

1.3 EXCHANGING DATA · 1.3.4

JavaScript & web forms

Original practice questions · 31 marks · about 40 minutes · spec 1.3.4(a)

Instructions. Answer all questions. The number of marks is shown in brackets []. Write code exactly, including punctuation. Quality of written communication is assessed in the extended-response question.

1 Total: 6 marks

This question is about JavaScript.

- (a) State what JavaScript is used for on a web page. [1]
-
- (b) State the name of the tags JavaScript is written between when embedded in an HTML page. [1]
-
- (c) JavaScript is interpreted by the browser. Explain why JavaScript is usually interpreted rather than compiled. [3]
-
-
-
- (d) State which language (HTML, CSS or JavaScript) makes a web page interactive. [1]
-

2 Total: 5 marks

A web page contains the following HTML element:

```
<p id="result"></p>
```

- (a) Write the JavaScript to change the content of this element to display the word *Pass*. [2]
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-
- (b) Write the JavaScript to display an alert box containing the message *Saved*. [1]
-
- (c) Explain why a developer might choose to show an alert box to the user. [2]
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A sign-up form asks the user for an email address. The website uses JavaScript to validate the form.

- (a) State what is meant by *validation*. [1]
- (b) Describe **one** validation check that could be applied to the email field. [2]
- (c) Explain one advantage to the user of the form being validated client-side before it is submitted. [2]
- (d) Explain why the email should also be validated server-side, even though it has already been checked in the browser. [3]

Look at the JavaScript function below, which is meant to count the items in an array called `products`.

```
function count() {  
  x = products.length  
  document.getElementById("display").innerHTML = x  
}
```

- (a) Describe the purpose of this function. [2]
- (b) Rewrite the function so that it shows the count in an alert box instead of writing it to the page. [2]

Discuss the use of client-side and server-side processing for validating the checkout form, including the benefits and limitations of each, and recommend how the checks should be split. [8]

END OF QUESTIONS