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Web Technologies and Programming

Lecture 09

Tables in HTML

Summary of the previous lecture

- **Adding images to web page**

- **Using images as links**

- **Image map**

- **Adding video to web page**

- **Adding audio o web page**

Outline

- **How to create tables**
- **Page lay-out using tables**

1. Creating HTML tables

- **Tables display information in rows and columns**

- **Tables are commonly used to display all manner of data that fits in a grid such as train schedules, television listings, financial reports etc.**

1. Creating HTML tables

- **An HTML table consists of the <table> element and one or more elements like**

- <tr>

- <th>

- <td>

- **Tables** are divided into **table rows** with the **<tr>** tag.

- **Table rows** are divided into **table data** with the **<td>** tag.

- A **table row** can also be divided into **table headings** with the **<th>** tag.

1. Creating HTML tables…

- **In HTML <table> tag is used to start a table while </table> tag indicates the end of the table**

    <table>

    Table Structure

    </table>

- **<tr> tag starts a row of the table and </tr> ends the row**

- **<td> is used to create a cell inside the row while </td> ends the cell**

1. Creating HTML tables…

- **The contents of the cell are written between <td> and </td> tags**

- **<th> tag is used to declare the cell of the heading row of the table**

1. Creating HTML tables…

- **An HTML Table with a Border Attribute**

- **If you do not specify a border for the table, it will be displayed without borders.**

- **A border can be added using the border attribute:**

- <table border="1">

1. Creating HTML tables…

<table border="1">

<tr>

<td> Name </td>

<td> Registration No. </td>

</tr>

<tr>

<td>Ali</td>

<td>FA13-BCS-001</td>

</tr>

</table>

Name	Registration No.
Ali	FA13-BCS-001

1. Creating HTML tables...

```
<!DOCTYPE html>
<html>
<body>

<table border="1" style="width:100%">
   <tr>
      <td>Jill</td>
      <td>Smith</td>
      <td>50</td>
   </tr>
   <tr>
      <td>Eve</td>
      <td>Jackson</td>
      <td>94</td>
   </tr>
   <tr>
      <td>John</td>
      <td>Doe</td>
      <td>80</td>
   </tr>
</table>

</body>
</html>
```

1. Creating HTML tables...

Jill	Smith	50
Eve	Jackson	94
John	Doe	80

1.1 Table Attributes

- **Table level attributes**
- **Row level attributes**
- **Cell level attributes**

1.1.1 Table Attributes

- **The Border Attribute: Indicates the presence of the border around the table**
  - **<table border="1">**
- **The align Attribute:**
  - **<table align= "center">**
  - **Other values for align are**
    - » **Center**
    - » **Left**
    - » **right**

1.1.1 Table Attributes

- **The bgcolor Attribute: sets the background color of the table**
  - **<table bgcolor="gray">**

- **The background Attribute: sets the specified image at the background of the table**
  - **<table background="image-title">**

1.1.1 Table Attributes…

- **The height and width Attributes:**

- **The cellpadding Attribute:**
  – **The cell padding attribute is used to create a gap between the edges of a cell and its contents**
    – **<table cellpadding="50">**

1.1.1 Table Attributes…

- **The height and width Attributes:**

- **The cellspacing Attribute:**
  - **The cellspacing attribute is used to create a space between the borders of each cell**

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1.1.1 Table Attributes...

```
tableattributes - Notepad
File  Edit  Format  View  Help
<html>
<head>
<title> Creating Table </title>
</head>
<body>
<h1>Creating Tables in HTML</h1>
<table border="1"   align="center"
cellspacing="50" cellpadding="50"
height="50" width="100" bgcolor="lightblue">
<tr>
<th>Name</th>
<th>Subject</th>
<th>Marks</th>
</tr>
<tr>
```

1.1.1 Table Attributes...

1.1.1 Table Attributes…

- **Differences Between HTML 4.01 and HTML5**

The "align", "bgcolor", "cellpadding", "cellspacing", "frame", "rules", "summary", and "width" attributes **are not supported in HTML5**.

1.1.2 Row level attributes

- **The align Attribute:**

Aligns content of the row

  - **<tr align="center, right or left">**

- **The bgcolor Attribute:**

Apply background color to row

  - **<tr bgcolor="gray">**

- **The background Attribute:**

Adds image as the background of row

  - **<tr background="image-name">**

1.1.2 Row level attributes

- **The height Attributes:**
- **Change height on table row**
  - **‹tr height="20" >**
- **The width Attributes:**
- **Change width of the row**
  - **‹tr widht="20">**
- **The valign Attributes:**
- **Changes row vertical alignment**
  - **<tr   valign="top, middle or bottom">**

