UTM
UNIVERSITI TEKNOLOGI MALAYSIA

Online Learning

Introduction to Basic HTML/xHTML

Sarina Sulaiman

Faculty of Computing

HTML

- A markup language that specifies the format of the text that is displayed in a Web browser.
- Separation of the presentation (CSS) of a document from the structure (HTML) of the document's information

HTML Background

- November 1990, first created by Tim Berners Lee, the father/inventor of WWW
- Knighted by Queen Victoria in 2004
- Hypertext is text which is not constrained to be linear
- Hypermedia is a term used for hypertext which is not constrained to be text: it can include graphics, video and sound

Words To Know

- **Tag -** Used to specify ("mark-up") regions of HTML documents for the web browser to interpret. Tags look like this: <tag>
- **Element -** A complete tag, having an opening <tag> and a closing </tag>
- **Attribute -** Used to modify the value of the HTML element. Elements will often have multiple attributes

Simple Meaning

- For now just know that:
  - a *tag* is a command the web browser interprets,
  - an *element* is a complete tag,
  - and an *attribute* customizes or modifies HTML elements.

XHTML and HTML4

- XHTML based on HTML and XML
  - HTML is considered a legacy technology

- What is XML?
  - XML stands for EXtensible Markup Language
  - XML is a markup language much like HTML
  - XML was designed to carry data, not to display data
  - XML tags are not predefined. You must define your own tags
  - XML is designed to be self-descriptive
  - XML is a W3C Recommendation

XHTML vs HTML4

- XHTML stands for **EX**tensible **H**yper**T**ext **M**arkup **L**anguage
- XHTML is almost identical to HTML 4.01
- XHTML is a stricter and cleaner version of HTML
- XHTML is HTML defined as an XML application
- XHTML is supported by all major browsers.

BAD HTML CODE

```
<html>
<head>
<title>This is bad HTML</title>
<body>
<h1>Bad HTML
<p>This is a paragraph
</body>
```

- Work fine in a browser!

HTML as XHTML

- HTML define as an XML document
- Hence the xHTML
- XML is a markup language where documents must be marked up correctly and "well-formed".

Guide to HTML/xHTML code

- Is not a programming language, it's a mark-up language
- HTML – Hypertext Mark-up Language
- HTML Not case sensitive, but xHTML is – for standardization and w3c validation
- Use tag for formatting output: new line, paragraph, text size, color, font type, etc.
- Can be a single or coupled tag
- Tag general format:
  Single: `<tag_format />`
  Double: `<tag_format> . . . </ tag_format>`

xHTML

- XHTML elements must be properly nested
- XHTML elements must always be closed
- XHTML elements must be in lowercase
- XHTML documents must have one root element

xHTML

- Attribute names must be in lower case
- Attribute values must be quoted
- Attribute minimization is forbidden

Attribute Minimization

- <input checked>
  <input readonly>
  <input disabled>
  <option selected>

- <input checked="checked">
  <input readonly="readonly">
  <input disabled="disabled">
  <option selected="selected">

xHTML validation

- Validate XHTML With The W3C Validator
- >> http://validator.w3.org/

Very simple HTML code

```
<html>
<head>
<title>Simple HTML</title>
</head>

<body>
Hello World! All my content goes here!
</body>
</html>
```

Activity 01

- Copy html code in slide 15 into your textpad
- Save it as activity01.html in your working directory as specified by lab technician
- Open activity01.html in your favourite Browser
- Check your answer here

Preparation for HTML

- Source-code form (txt file)
- To begin coding and using HTML you need only two things:
  - a *simple-text* editor (Notepad, Textpad)
  - A browser (IE, Firefox, Chrome)
- WYSIWYG
  - Dreamweaver
  - let you create pages quickly but you can only spicing up or polishing up HTML effects manually – can't do that if doesn't know HTML

The Most Important Elements

- <html></html>
  - begins and ends each and every web page
- <head></head>
  - The *head* functions "behind the scenes."
  - Tags placed within the *head* element are not directly displayed by web browsers
  - Javascript and CSS elements is place here
- <title></title>
  - The words you write between the opening and closing <title></title> tags will be displayed at the top of a viewer's browser
- <body></body>
  - The <body> element is where *all* content is placed. (Paragraphs, pictures, tables, etc)

