The combination of HTML and CSS has meant that web browsing can be done on a variety of devices and not just computers and phones. Which of the following statements about CSS are true? Select all that apply.

- You can change a web page's appearance with CSS without editing its HTML.
  - o This is possible because there is a separation between content and style in CSS.
- CSS describes the look and layout of a document written in HTML.
- CSS gives you control over spacing and positioning of content on a web page.
  - o It also gives you control over color, size and fonts.

Semantic tags describe the meaning of a web page and they help search engines and accessibility software like screen readers to understand the contents of a page. Which of the following statements are true? Choose all that apply.

- Basic HTML tags like the heading and list tags can be used to describe content.
  - o For example, a heading tag like h1 describes that the content is a heading.
- The article element is used for complete, self-contained compositions on a web page.
  - o Examples include a blog post, or an article published in an online magazine or newspaper.
- The main navigation links of your website should be added inside the nav element.
  - o The main links allow users to navigate between different parts of your web page.

Is the following statement true or false? If you want to create an unordered list you should use the litag.

False, for an unordered list you use the ul tag. The li tag is list item.

You want to improve the SEO of a website. What metadata should you add to the head element of the website and why? Check all that apply.

- Robots metadata to improve how search engines analyze the website.
  - The name "robots" comes from the automated software, often referred to as "bots", that search engines use to analyze websites.
- Author metadata to inform search engines who the author of the web page is.
  - o Author metadata specifies the author of the web page.
- Description metadata to help search engines understand what the web page is about.
  - o The description metadata describes the content of the web page.
- Viewport data to help web browsers display websites at the appropriate scale on the device being used.
  - o Mobile devices will by default attempt to render a web page as if it is being viewed on a desktop. The solution is to define viewport metadata.

When adding a new CSS and a new JavaScript file to the template web page, what needs to be done? Check all that apply.

- Add a link element to reference the CSS file
- Add the JavaScript file to the js folder
- Add a script element to reference the JS file
- Add the CSS file to the css folder

You need to add the CSS file to the css folder, the JavaScript file to the jsfolder, a link element to reference the CSS file and a script element to reference the JS file.

## Frontend developers use the Open Graph Protocol to improve the user experience of shared links because it helps social media platforms create a preview of the shared web page.

Yes, the Open Graph Protocol is a set of metadata rules that allows web pages to describe themselves to social networks. Social media platforms use these meta tags to create a preview of the shared web page.

## As part of your role as a developer you've been asked to prepare a web page so it can be linked on social media platforms. Which of the following statements are true? Choose all that apply.

- A meta tag can inform social media platforms of the content type such as video or website.
  - o A meta tag can also be added to tell social media platforms what title and image will be displayed in the preview.
- A meta tag can determine what title will be displayed in the preview of a website on a social media platform.
  - O A meta tag can also be added to tell social media platforms what title to display in the preview and whether the content being shared is a website or not.
- A meta tag can inform the social media platform what the preferred preview image is.
  - o A meta tag can also be added to tell social media platforms if the content being shared is a website and what the preferred preview image is.

#### As a developer, you can add client-side validation to a form by using specific input types.

Yes, Client-side validation checks for errors as soon as they are typed into the form. The web browser does this by validating the submitted data against the specified input type. The web browser will show an error message if the wrong type of input has been submitted.

# You are asked to help create a signup form. What can you do to improve the user experience of the form? Select all that apply.

- Add labels for each input element.
  - o Labels will help users understand what they need to add in each field. It is important to set the ID attribute of each input field so that the corresponding label can be associated with it.
- Ensure that the correct input types are used.
  - Using specific input types makes it easier to complete a form correctly because users are warned if they enter an incorrect response.

# What additional attributes can you add to an element on an HTML form to improve client-side validation? Check all that apply.

- maxlength
  - You can specify the maximum number of characters allowed for a form field by adding for example: maxlength="12" inside the input type element.
- required
  - o If it is essential that a user submit a response to a specific field on your form, you should add: Required inside the input type element.
- minlength
  - O You can specify the minimum number of characters required for a form field by adding for example: minlength="3" inside the input type element.

#### What is the purpose of the fieldset element in an HTML form?

It groups radio buttons. If you do not add a fieldset element to each radio button, all radio buttons will belong to the same group.

If you must add a question on a form where users need to pick an option from a very long list, you can add a datalist input type which will allow the user to begin typing to narrow down the available options based on their input.

Yes, The Datalist input type is also useful when the list of options might become longer in future.

You've been asked to help develop a new online store. Security is very important to the customer. Which form method should be used to improve security?

The HTTP POST method is more secure than the HTTP GET method. When a form is submitted using the Post method, the form data is inserted into the content of the HTTP request instead of appended at the end of the URL as is done with the GET method.

### What are the advantages of styling HTML forms with CSS? Check all that apply.

- You can specify the styling of individual elements.
  - o Alternatively, you can style element types using element selectors. When you style HTML forms with CSS it will display the same across browsers creating a consistent user experience.
- You can specify styling for element types using element selectors.
  - Alternatively, you can specify the styling of individual elements. When you style HTML forms with CSS it will display the same across browsers creating a consistent user experience.
- It creates a consistent user experience across browsers.
  - o By default, browsers handle forms differently but if you style a form with CSS all browsers will display the form in the same way.

Video and audio tags make it easy to add videos and audio to web pages. Is the following statement true or false? You have to add both source and type attributes to both video and audio tags.

True, the source specifies the address of the video or audio file, and the type attribute specifies the file format.

You are creating an about page for a local business that includes an audio player. What are the elements and attributes needed for the audio player? Choose all that apply.

Controls Attribute, without the controls attribute users won't be able to play or pause the audio.

Source Element, you have to specify the source element so that you can set the src attribute to the audio file.

Audio Element, without the audio element there can't be an audio player.

Type Attribute, you have to set the type to specify the file format.

You are a developer at the Little Lemon Tree company and your team leader has asked you to embed a map in the web page you are developing. You have learned that there are various important security issues when using iframes. Select the ways that these issues can be addressed. Check all that apply.

- You can use the allow attribute to limit which browser features the iframe can access.
  - o The allow attribute can be set, for example, to not allow the iframe camera or microphone access.
- Recommend that iframes are not used.
  - O You need to be mindful when embedding a web page using iframe because the web page can run JavaScript code which can be used to exploit security vulnerabilities.
- The sandbox attribute can prevent files from being downloaded.
  - o The sandbox attribute can also prevent popup windows.

A small business is planning to embed advertisements on their website and you have to create an iframe to set up an image on their website. However, there are some security concerns when it comes to embedded content. What can you do to minimize those concerns? Select all that apply.

- Use the allow attribute.
  - Using the allow attribute means that you can disable browser features for the iframe like payment, microphone and camera access.
- Add the sandbox attribute to the iframe element.
  - O This will prevent JavaScript files from running within the iframe and it restricts browser capabilities within the iframe context.

There are three main technologies underpinning the production of animated and video game content for the web browser. These are GIF or webP, 2D Canvas and WebGL. Which of the following statements about these technologies are true? Choose all that apply.

- GIF and webP are used to animate images, but with no interactivity.
  - o GIF and webP are popular for embedding animated content but the format has no interactivity.
- 2D Canvas is used for building both 2D video games and animations.
  - o The 2D Canvas allows 2D graphics to be drawn in the web browser.