1.1.2 Row level attributes…

```
tratt - Notepad
File  Edit  Format  View  Help
<h1>Using Row attribute</h1>
<table border="1">
<tr   >
<th>Name</th>
<th>Subject</th>
<th>Marks</th>
</tr>
<tr height="75" algin="center" valign="top"
bgcolor="gray">
<td>Basharat</td>
<td>Web Engineering</td>
<td>75</td>
</tr>
</table>
</body>
```
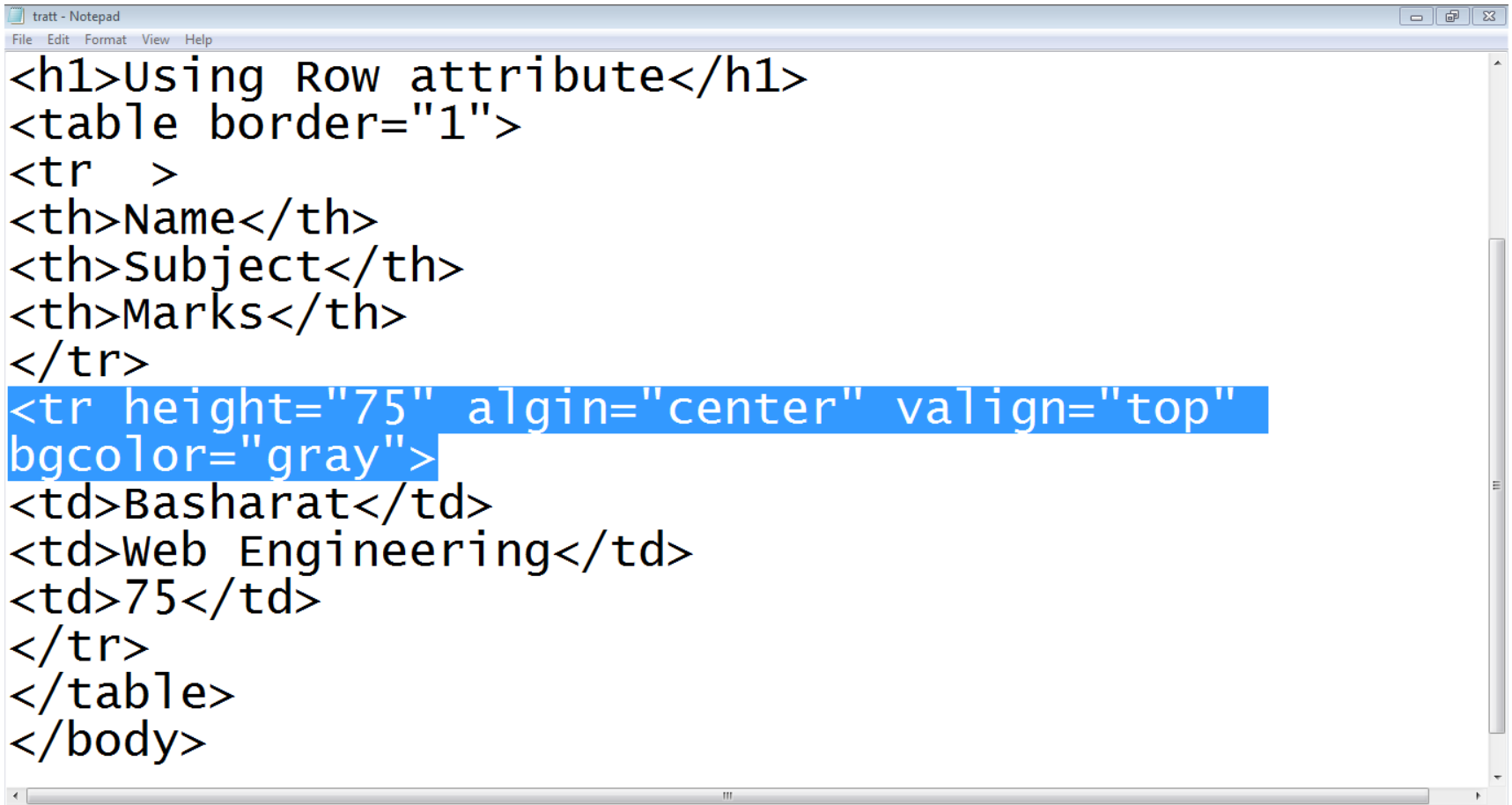
1.1.2 Row level attributes…

1.1.3 Cell level attributes

- **The align Attribute:**

  – **‹td align="center, right or left"›**

- **The bgcolor Attribute:**

- **The height and width Attributes:**

- **The valign Attributes:**

1.1.3 Cell level attributes

- **The rowspan Attributes:**
- **used when a cell should span across more than one rows**

- **The colspan Attribute:**
- **used when a cell should span across more than one column**

1.1.3 Cell level attributes...

```
<table border="1">
<tr>
<td rowspan="2">Name</td>
<td colspan="2">Subjects</td>
</tr>
<tr>
<td >OOP</td>
<td >DB</td>
</tr>
<tr>
<td >ALi</td>
<td >75</td>
<td >80</td>
</tr>
</table>
```

