A picture containing logo

Description automatically generated

Distance Learning Activity 2

ICTWEB519 Develop complex web page layouts

ICTWEB520 Develop complex cascading style sheets

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# 1. Instructions to Learners

## Purpose of this distance learning activity

This activity requires the learners to code in HTML and CSS based on the following topics:

* List
* Tables
* Positioning elements
* Display property
* Opacity
* Responsive layout
* Flexible box
* Semantic tags

## What you are required to do

For this distance learning activity, you are required to answer questions and create small web pages.

## Resources

* Please refer to the learner guides.

## How to submit your Distance Learning Activity

**File naming convention**

When submitting your Distance Learning Activity, use the following naming convention

* Unit of Competency code (i.e., ICTWEB519\_520)
* ‘DLA’ followed by the week number (ie., 5)
* Your first name and initial of last name. Capitalise only the first letter of names. Then insert a dash, followed by submission attempt.

Hence as an example of incorporating the three points above your file name or subject line should appear this way: *ICTWEB519\_520* *DLA 1 – JessieA #1*

Create a website project folder called using the naming convention specified above. This folder will be used to store the following

* This distance learning activity
* Other website project folder as required by the questions below

Once completed, compress the website project folder in zip format and then submit. Always submit your distance learning activity on time by the due date. Your completed distance learning activity must be uploaded onto Moodle by 11.55pm on Sunday of the current week.

**2. Questions (class and list order and unorder)**

| Question 1. Create a web page so that it appears the same with the given the diagram below: |
| --- |
| **HOW TO COOK**    **Preparation:**   * 1. Prepare ingredients.   2. Slice ingredients.   **Warning!!!**   * Be careful not to cut yourself when slicing.   **Cooking Procedure:**   1. Sauté spices under high heat.   **Caution!!!**   * Be careful not to burn yourself. |

| Question 2. Create a web page so that the transparent pink square is on top the section that has the background image of a turtle as shown below:  Specifications:   * HTML Sections:   Pink: <div id = “top”></div> <!--do not put anything inside the div section-->  Turtle: <div id= “bottom”></div> <!--do not put anything inside the div section-->   * CSS:   + Create a css file so that it looks like the diagram above.   + The dimensions of both section should not be greater than 300px. The top section should be smaller than the bottom section.   + The top section must have a background color pink and must be very transparent as shown in the photo above.   + The bottom section must have a background image of a turtle. |
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| Question 3. Create a web page that displays the following:   * Static * Absolute * Fixed * Relative * Sticky   Use the tags <dl>, <dt>, <dd>.  You may perform further formatting to make the web page presentable. |
| --- |

Definition

* Static - The element is positioned according to the normal flow of the document. The top, right, bottom, left, and z-index properties have no effect. This is the default value.
* Absolute - An element with position: absolute; is positioned relative to the nearest positioned ancestor (instead of positioned relative to the viewport, like fixed). However; if an absolute positioned element has no positioned ancestors, it uses the document body, and moves along with page scrolling.
* Fixed - An element with position: fixed; is positioned relative to the viewport, which means 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 in the page where it would normally have been located.
* Relative - An element with position: relative; is positioned relative to its normal position. Setting the top, right, bottom, and left properties of a relatively-positioned element will cause it to be adjusted away from its normal position. Other content will not be adjusted to fit into any gap left by the element.
* Sticky - An element with position: sticky; is positioned based on the user's scroll position. A sticky element toggles between relative and fixed, depending on the scroll position. It is positioned relative until a given offset position is met in the viewport - then it "sticks" in place (like position:fixed).

dl,dt,dd (Perform in

* The <dl> tag defines a description list.
* The <dl> tag is used in conjunction with <dt> (defines terms/names) and <dd> (describes each term/name).

| Question 4. Create an html page with the following specification:  The page should have the following sections:   * Header   + Background-color: lightgrey   + Font-color: #fdfdfd   + Height: 10% of the viewport height   + Must have an h1 that says: “Header” as shown. The h1 should be centered horizontally and vertically. * Nav   + Background-color: black   + Height: 5% of the viewport height   + Must have links as shown below. The links do not need to direct to any url. The links should look similar with the diagrams below: * Main   + Background-color: lightgreen   + Height: Do not define   + Must consist of h2 that says “The Main Section” as shown   + Below h2 there should be at least 20 paragraphs. Each paragraph should be at least 100 words.   + As shown below, when scrolling down the main section, the sections Header and Nav should not move.   Please see the screenshot below for the sample output. Note the following:   * the red border below represents the viewport and it is not part of the page. * There should be no spaces between the viewport and the page contents. |
| --- |
| Graphical user interface, text  Description automatically generated  Scrolling down the main section….  Text  Description automatically generated |

| Question 5. Fluid Layout Exercise  Create an HTML and CSS file so that it appears the same with the given the diagram below:  Specifications   * + The section with the red line is the wrapper. Outside the wrapper is the body. Note that the body does not have a border in your actual webpage. The blue border is only used for this document only.   + Inside the wrapper, the top section is the header.   + Below the header, the bigger section is the section. Besides the section is the aside.   + Use fluid layout on all the dimensions, margins and padding so that all section proportionally resizes if the window resizes as well. |
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| Question 6. ***Working with media queries (Combination flex and media queries)***  Create a webpage with the following specifications:  Add 2 div elements that both have the class name of “col”. Each div should have an h1 and p element with some dummy text.  In the CSS code, create the col class as follows:   * Float the element to the left, give it a background colour of “lightgray”, and set its width to be 50% of the viewports width   Create a media query that is executed when the device is put into portrait orientation. It should modify the col class to set the width to 100% of the viewports width, and set the background colour to be light blue.  The output should appear similar to the following when in portrait orientation: |
| --- |
| *Figure 2-39: HTML and CSS output*  And should appear as per the following figure when in landscape orientation: |

| Question 7. ***Create a flexible box***  Create a webpage with the following specifications:  Add a div element that sets the class attribute to be “responsivebox”. Nest three div elements within the div element, each with content that displays its flex item number: 1, 2, and 3.  In the CSS code, create the responsivebox class as follows:   * Ensure that it is a flexible box has a direction of column. * Ensure that a CSS child combinator is created for nested div elements within the responsivebox class that sets a background colour of light green, a width of 150px, a margin of 10px, and a font size of 20px.   The output should appear similar to the following: |
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| Question 8. ***Align flex items***  Create a webpage with the following specifications:  Add a div element that sets the class attribute to be “responsivebox”. Nest three div elements within the div element, each with content that displays its flex item number: 1, 2, and 3.  In the CSS code, create the responsivebox class as follows:   * Ensure that it is a flexible box has a direction of row, has a height of 250px, a background colour of “lightgray”. The flex items should be centred both vertically and horizontally. * Ensure that a CSS child combinator is created for the nested div elements within the responsivebox class that sets a background colour of “lightgreen”, a width of 150px, a margin of 10px, and a font size of 20px.   The output should appear similar to the following: |
| --- |
|  |