# Knowledge assessment: Produce dynamic pages using client-side script

## Criteria

### Unit code, name and release number

ICTWEB411 - Produce basic client-side script for dynamic web pages (1)

### Qualification/Course code, name and release number

ICT50615 - Diploma in Web-Based Technologies

## Student details

### Student number

807135473

### Student name

Alex Goulden

## Assessment Declaration

* This assessment is my original work and no part of it has been copied from any other source except where due acknowledgement is made.
* No part of this assessment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.
* I understand that plagiarism is the presentation of the work, idea or creation of another person as though it is your own. Plagiarism occurs when the origin of the material used is not appropriately cited. No part of this assessment is plagiarised.

### Student signature and Date

## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your knowledge of client-side scripting and dynamic web page development. |
| **Assessment Event number** | 2 of 2 |
| **Instructions for this assessment** | This is a written assessment and it will be assessing you on your knowledge of the unit.  This assessment is in one part:   1. Short answer questions   The assessment also contains:   * Assessment Feedback. |
| **Submission instructions** | On completion of this assessment, you are required to upload it or hand it to your assessor for marking.  Ensure you have written your name at the bottom of each page of your assessment.  Submit the following documents for each part:   * Part 1   + This document.   It is important that you keep a copy of all electronic and hardcopy assessments submitted to TAFE and complete the assessment declaration when submitting the assessment. |
| **What do I need to do to achieve a satisfactory result?** | To achieve a satisfactory result for this assessment, all questions must be answered correctly. |
| **What do I need to provide?** | * A pen, if a paper version of assessment is provided * USB drive or other storage method with enough free space to save work to. |
| **What will the assessor provide?** | Assessment paper. |
| **Due date/time allowed** | Indicative time to complete assessment:   * 90 minutes. |
| **Assessment location** | This assessment may be completed outside of the classroom.  The student may access their referenced text, learning notes and other resources. |
| **Supervision** | Your assessor may ask for additional evidence to verify the authenticity of your submission and confirm that the assessment task was completed by you. |
| **Reasonable adjustment** | If you have a permanent or temporary condition that may prevent you from successfully completing the assessment event(s) in the way described, you should talk to your assessor about ‘reasonable adjustment’. This is the adjustment of the way you are assessed to take into account your condition, which must be approved BEFORE you attempt the assessment. |
| **Assessment feedback, review or appeals** | In accordance with the TAFE NSW policy *Manage Assessment Appeals,* all students have the right to appeal an assessment decision in relation to how the assessment was conducted and the outcome of the assessment. Appeals must be lodged within **14 working days** of the formal notification of the result of the assessment.  If you would like to request a review of your results or if you have any concerns about your results, contact your Teacher or Head Teacher. If they are unavailable, contact the Student Administration Officer.  Contact your Head Teacher for the assessment appeals procedures at your college/campus. |

## Part 1: Short answer questions

Read the questions carefully. Each answer should be 100-250 words.

1. Explain the principles of open platform programming and how these principles benefit JavaScript programmers:

Open platform programming refers to the use of open standard documentation and reports in a software system. This allows for the public to view and alter a software to function in other ways than originally intended. In JavaScript this means that the utility of code can deviate from what is considered standard use.

1. Define client-side and server-side scripting and explain the main differences between them. Include examples of where one is preferred over the other.

Client-side scripting and server-side scripting are vastly different in use case, with both having problems they are designed to solve.

Client, code that operates on the users computer – html, css, javascript

Most frequently used in visual and simple operations, while different client languages focus on different aspects, they share this common relation

Server, code that operates on the web server – ruby, php, python

Operations that are most often customized to suit the use case, frequently used for operational and logistic functions, this is server languages most common relation

1. Describe how client-side scripting is applied to create dynamic web pages using:
   1. Events and event handlers

Events and event handlers are used to activate code – events require something to happen on a site either from the user or the site itself. This allows for pages to dynamically display content or create interactables in unique or useful way.

* 1. Internet operation between client and server

Interactions between the client and server can be used to send data or receive files to be utilised on the client side

* 1. Internet protocols

Through javascript you can establish server connections, which in turn allows for a vast range of dynamic opportunities. To do so requires the necessary technologies, meaning tools like node.js can work with wider internet protocols and create more dynamic server interactions

* 1. Standard generalised markup language

SGML’s like XML and HTML give client side scripting languages like javascript a structured layout to expand upon and provide utility to – while also allowing them to connect and interact with other languages and tools.

* 1. Associated standards

Allow for client-side languages to link up with other scripts and tool sets correctly and as expected

1. Describe the main security restrictions on web servers

The most commonly found web restrictions are:

Preventive measures for SQL injection and XSS attacks.

Dual sided validation

Controlled file uploads

Use of HTTPS

1. Describe the importance of standards for programming documentation. Give an example.

Programming documentation standards are extremely important in all aspects of development, they provide a consistent appearance, structure, and quality to software and its process.

A JS would be the requirement that one var statement must be used per variable assignment. These must be declared at the top of the function in which they are being used as this avoids issues with variable hoisting.

## Assessment Feedback

*NOTE: This section* ***must*** *have the assessor signature and student signature to complete the feedback.*

### Assessment outcome

Satisfactory

Unsatisfactory

### Assessor feedback

Has the Assessment Declaration been signed and dated by the student?

Are you assured that the evidence presented for assessment is the student’s own work?

Was the assessment event successfully completed?

If no, was the resubmission/re-assessment successfully completed?

Was reasonable adjustment in place for this assessment event?  
*If yes, ensure it is detailed on the assessment document.*

Comments:

### Assessor name, signature and date:

### Student acknowledgement of assessment outcome

Would you like to make any comments about this assessment?

### Student name, signature and date

***NOTE: Make sure you have written your name at the bottom of each page of your submission before attaching the cover sheet and submitting to your assessor for marking.***