Name	Subjects	
	OOP	DB
ALi	75	80

1.2 Creating HTML tables Caption

- **An HTML Table With a Caption**

- **To add a caption to a table, use the <caption> tag:**

1.2 Adding caption to the table

- **<caption> tag is used to add a caption of the table**

- **We usually add caption before the first row of the table**

1.2 Creating HTML table caption
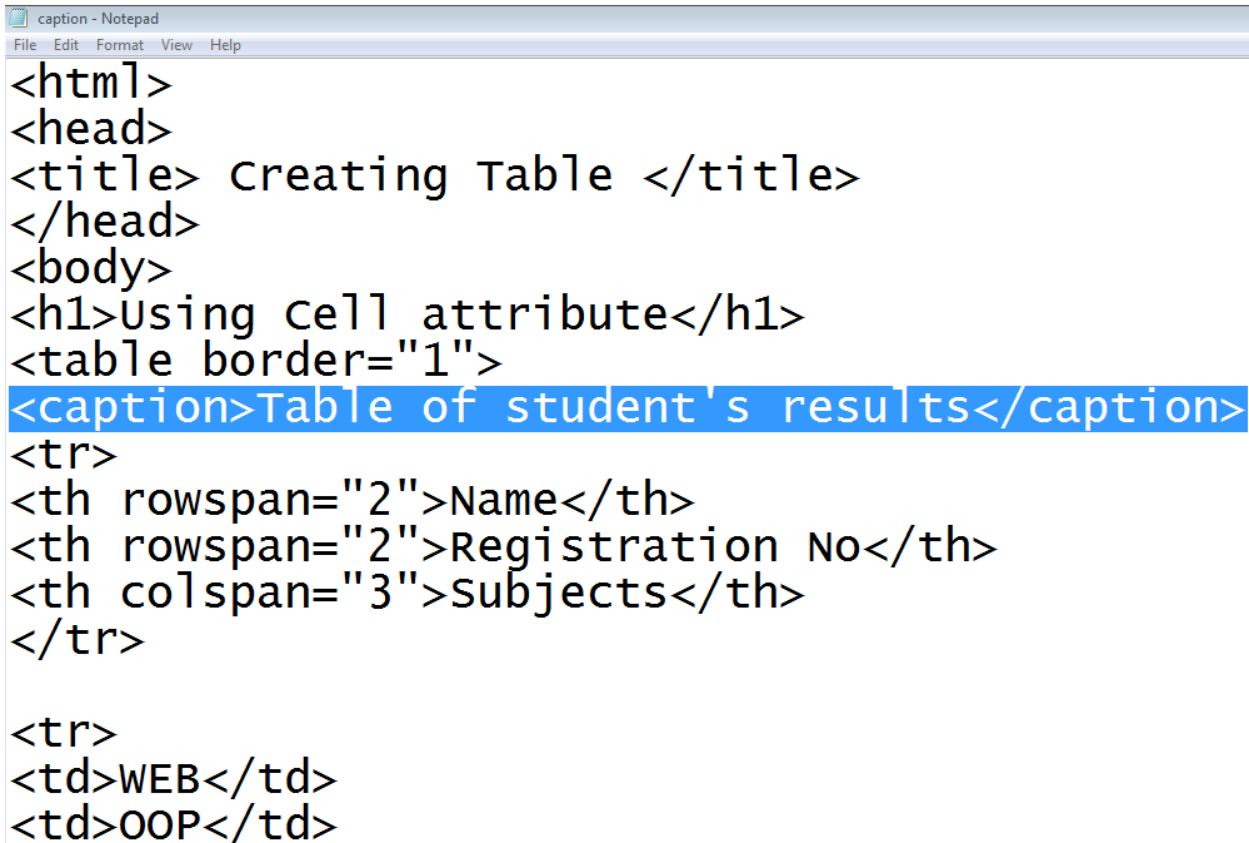
- **An HTML Table With a Caption**
- **To add a caption to a table, use the <caption> tag**:

1.2 Creating HTML tables Caption

Example

```
<table style="width:100%">
 <caption>Monthly savings</caption>
 <tr>
  <th>Month</th>
 </tr>
 <tr>
  <td>January</td>
 </tr>
</table>
```

1.2 Adding caption to the table…

```
caption - Notepad
File  Edit  Format  View  Help

<html>
<head>
<title> Creating Table </title>
</head>
<body>
<h1>Using Cell attribute</h1>
<table border="1">
<caption>Table of student's results</caption>
<tr>
<th rowspan="2">Name</th>
<th rowspan="2">Registration No</th>
<th colspan="3">Subjects</th>
</tr>

<tr>
<td>WEB</td>
<td>OOP</td>
```

1.2 Adding caption to the table...

1.3 Creating HTML tables - id attribute

A Special Style for One Table

To define a special style for a special table, add an **id attribute** to the table:

1.3 Creating HTML tables - id attribute

A Special Style for One Table

Example

```
<table id="t01">
 <tr>
  <th>Firstname</th>
  <th>Lastname</th>
  <th>Points</th>
 </tr>
 <tr>
  <td>Eve</td>
  <td>Jackson</td>
  <td>94</td>
 </tr>
</table>
```