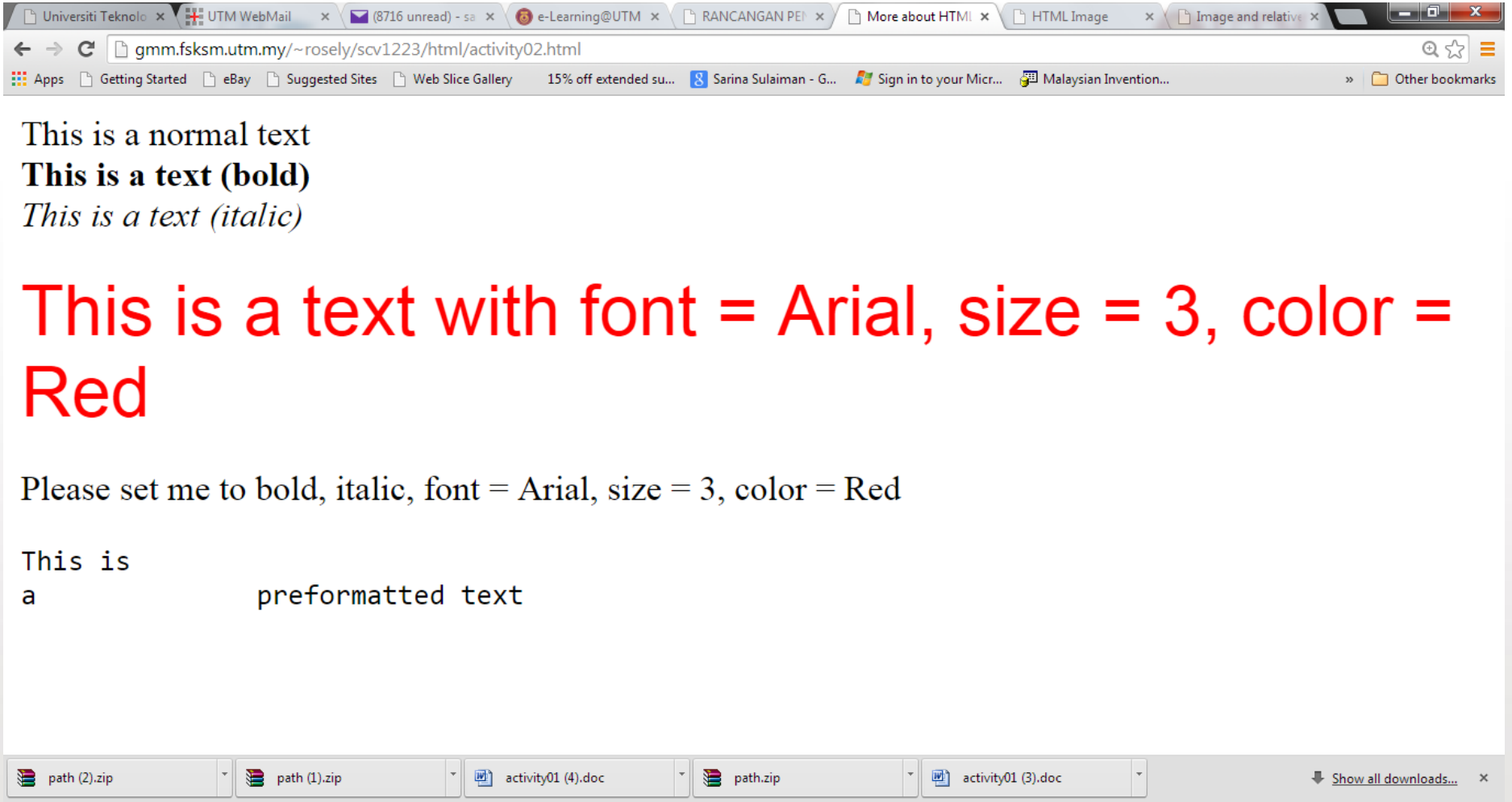
More complex code

```
<html>
<head>
<title>More about HTML Text</title>
</head>
<body>
This is a normal text<br><b>This is a text (bold)</b>
<br />
<i>This is a text (italic)</i>
<p><font face="Arial" color="#FF0000" size=+3>
This is a text with font = Arial, size = 3, color = Red</font></p>
<p>Please set me to bold, italic, font = Arial, size = 3, color = Red</p>
<pre>
This is a
preformatted                    text
</pre>
</body>
</html>
```

Activity 02

- Copy html code in slide 19 into your textpad
- Save it as activity02.html in your working directory as specified by lab technician
- Open activity02.html in your favourite Browser
- Check your answer here

Activity 02


Universiti Teknolo
UTM WebMail
(8716 unread) - sa
e-Learning@UTM
RANCANGAN PEI
More about HTMI
HTML Image
Image and relative
gmm.fsksm.utm.my/~rosely/scv1223/html/activity02.html
Apps
Getting Started
eBay
Suggested Sites
Web Slice Gallery
15% off extended su...
Sarina Sulaiman - G...
Sign in to your Micr...
Malaysian Invention...
Other bookmarks
This is a normal text
This is a text (bold)
This is a text (italic)
This is a text with font = Arial, size = 3, color = Red
Please set me to bold, italic, font = Arial, size = 3, color = Red
This is
a preformatted text
path (2).zip
path (1).zip
activity01 (4).doc
path.zip
activity01 (3).doc
Show all downloads...

