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## Lab Exercise 02 – Develop a web page.

### Objectives

By the end of this lab session, you will be able to understand page structure and HTML tags.

### Prerequisites

- Experience with any text editor like notepad, notepad++, or Edit plus etc.
- How to navigate through different directories.
- How to type content in a file and save them on a computer.

### Introduction

Website is a collection of web pages which are grouped together and usually connected in various ways. A web page is a document commonly written in Hypertext Markup Language (HTML) that is accessible through the Internet or other network using an Internet browser. A web page is accessed by entering a URL address and may contain text, graphics, and hyperlinks to other web pages and files. HTML stands for Hypertext Markup Language, and it is the most widely used language to write Web Pages. HTML describes the structure of Web pages using markup. HTML elements are the building blocks of HTML pages. HTML elements are represented by tags.

### Basic HTML Example

```
<!DOCTYPE html> <html>
  <head> </head>
  <body> </body>
</html>
```

**<!DOCTYPE html>**

It should include this tag even before the <html> tag. It is not an html tag, but tells the browser, the version of HTML page has written.

**<html>**

This tag tells browser that this is the start of an html document. All the html document contains between '<html>' and '</html>'.

**<head>**

Text between <head> and </head> tags are the header information. These content does not display on the web page.

**<body>**

All the information which are displaying on the webpage include between the <body> tag.

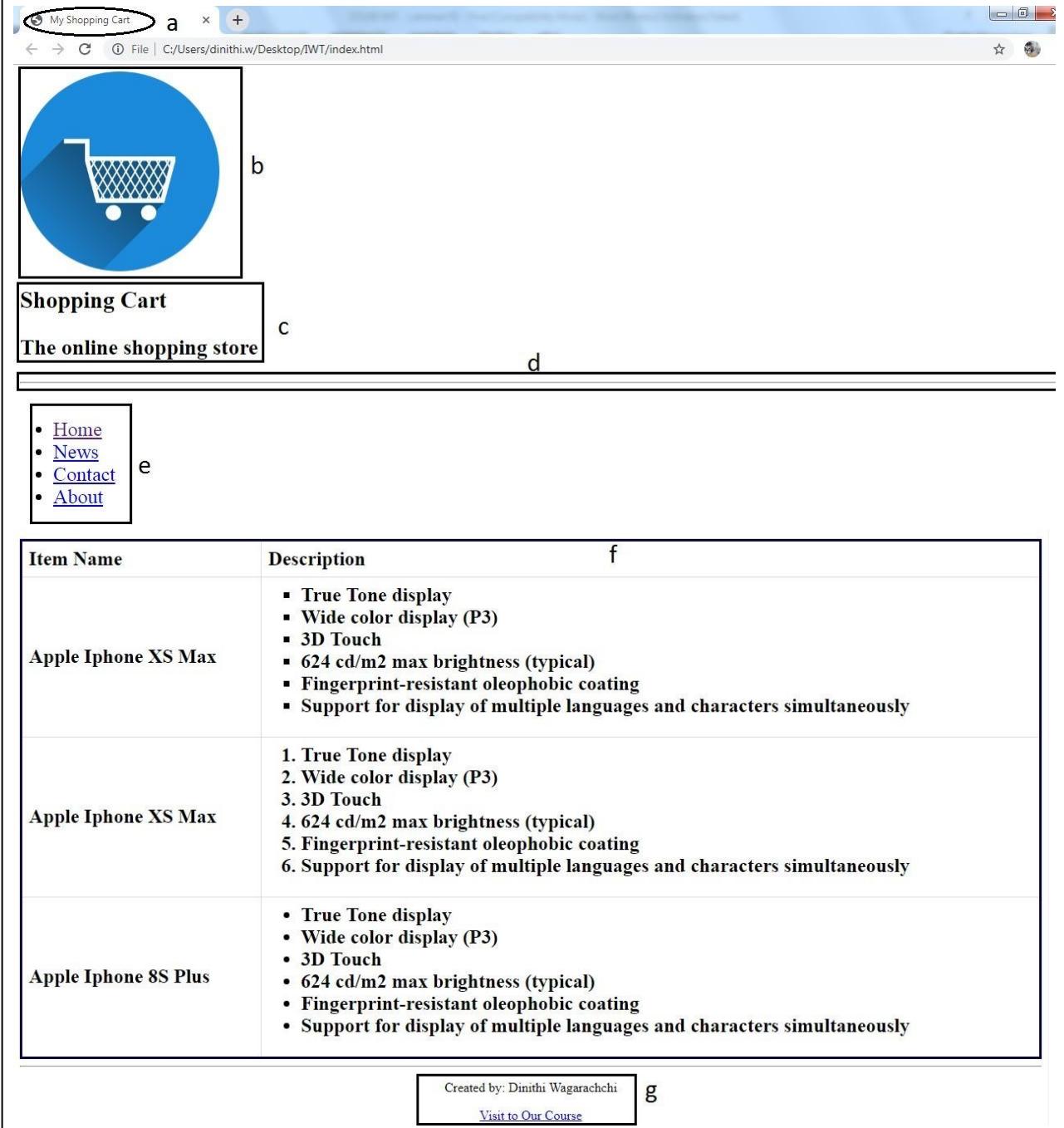
**Exercise 1: Create a shopping cart (part 1)**

