-right](#)

  - [margin-bottom](#)

  - [margin-left](#)

  margin: 10px 5px 15px 20px;

Margin Collapse Example

Top and bottom margins of elements are sometimes collapsed into a single margin that is equal to the largest of the two margins.

A paragraph with a top 30 right 0 bottom margin of 5 & left 100 pixels.

A paragraph with a top and bottom margin of 20 pixels.