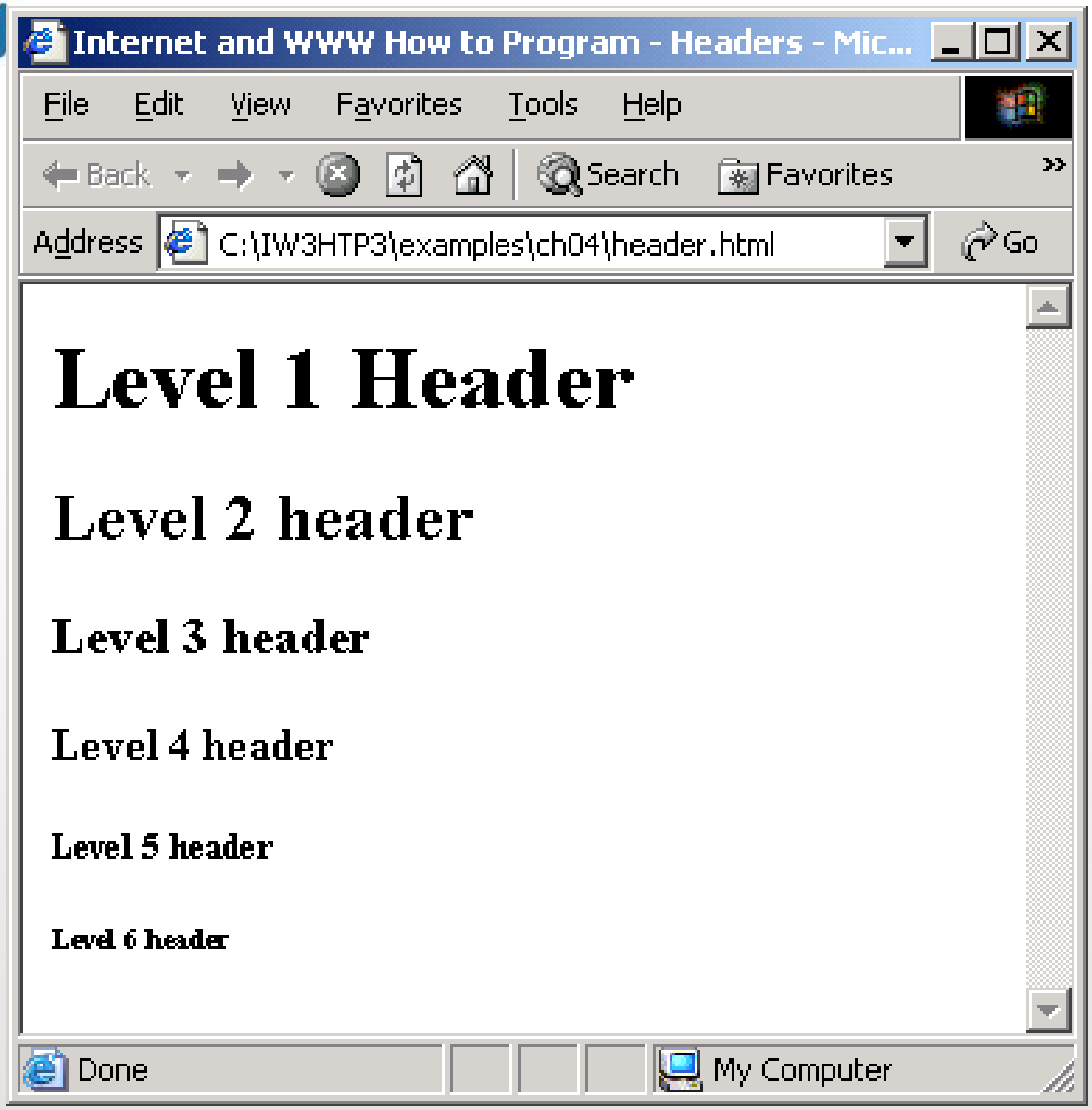
HTML attributes

- Attributes are properties of tags.
- Name and value pair
- For example
  - *<font face="Arial" color="#FF0000" size=+3>*
  - The tag is <font> and the properties are:
    - Face
    - Color
    - Size
  - <p align="justify">
  - <p align="center">
  - <p align="right">

HEADERS

- Six headers (header elements): h1 ~ h6

```
1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
3     "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
4
5  <!-- Fig. 4.4: header.html -->
6  <!-- XHTML headers         -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9     <head>
10       <title>Internet and WWW How to Program - Headers</title>
11    </head>
12
13    <body>
14
15       <h1>Level 1 Header</h1>
16       <h2>Level 2 header</h2>
17       <h3>Level 3 header</h3>
18       <h4>Level 4 header</h4>
19       <h5>Level 5 header</h5>
20       <h6>Level 6 header</h6>
21
22    </body>
23 </html>
```


Internet and WWW How to Program - Headers - Mic...
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\IW3HTP3\examples\ch04\header.html
Go
Level 1 Header
Level 2 header
Level 3 header
Level 4 header
Level 5 header
Level 6 header
Done
My Computer

Image

- <img src="*image file name*" . . . >
- Activity 04
  -
- Activity 05 – image relative path/location

URL Types:

Local Src	Location Description
src="sunset.gif"	picture file resides in same directory as .html file
src="../sunset.gif"	picture file resides in previous directory as .html file
src="../pics/sunset.gif"	picture file resides in the *pic* directory in a previous directory as .html file