1. Create the folder structure as following.
  - a. Create A folder called “IWT”.
  - b. Inside that create a folder named “src”.
  - c. Create A folder called “images” inside the “src” folder.
  - d. Create A folder called “styles” inside the “src” folder.
  - e. Create A folder called “js” inside the “src” folder.
  - f. Create a file named “index.html” and save it in “src” folder.

```
<!DOCTYPE html>
<html>
  <head>
    <!-- add a title (a) -->
  </head>
  <body>
    <!-- add a logo (b) -->
    <!-- add a header (c)-->
    <!-- add a sub-header (c) -->
    <!-- add a horizontal line (d)-->
    <!-- add a horizontal menu (e) -->
    <!-- add a table (f)-->
    <!-- add a horizontal line (d)-->
    <!-- add a footer (g)-->
  </body>
</html>
```

2. Get the following code and complete it using the given instructions. When completing the code, comment the letter of the exercise right before the answer code.

Following is the webpage view of the code.



The screenshot shows a web browser window with the following labeled components:

- a**: The 'My Shopping Cart' link in the header bar.
- b**: The large blue circular icon containing a shopping cart.
- c**: The text "The online shopping store" below the sidebar.
- d**: The main content area where the table is located.
- e**: The sidebar containing the navigation menu.
- f**: The column header "Description" for the table.
- g**: The footer text "Created by: Dinithi Wagarachchi" and "Visit to Our Course".

Item Name	Description
Apple Iphone XS Max	<ul style="list-style-type: none"> <li>▪ True Tone display</li> <li>▪ Wide color display (P3)</li> <li>▪ 3D Touch</li> <li>▪ 624 cd/m<sup>2</sup> max brightness (typical)</li> <li>▪ Fingerprint-resistant oleophobic coating</li> <li>▪ Support for display of multiple languages and characters simultaneously</li> </ul>
Apple Iphone XS Max	<ol style="list-style-type: none"> <li>1. True Tone display</li> <li>2. Wide color display (P3)</li> <li>3. 3D Touch</li> <li>4. 624 cd/m<sup>2</sup> max brightness (typical)</li> <li>5. Fingerprint-resistant oleophobic coating</li> <li>6. Support for display of multiple languages and characters simultaneously</li> </ol>
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- a. Add a title
- Title displays in the title bar of the browser name.



Check the following example in order to complete the activity.

[https://www.w3schools.com/tags/tag\\_title.asp](https://www.w3schools.com/tags/tag_title.asp)

Write the code for the task in following block.

- b. Add a logo

- Download an image from the following URL and save it in image folder created inside 'IWT' folder.