2. Page Layout using Tables

- **We can use tables to define the structure of the web page**

2. Page Layout using Tables

2. Page Layout using Tables...

Header

Footer

```html
</head>
<body>
<table border="1" height="100%" width="80%" align="center">
<tr height="15%">
<td colspan="2"> </td>
</tr>
<tr height="80%">
<td width="20%"> </td>
<td width="80%"> </td>
</tr>
<tr height="5%">
<td colspan="2"> </td>
</tr>
</table>

</body>
</html>
```
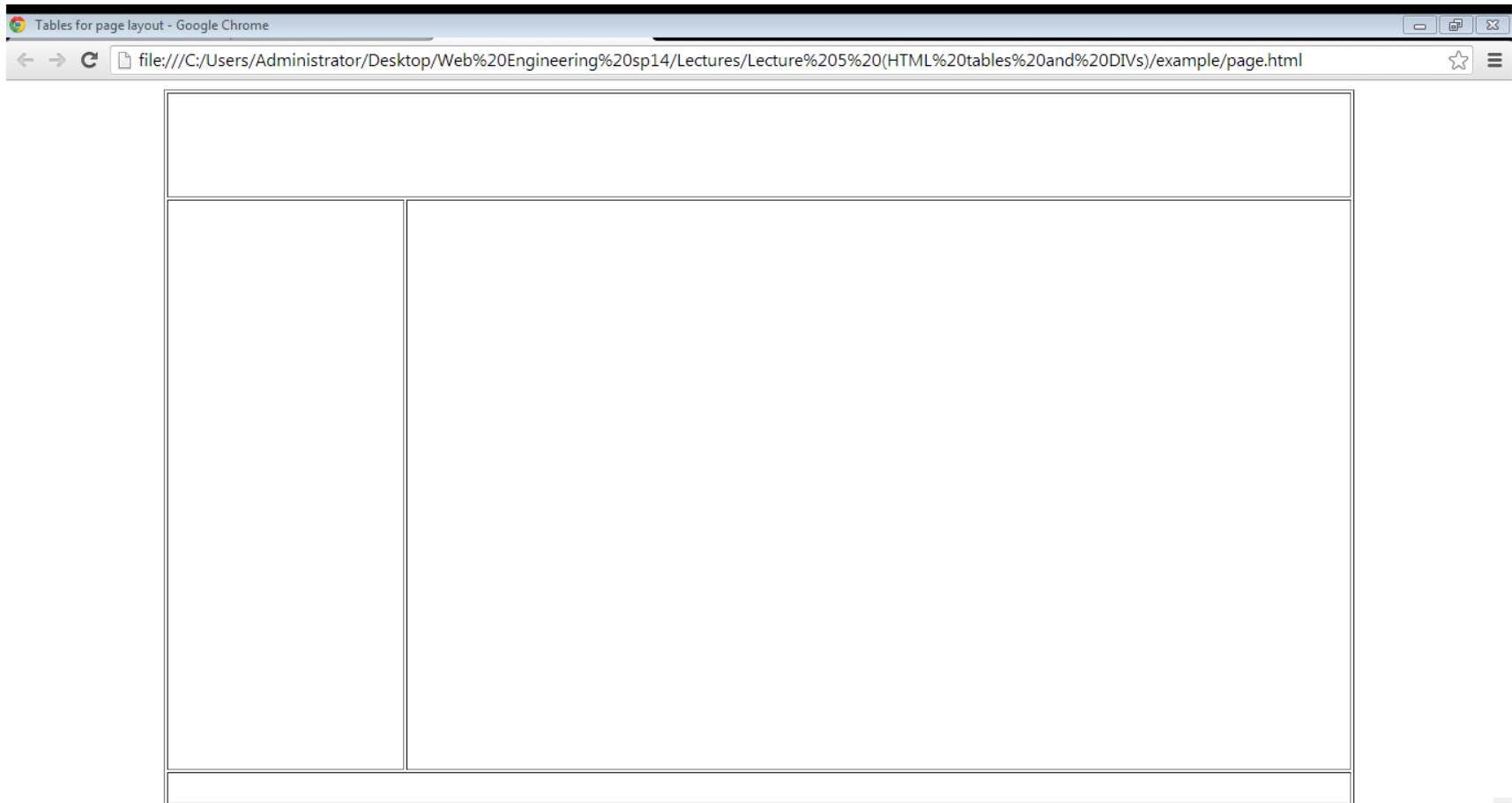
Body and links

Example: Step 1 (Structure of the page)

2. Page Layout using Tables…

Example: Step 1 (Structure of the page)