Activity 04

Universiti Teknolo
UTM WebMail
(8716 unread) - sa
e-Learning@UTM
RANCANGAN PE
More about HTM
HTML Image
Image and relative
gmm.fsksm.utm.my/~rosely/scv1223/html/image01.html
Apps
Getting Started
eBay
Suggested Sites
Web Slice Gallery
15% off extended su...
Sarina Sulaiman - G...
Sign in to your Micr...
Malaysian Invention...
Other bookmarks
path (2).zip
path (1).zip
activity01 (4).doc
path.zip
activity01 (3).doc
Show all downloads...
innovative ● entrepreneurial ● global

Activity 04

Universiti Teknolo
UTM WebMail
(8716 unread) - sa
e-Learning@UTM
RANCANGAN PEN
HTML Image
view-source:gmm
index.html
view-source:gmm.fsksm.utm.my/~rosely/scv1223/html/image01.html
Apps
Getting Started
eBay
Suggested Sites
Web Slice Gallery
15% off extended su...
Sarina Sulaiman - G...
Sign in to your Micr...
Malaysian Invention...
Other bookmarks
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
2 <html xmlns="http://www.w3.org/1999/xhtml">
3 <head>
4 <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
5 <title>HTML Image</title>
6 </head>
7
8 <body>
9
10 </body>
11 </html>
12
path (2).zip
path (1).zip
activity01 (4).doc
path.zip
activity01 (3).doc
Show all downloads...

Activity 05

Universiti Teknolo
UTM WebMail
(8716 unread) - sa
e-Learning@UTM
RANCANGAN PE
More about HTM
HTML Image
Image and relative
file:///C:/Users/COURSE~1/AppData/Local/Temp/Rar$EX01.605/path/app/index.html
Apps
Getting Started
eBay
Suggested Sites
Web Slice Gallery
15% off extended su...
Sarina Sulaiman - G...
Sign in to your Micr...
Malaysian Invention...
Other bookmarks
UNITED
10x
DYNAMO
10x
VANCOUVER
WHITECAPS
FC
10x
10x
path (2).zip
path (1).zip
activity01 (4).doc
path.zip
activity01 (3).doc
Show all downloads...

Activity 05

Universiti Tekn
UTM WebMail
(8716 unread)
e-Learning@U
RANCANGAN
More about HT
HTML Image
Image and rela
index.html
view-source:file:///C:/Users/COURSE~1/AppData/Local/Temp/Rar$EX01.605/path/app/index.html
Apps
Getting Started
eBay
Suggested Sites
Web Slice Gallery
15% off extended su...
Sarina Sulaiman - G...
Sign in to your Micr...
Malaysian Invention...
Other bookmarks
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
2 <html xmlns="http://www.w3.org/1999/xhtml">
3 <head>
4 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5 <title>Image and relative path/location</title>
6 </head>
7
8 <body>
9 <table width="200" border="1">
10 <tr>
11 <td> </td>
12 <td>
13 </td>
14 </tr>
15 <tr>
16 <td> </td>
17 <td> </td>
18 </tr>
19 </table>
20
21 </body>
22 </html>
23
path (2).zip
path (1).zip
activity01 (4).doc
path.zip
activity01 (3).doc
Monday, 29 December, 2014

Link

linked

reference object :

- Part of text in the same document
- Other document
- Image / animation / audio / video
- Application logic (CGI script)
- Client script (JavaScript / VBScript)