[https://www.google.com/search?tbm=isch&q=shopping+cart+logo&chips=q:shopping+cart+logo\\_1:circle:zHAFZGhb08%3D&usg=AI4\\_kTm7J-dcvfI5kX8maeMOxS4afgbw&sa=X&ved=0ahUKEwi-d21u6rhAhWBbn0KHfnLApwQ4lYIPygO&biw=1600&bih=718&dpr=1](https://www.google.com/search?tbm=isch&q=shopping+cart+logo&chips=q:shopping+cart+logo_1:circle:zHAFZGhb08%3D&usg=AI4_kTm7J-dcvfI5kX8maeMOxS4afgbw&sa=X&ved=0ahUKEwi-d21u6rhAhWBbn0KHfnLApwQ4lYIPygO&biw=1600&bih=718&dpr=1)

- Add that specific image to the html.
- Change the width to 200px.

- 
- Change the height to 200px.

Check the following example in order to complete the activity.

[https://www.w3schools.com/tags/tag\\_img.asp](https://www.w3schools.com/tags/tag_img.asp)

Write the code for the task in following block.

c. Add A Header

- <h1>, <h2>, <h3>, <h4>, <h5>, <h6> are the headers in HTML.
- Add a suitable header using those tags to display website name and description.
- Headers should be centered.

Check the following example in order to complete the activity.

[https://www.w3schools.com/tags/tag\\_header.asp](https://www.w3schools.com/tags/tag_header.asp) Write the code for the task in following block.

d. Add a horizontal line □ Add a horizontal line.

Check the following example in order to complete the activity.

[https://www.w3schools.com/tags/tag\\_hr.asp](https://www.w3schools.com/tags/tag_hr.asp)

Write the code for the task in following block.

- e. Add a horizontal menu
  - Add following as points. (bullet points)

“Home”, “News”, “Contact”, “About Us”.

- Add hyperlink tags in order to direct it to another page.

Check the following example in order to complete the activity.

[https://www.w3schools.com/tags/tag\\_ul.asp](https://www.w3schools.com/tags/tag_ul.asp)

Write the code for the task in following block.

- f. Add a table
  - Create a table to display products' information.
  - Table should at least have two columns. (Item Name, Description)  Table width should be fit to the page.

- 
- In description column it should include information in bullet point format (Should use square bullet points), number format.
  - Should use bold and italic words.
  - Should use special characters (&, <, > etc.).

Check the following example in order to complete the activity.

Table - [https://www.w3schools.com/tags/tag\\_table.asp](https://www.w3schools.com/tags/tag_table.asp)

Special Characters - [https://www.w3schools.com/html/html\\_entities.asp](https://www.w3schools.com/html/html_entities.asp)

Bold text - [https://www.w3schools.com/tags/tag\\_b.asp](https://www.w3schools.com/tags/tag_b.asp)

Italic text - [https://www.w3schools.com/tags/tag\\_i.asp](https://www.w3schools.com/tags/tag_i.asp)

Write the code for the task in following block.

g. Add a Footer □ Should display your name and a hyperlink to navigate ‘<http://courseweb.sliit.lk/>’.

Check the following example in order to complete the activity.

[https://www.w3schools.com/tags/tag\\_a.asp](https://www.w3schools.com/tags/tag_a.asp)