2. Page Layout using Tables…

Example: Step 2 (Header section)

```
page - Notepad
File  Edit  Format  View  Help

</head>
<body>
<table border="1" height="100%" width="80%" align="center">

<tr height="15%">
<td colspan="2" bgcolor="lightblue" align="center">
<font color="green" size="7">
<img src="comsats.jpg" align=Middle>          ← Adding Logo
COMSATS institute of Information Technology
</font>                                        ← Title
</td>
</tr>


<tr height="80%">
<td width="20%"> </td>
<td width="80%"> </td>
```
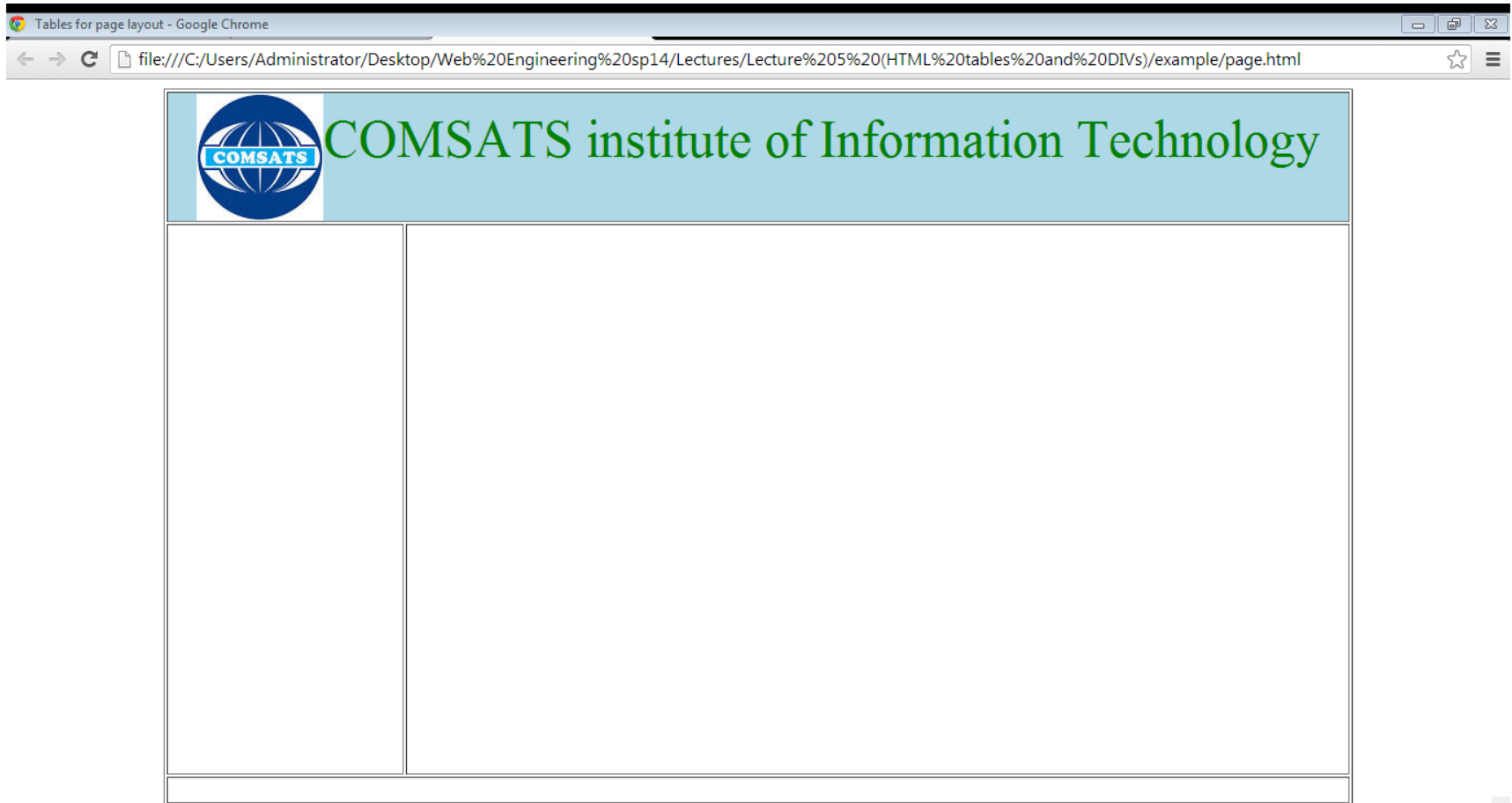
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1.5. Page Layout using Tables…

Example: Step 2 (Header section)