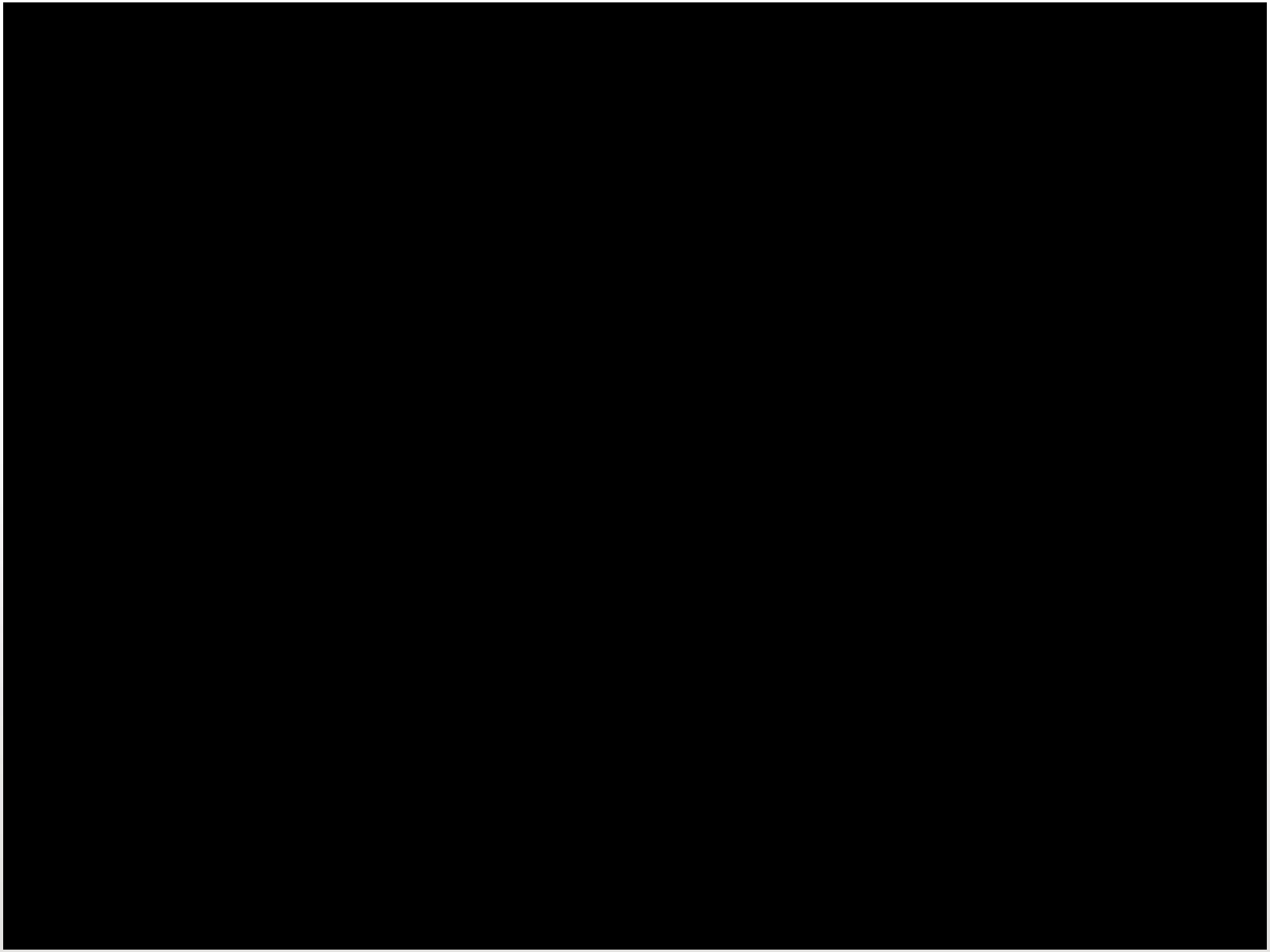
linked object :

- Text
- Image

Link – cont (Activity 06)

- Inside document
  - Declare anchor: <a name="top" id="top">
  - Link to anchor: [go to top]
- Outside document
  - Same website – only dir. Without full url/http
    - Link to outside page same website
  - Different website – full http url
    - Link-(UTM homepage)
- Image link
  -

Activity 06



Unordered Lists

- Unordered list element `ul`
  - Creates a list in which each item begins with a bullet symbol (called a disc)
  - `li` (list item): Entry in an unordered list
  - Format: `<ul>`

```
        <li>  </li>
        <li>  </li>
    </ul>
```

Nested and Ordered Lists

- Represent hierarchical relationships
- Ordered lists (ol)
  - Creates a list in which each item begins with a number
  - Format

```
        <li>  </li>
        <li>  </li>
    </ol>
```