Write the code for the task in following block

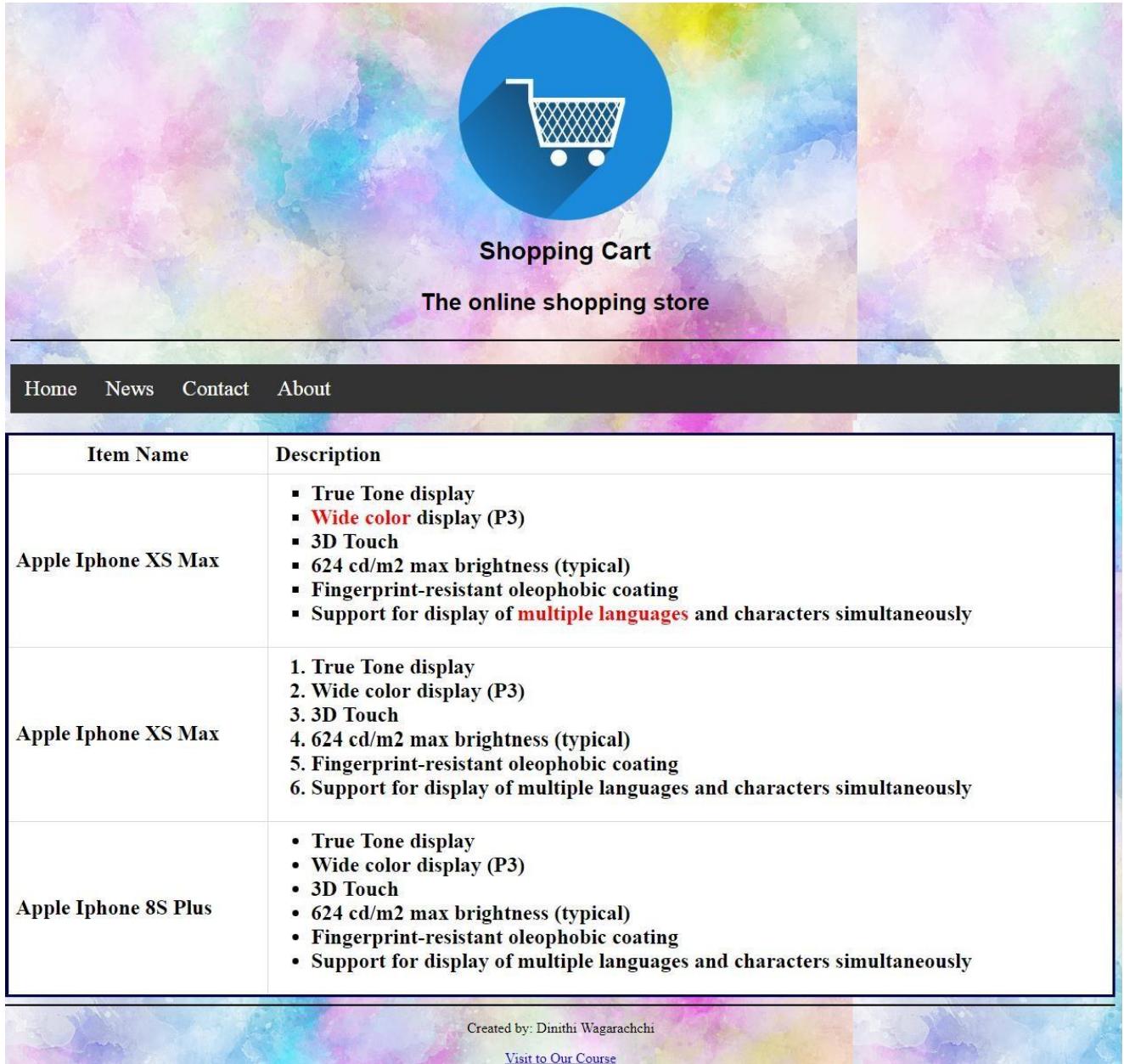
## **Exercise 2**

What are the empty elements in HTML? (Explain with examples)

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## Next Week...

In the next lab session, it will be able to change this session web page into the following one.



The mockup shows a colorful, abstract background with a large blue circle containing a shopping cart icon. Below the circle, the text "Shopping Cart" is displayed. Underneath that, the text "The online shopping store" is shown. At the bottom of the page, there is a dark navigation bar with links for "Home", "News", "Contact", and "About". The main content area contains a table with three rows, each listing a product name and its description. The products listed are Apple iPhone XS Max, Apple iPhone XS Max, and Apple iPhone 8S Plus.

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Created by: Dinithi Wagarachchi  
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