2. Page Layout using Tables...

Links table

```
<td width="20%" valign="top">
<table border=1 bgcolor="lightblue" width="100%">
<tr >
<td><a href="page.html">Home</a></td>
</tr>
<tr >
<td><a href="http://ww3.comsats.edu.pk/ee/">Electrical Eng De
</tr>
<tr >
<td><a href="http://ww3.comsats.edu.pk/cs/">Computer science
</tr>
<tr >
<td><a href="http://ww3.comsats.edu.pk/phy/">Physics Departme
</tr>
<tr >
<td><a href="page.html">Library</a></td>
</tr></table></td>
```
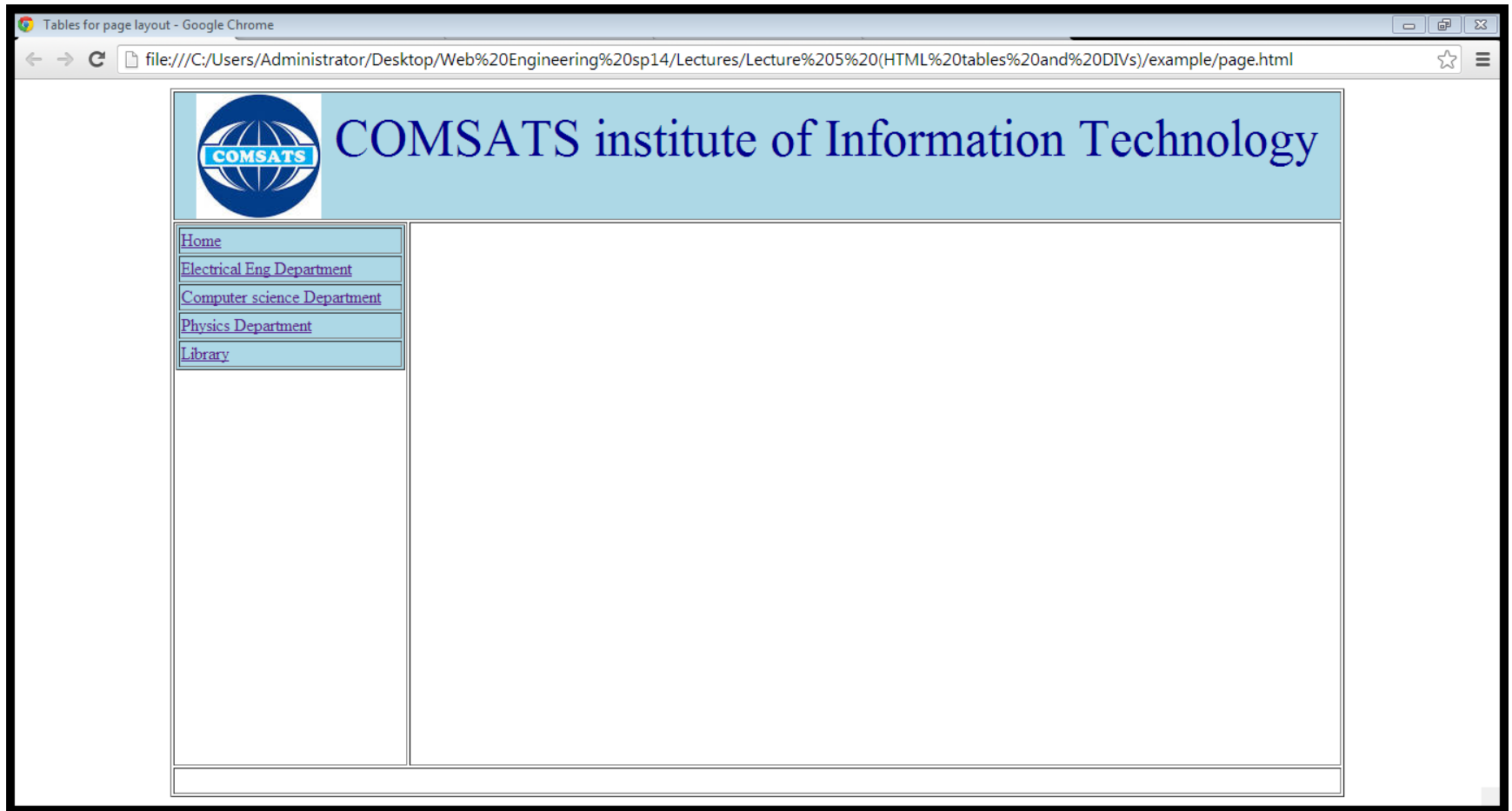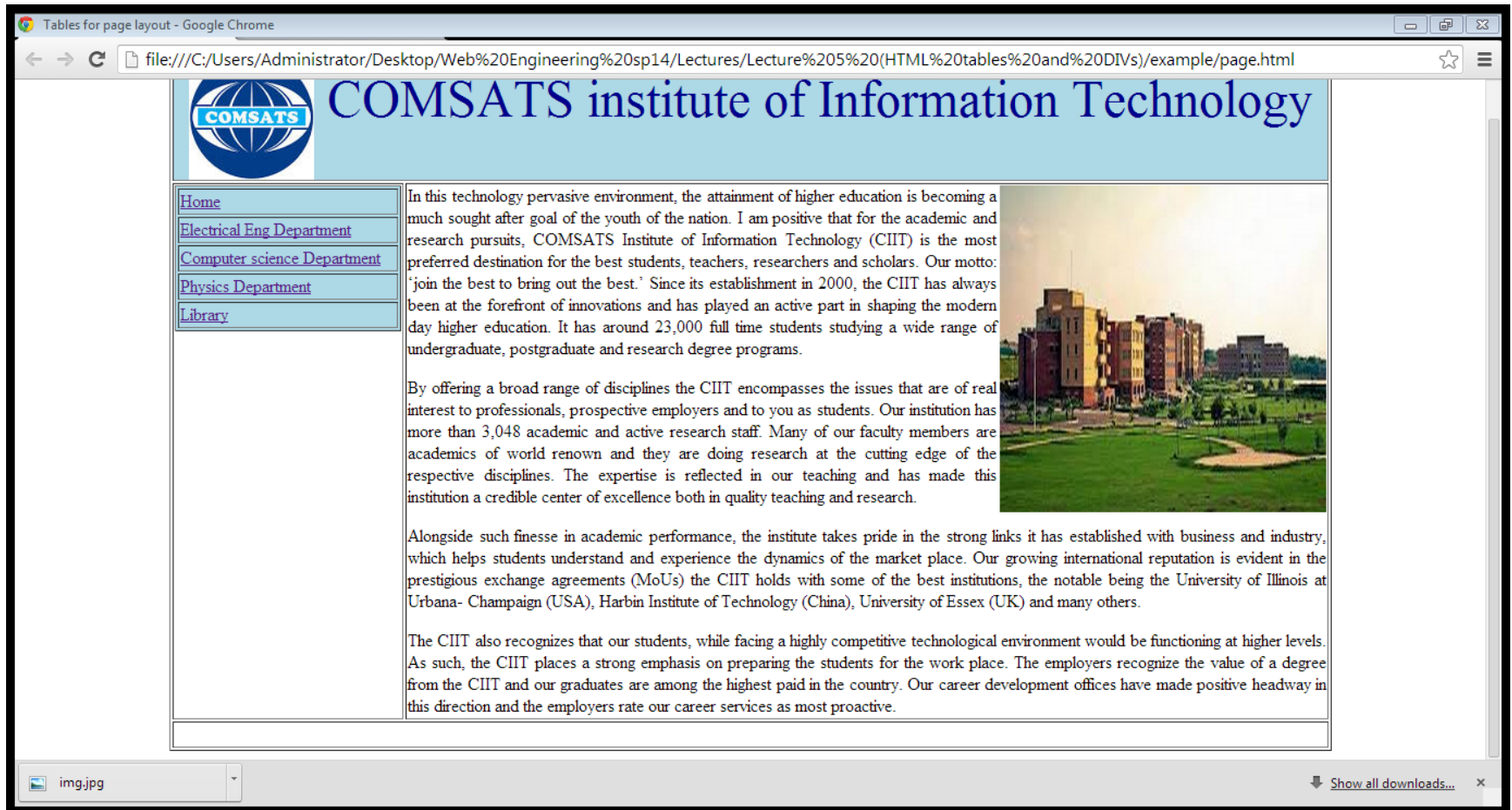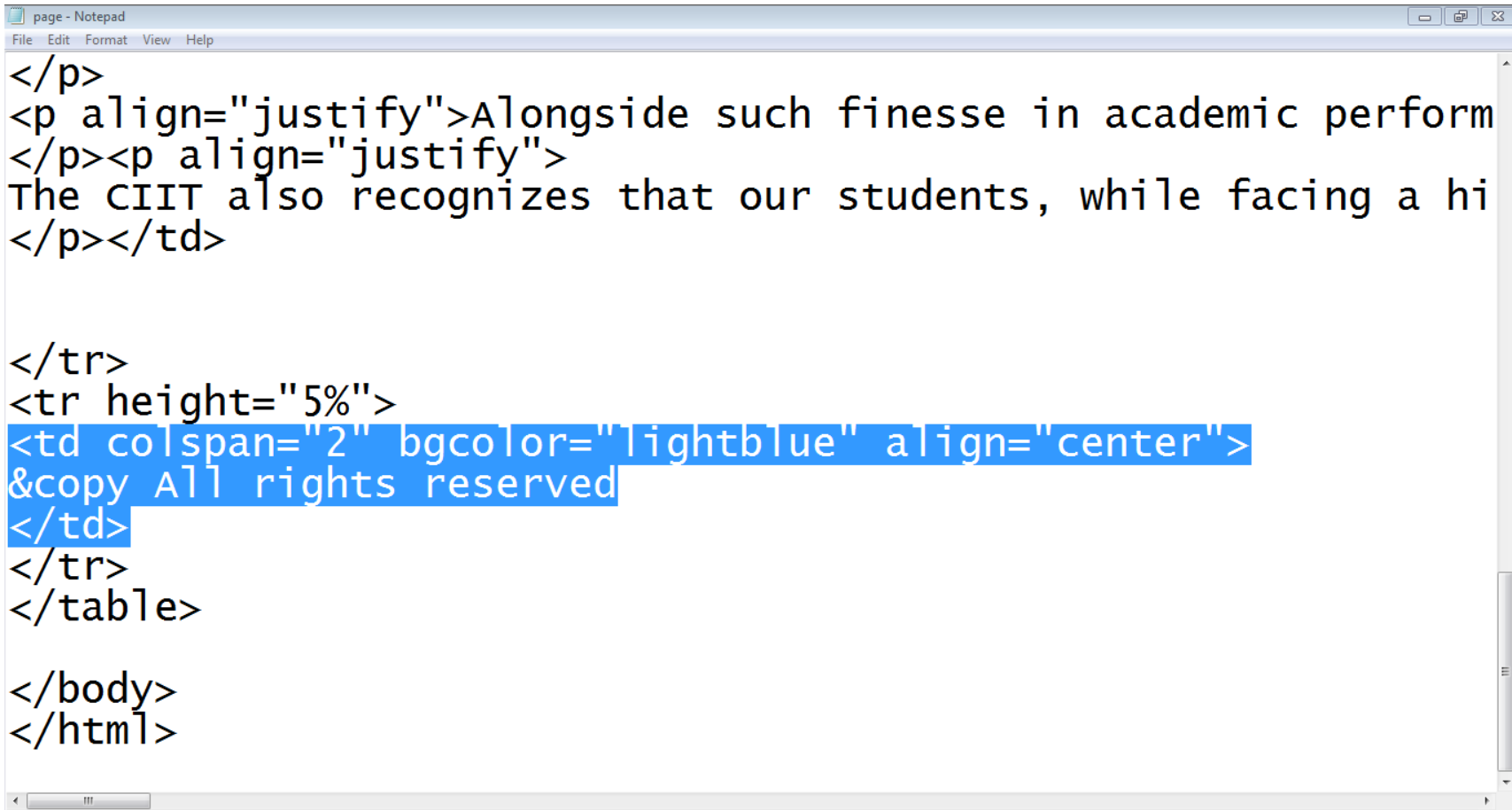
Example: Step 3 (Links section)