Table

Begin table

    Begin row
     Column1, Column2, . . .
    End row
    . . .
End table

Table

Begin table = <table . . . >
End table = </table>

Begin row = <tr . . . >
End row = </tr>

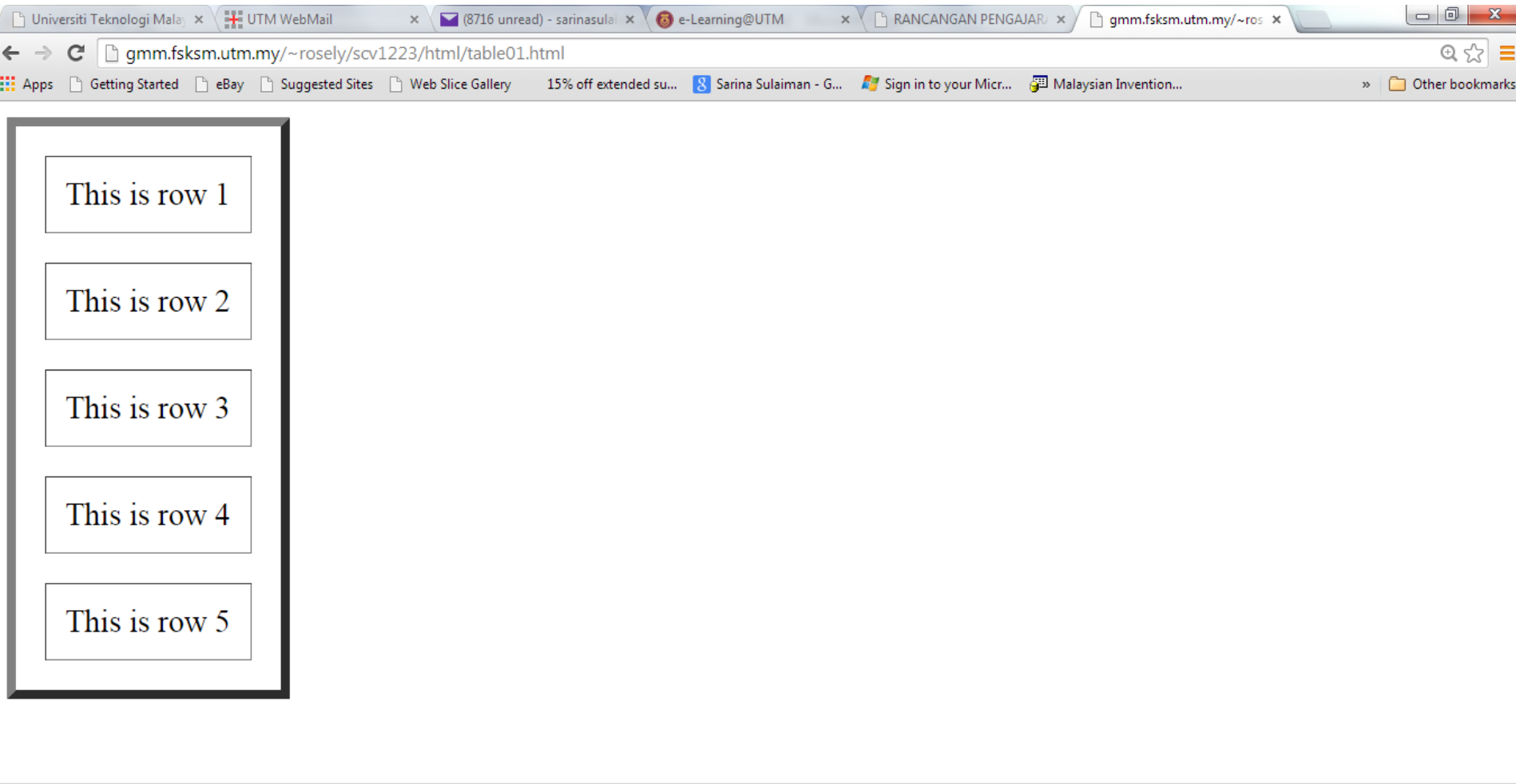
Column = <td . . . > *column content* </td>

***column content* : text, image, linked object, etc.**

Table (Activity 07)

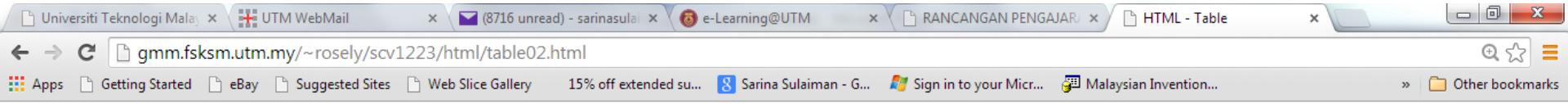
- Attributes:
  - Sizing using pixel size
  - Table border:
    - <table border="5">
  - Spanning /merging cell
    - <td rowspan="2"> vertical merging – activity 8
    - <td colspan="3"> horizontal merging – activity 9
  - Cell pading: distance between cell borders and content: <table cellpadding="10">
  - Cell spacing: width of cell border:
    - <table cellspacing="15">

