ASSESSMENT TASK 1

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| Version Number: 3   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | Task Number | 1 of 3 | Task Name | Basic PHP website | | National unit(s) code | ICTWEB501  ICTDBS504 | National unit(s) title | Build a dynamic website  Integrate database with a website | | National qualification code | ICT50115 | National qualification title | Diploma of Information Technology | | RMIT Program code | C5341 | RMIT Course code | COSC7369C | | | | |
| Assessment Information | | |
| **Duration and/or due date:** | Week 5 | |
| **Task instructions** | | |
| **Summary and Purpose of Assessment**  You are required to create a simple website using HTML forms and PHP scripts to demonstrate how HTTP requests, arrays, variables, conditional statements and functions combine to add dynamic functionality to a website. The website will contain HTML structure, a navigation, and CSS styling.  You are also required to test your PHP scripts and explain key web-programming concepts  Completing this assessment task allows you to demonstrate that you can   * create the software components of a website * test the components of a website * integrate the components to produce a web application * create a website, using efficient and effective code * explain web programming concepts   **Assessment Instructions**  ***What***  Choose a theme for a simple website. For example, movies, games, books, animals or food  Collect data and images for 3 examples (e.g. data and images for 3 movies)  Use HTML forms and PHP scripts to collect, search and display information on your chosen theme  The website must demonstrate the following functionality:   * Welcome page   + A PHP array containing three images   + Looping through the array and displaying all images using HTML and CSS * Post form   + An HTML form using the post method; with 2 text input fields and submit button   + Passing the form data to a script which will test for errors and if correct, will display the posted data to the screen. * Search form   + An HTML form using the get method; with a select input field (4 options) and submit button   + Passing the search criteria to a script which will use switch() to find and display appropriate information * Image form   + An HTML form using the post method; with a file input field and submit button   + Browsing for an image and displaying image details   + Moving the image to a specified folder   Explain the following web programming concepts   * hypertext transfer protocol (HTTP) – post and get * superglobal arrays   ***Where***  The PHP website should be uploaded to the RMIT file server where it can be viewed and assessed.  All files in your PHP website project folder should be zipped and uploaded to Canvas by the due date  Written answers to programming questions should be saved as a Word or PDF file and uploaded to Canvas by the due date  You will be provided some class time to work on this assessment, however, it is expected that most of this assessment will be completed outside of class.  ***How***  You will be assessed against the criteria as listed in the marking criteria in Section B of this task. To achieve a satisfactory result, you will need to address all criteria satisfactorily. | | |
| **Conditions for assessment** | | |
| * Assessment will be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the database field of work * You must be assessed by a qualified assessor (NVR/AQTF assessor requirements) * You must complete the task by week 5 * This is an individual task, however, you may discuss the technical requirements with others to clarify your ideas * You must complete all tasks listed in the checklist to the standard described in Section B to be deemed satisfactory in this assessment * Please make arrangements with your assessor at least one week prior to the assessment due date if you feel you require special allowance or allowable adjustment to this task * You will have the opportunity to re-submit should you be deemed unsatisfactory (one resubmit allowed). | | |
| **Instructions on submitting your project/portfolio/report** | | |
| The PHP website MUST be uploaded to the RMIT file server where it can be viewed and assessed.  All files in your PHP website project folder should be saved as an archive file (ZIP or RAR) and named **A1\_studentname**  Written answers to programming questions should be in a Word document named **A1questions\_studentname.docx**  Upload both files toCanvas in week 5 | | |
| **Equipment/resources students must supply:** | | **Equipment/resources to be provided by RMIT or the workplace:** |

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| * Laptop * XAMPP virtual server * Browsers | * Computer and Internet access * Web server - RMIT file server * Database server – RMIT SQL * Web development environment |

1. **Assessment Guide**

Below is a checklist for how this assessment task will be judged as satisfactory or not satisfactory.

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| **Criteria for assessment** |
| **Part A – create a basic PHP website with the following features and functionality** |
| 1. **Text and images** |
| * Choose a theme for this website. For example, movies, games, books, animals or food * Collect data and images for 3 examples (e.g. 3 movies) * Store the data (name & description) in a text file * Store the 3 images (max size 300px) in a folder named images * This data is to be used in your PHP web pages |
| 1. **Use PHP include to provide HTML structure, navigation, and CSS design** |
| * Each php page must contain HTML structural elements, a main heading and a navigation (home, search, post, images) * Create 3 include files (head.php, nav.php and footer.php) with the required HTML structural elements and include these files on each page * Create an external CSS file and link to each page |
| 1. **Welcome Page** |
| * Create a PHP array containing three images * Write a PHP script to loop through the array and display all images using HTML and CSS |
| 1. **Post Form - create a form & PHP script demonstrating HTTP post requests** |
| * Create an HTML form to collect user input (2 text fields) and pass the data to a display script using the post method * Use if/else statements and the empty() function to test whether all fields have been filled out. * If data is correct, create variables for POST data and display the variables using HTML and CSS |
| 1. **Search Form – create a form & PHP script demonstrating HTTP get requests** |
| * Create an HTML form with a select box and submit button * The select box must contain 4 options * On submit pass a select option value (e.g. name) to a PHP search results page * The search results page must test the value passed and display relevant information using switch() and case statements |
| 1. **Image form – create a form & PHP script to upload an image to a folder** |
| * Create an HTML form with a browse button * On submit, pass the image details to an upload script * Verify the image details in the $\_FILES array and create variables for each array item * Use if/else statements and the error code to test the status of the image. * If the image is OK, move the image to an images folder and display image details (name and size) and the image. * If there is a problem, display an error message |
| **Part B - Questions** |
| **Write answers to the following questions in a Word document**  **Name the Word document: *A1\_questions\_studentname*** |
| 1. How does the HTTP request method POST work?   Post put the data in the data body of the 'FORM' , and the pairs of the parameter value pairs in the form are sent to the  REQUEST BODY . All operations of POST are invisible to the user   1. Explain why you have used this method in your post and image forms?   According to the HTTP specification, the POST is a request that might modify a resource on the server.  Picture resources generally occupy relatively large storage space and  POST has no limit and can transmit large amounts of data. |
| 1. How does the HTTP request method GET work?   Get requests are typically attached to urls as query strings.If the data is English letters/Numbers, send as is;  If it's a space, convert it to +;If it is Chinese/other characters, then directly use BASE64 encryption of the string,  such as: % e4% BD%A0 e5% a5% BD, where XX in % XX is the hexadecimal representation of the symbol ASCII   1. Explain why you have used this method in your search form?   Essentially, all of the GET information is in the URL, so it's easy to document and reuse. |
| 1. What is the Superglobal array $\_FILES?   In PHP programs, the upload data that needs to be processed is stored in the global array $\_FILES (super global array)   1. What information is stored in $\_FILES?   1: the value stored in $\_FILES['userfile']['name']  2: the value stored in $\_FILES['userfile']['type']  3: the value stored in $\_FILES['userfile']['size']  4: the value stored in $\_FILES['userfile']['tmp\_name']  5: the value stored in $\_FILES['userfile']['error'] |
| 1. Explain how you could use var\_dump() or print\_r() to diagnose errors when working with arrays?   Print easy-to-understand information about the variable, and if you give a string, integer, or float, print the variable value itself. If you give an array, it will display the keys and elements in a format. Object is similar to an array. Remember, print\_r() moves the pointer to the last edge of the array. Use reset() to return the pointer to the beginning  Var\_dump:  This function displays information about the structure of one or more expressions,  including the type and value of the expression. The array recursively expands the value,  showing its structure by indentation. |