2. Page Layout using Tables...

Example: Step 3 (Links section)

2. Page Layout using Tables...

Example: Step 4 (body section)

2. Page Layout using Tables...

```
page - Notepad
File  Edit  Format  View  Help
</p>
<p align="justify">Alongside such finesse in academic perform
</p><p align="justify">
The CIIT also recognizes that our students, while facing a hi
</p></td>


</tr>
<tr height="5%">
<td colspan="2" bgcolor="lightblue" align="center">
&copy All rights reserved
</td>
</tr>
</table>

</body>
</html>
```
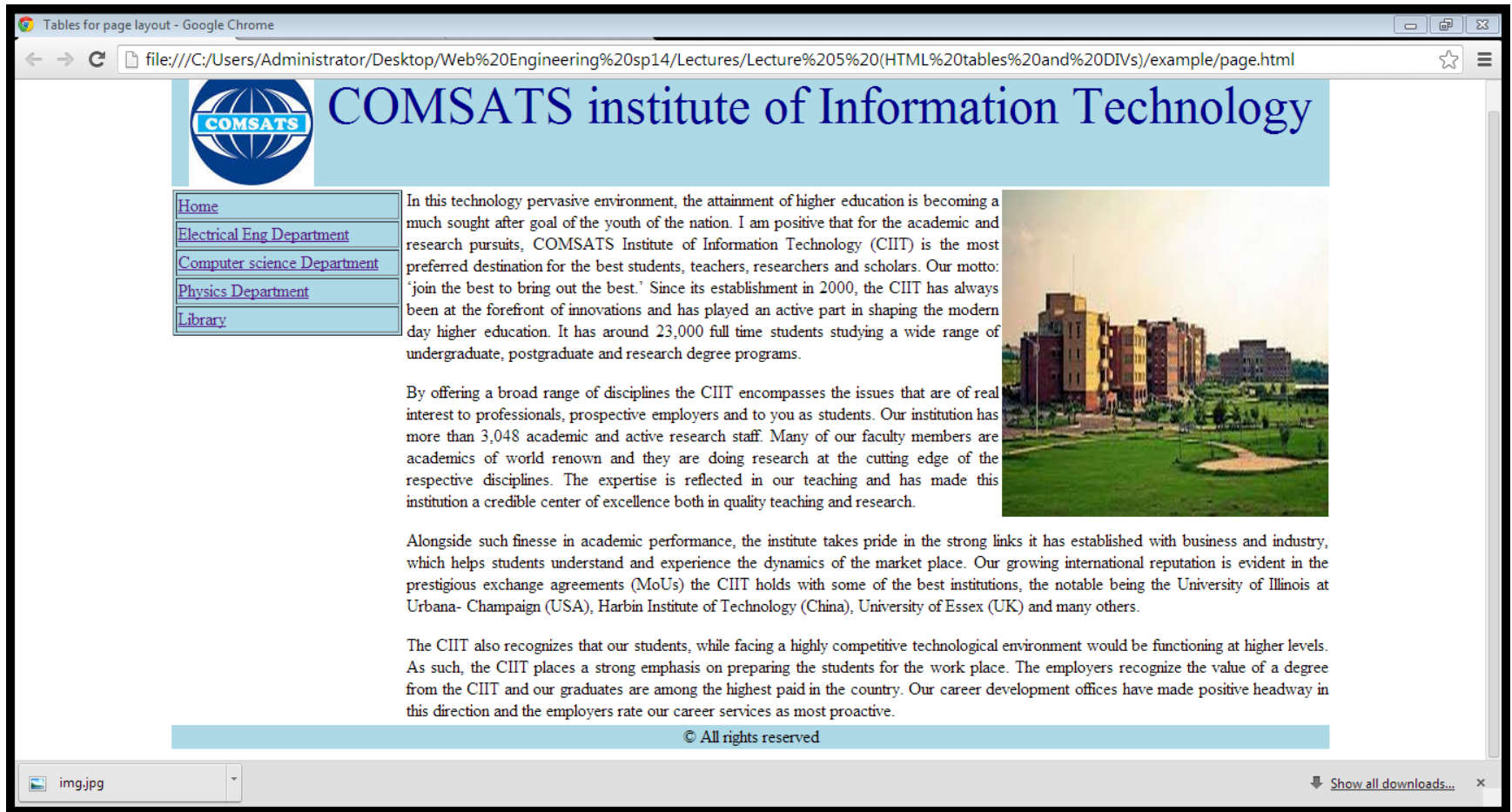
Footer (bracket beside highlighted footer section)

Example: Step 5 (footer section)

2. Page Layout using Tables...

Example: Step 5 (footer section)

Summary

- Use the HTML **<table>** element to define a table
- Use the HTML **<tr>** element to define a table row
- Use the HTML **<td>** element to define a table data
- Use the HTML **<th>** element to define a table heading
- Use the HTML **<caption>** element to define a table caption
- Use the CSS **border** property to define a border
- Use the CSS **padding** property to add padding to cells
- Use the CSS **text-align** property to align cell text
- Use the CSS **border-spacing** property to set the spacing between cells
- Use the **colspan** attribute to make a cell span many columns
- Use the **rowspan** attribute to make a cell span many rows
- Use the **id** attribute to uniquely define one table

Summary

- **Creating tables in HTML**
- **Table attributes**
  - **Table level attributes**
  - **Row level attributes**
  - **Cell level attributes**
- **Page lay-out using tables**

THANK YOU