Activity 07: table



Activity 07: table

Activity 08: colspan

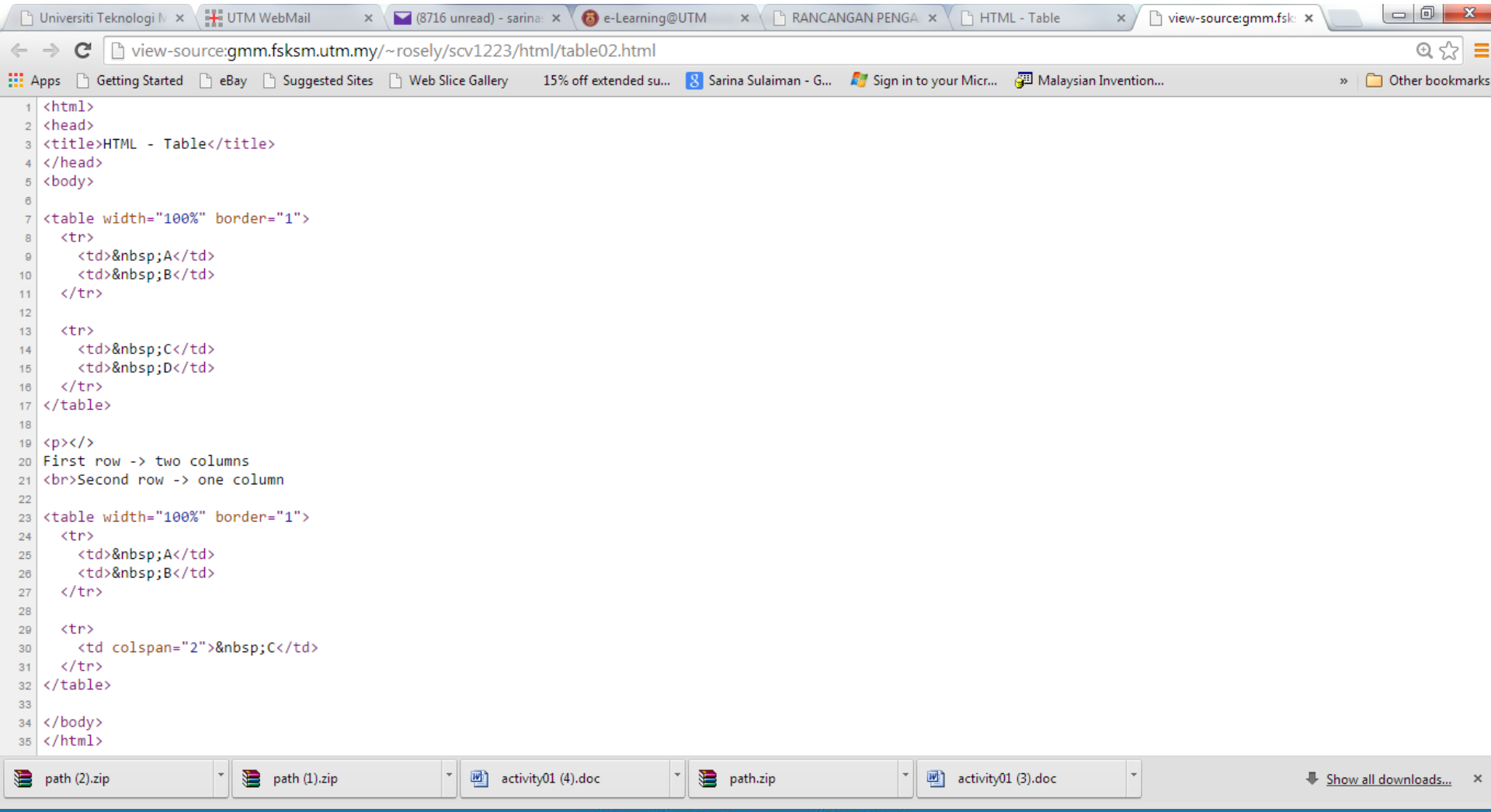


A	B
C	D

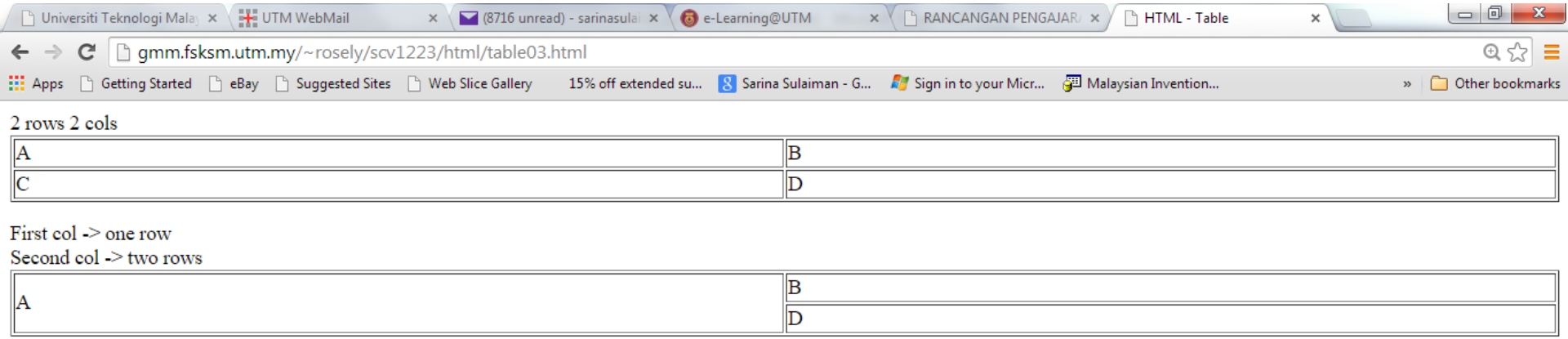
First row -> two columns
Second row -> one column

A	B
C	

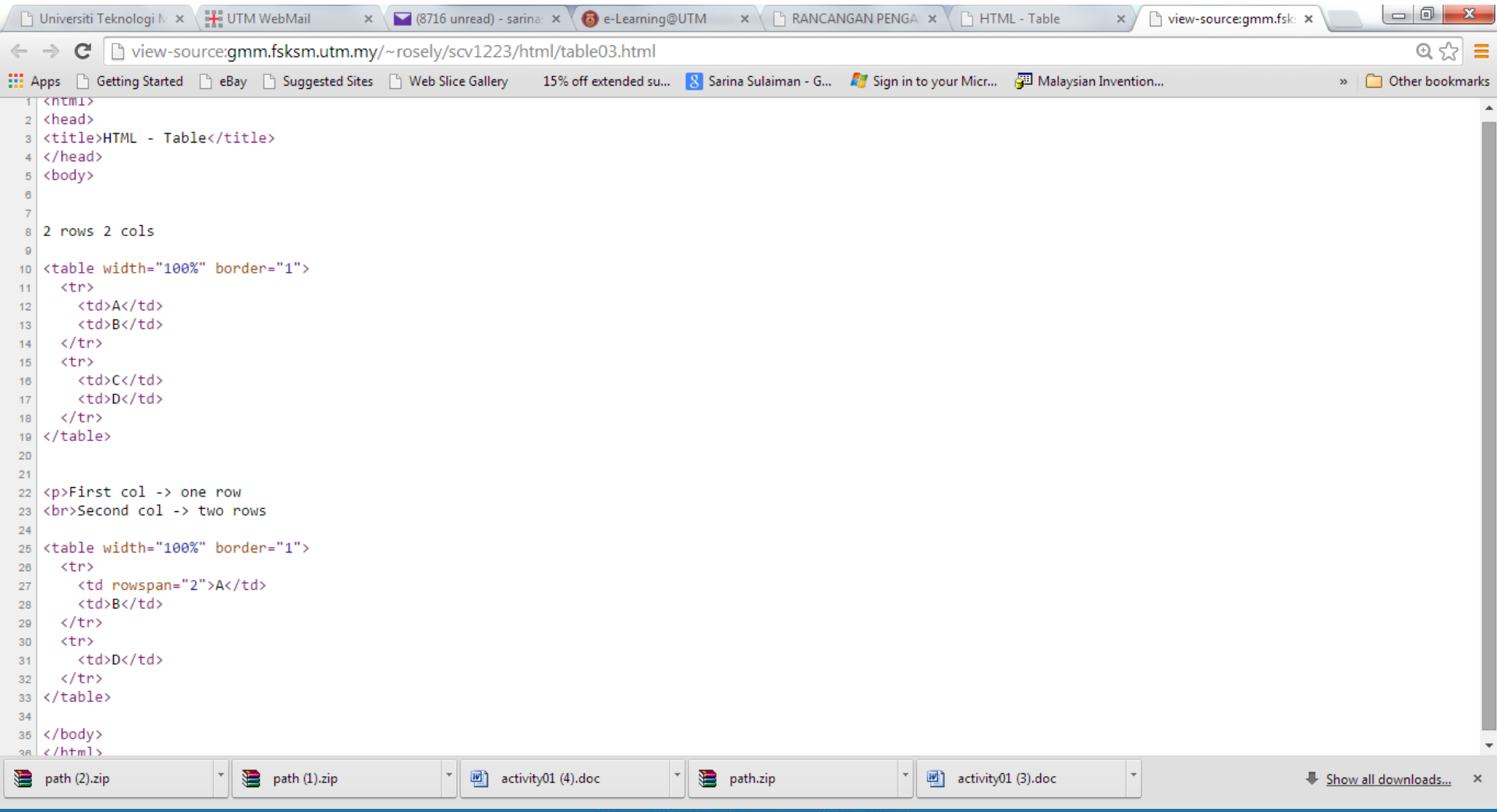
Activity 08: colspan



Activity 09: rowspan

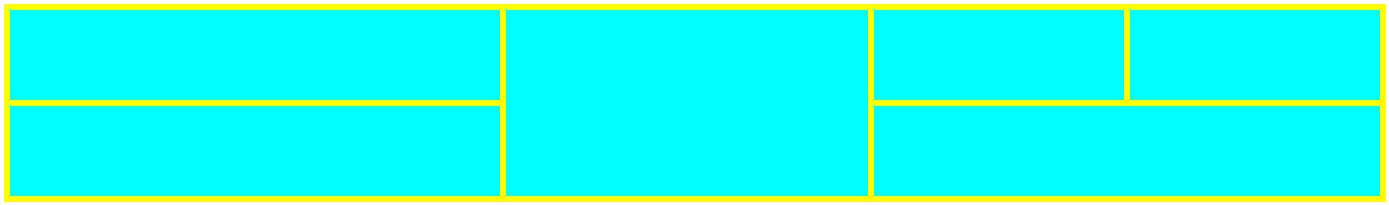


Activity 09: rowspan




```
<html>
<head>
<title>HTML - Table</title>
</head>
<body>


2 rows 2 cols

<table width="100%" border="1">
  <tr>
    <td>A</td>
    <td>B</td>
  </tr>
  <tr>
    <td>C</td>
    <td>D</td>
  </tr>
</table>


<p>First col -> one row
<br>Second col -> two rows

<table width="100%" border="1">
  <tr>
    <td rowspan="2">A</td>
    <td>B</td>
  </tr>
  <tr>
    <td>D</td>
  </tr>
</table>

</body>
</html>
```

Activity 10



It's your turn ???

Activity 10/10-a

Other Sources

- http://www.w3schools.com
- http://www.tizag.com

Online Learning

UTM
UNIVERSITI TEKNOLOGI MALAYSIA

THANK YOU