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| **Student Name** |  | **Student Number** | |  | | |
| **Unit Code/s & Name/s** | ICTDBS504 Integrate database with website | | | | | |
| **Assessment Name** | **Portfolio of Evidence**  Gorgeous Cupcakes website upgrade | **Assessment Task No.** | | | 2 | |
| **Assessment Due Date** | Week 8 | **Date submitted** | | |  | |
| **Assessor Name** | Manuela Perez | | | | | |
| **Student Declaration:** I declare that this assessment is my own work. Any ideas and comments made by other people have been acknowledged as references. I understand that if this statement is found to be false, it will be regarded as misconduct and will be subject to disciplinary action as outlined in the TAFE Queensland Student Rules. I understand that by emailing or submitting this assessment electronically, I agree to this Declaration in lieu of a written signature. | | | | | | |
| **Student Signature** |  | | **Date** | | |  |

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| **Instructions to Student** | **Learning Support**  Additional support is available to help you achieve your learning goals. Speak to your teacher or a Learning Skills Centre team member if you feel that you may benefit from some extra support. The Institute provides extra support through the Disability Support Unit and the Learning Skills Centre.  RPL (Recognition of Prior Learning) is available for this unit. Speak to your teacher/assessor to check if you qualify for RPL.  **Conditions of Assessment**  You will need to complete the learning and undertake all assessments satisfactorily to be deemed competent. You are responsible for complying with all assessment item instructions; submission and collection requirements; undertaking assessment tasks honestly and retaining a copy of all assessment items.  You must submit assessment items by the **due date**, unless an extension has been granted by your teacher. Failure to submit assessment items by the due date will result in a “did not submit” being recorded and depending on your circumstances, you may be granted one final resubmission.  To be judged competent in this assessment item the student is required to demonstrate competence in all indicators shown in the marking guide.  **The Classroom as a Simulated Work Environment**  Students must be aware and take responsibility for the problems of working in a shared IT environment. Problems such as noise levels, production flow, interruptions and time variances are common to workplaces. In the simulated environment provided in the classroom these problems can take the form of:   * Other students who continually ask questions or talk aloud while thinking * Fire drills, projector not working, printers running out of paper or toner cartridge * Miscalculating how much work you can do in one day, missing classes and so on.   Some things are unavoidable and you must devise strategies to overcome them, for example, we cannot stop students from asking questions or entering at exiting the class. Other things are unpredictable (e.g. fire drills). You need to be aware and plan and organise your work allowing some extra time for unavoidable and unpredicted events.  **Assessment Criteria:**  To achieve a satisfactory result, your assessor will be looking for your ability to demonstrate key skills/tasks/knowledge to an acceptable industry standard.  Refer to the marking criteria document for a detailed list of items.    **Number of Attempts:**  You will receive up to two (2) attempts at this assessment task. Should your 1st attempt be unsatisfactory (U), your teacher will provide feedback and discuss the relevant sections / questions with you and will arrange a due date for the submission of your 2nd attempt. If your 2nd submission is unsatisfactory (U), or you fail to submit a 2nd attempt, you will receive an overall unsatisfactory result for this assessment task. Only one re-assessment attempt may be granted for each assessment task, with the exception of Apprentices or Trainees who are permitted an additional supplementary assessment. For more information, refer to the Student Rules. |
| **Submission details** (if relevant) | Submit your assessment to the allocated dropbox in Connect or to the allocated network folder.  Your teacher will provide all the details for the submission system or network.  Your assignment must be saved with your surname\_student number\_unit/cluster\_AssessmentNumber. For example:  surname\_1234567890\_ICTWEB505\_1  For re-submissions, an “R” must be added to the file name. For example:  surname\_1234567890\_ICTWEB505\_1\_R  The Marking Criteria Sheet must be signed and submitted with your work. |
| **Instructions to Assessor** | To be judged competent in this assessment item the student is required to demonstrate competence in all indicators shown in the marking guide. |
| **Note to Student** | An overview of all Assessment Tasks relevant to this unit is located in the Unit Study Guide or Competency Guide |

**Instructions to Students**

This assessment task requires students to keep a portfolio of completed tasks for the case study business, Gorgeous Cupcakes.

Details of the case study follow.

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| **Case study details**  Gorgeous Cupcakes is small local business. The management at Gorgeous Cupcakes has decided that a website interface would increase their sales. In particular, they would like to display their product (cupcakes) on a web page. To ensure their website visitors can find the cupcakes they are looking for as easily as possible they would also like clickable links for different cupcake categories. When a link is clicked only cupcakes in that category will be displayed on a web page.  At this stage, the management at Gorgeous Cupcakes only wish to display their product and do not wish to sell online. That is, they do not require a shopping cart facility. The management at Gorgeous Cupcakes would like their website to display and function appropriately on popular web browsers.  After receiving this request, you asked Gorgeous Cupcakes to provide you with further details about what type of product data they wish to store and display on their website. In response, the management at Gorgeous Cupcakes have provided the following additional information. For each product, display the cupcake name, a brief description of the product, and the price.  You recognise that you will also need to store the category of each product so that you can sort the products according to category as requested by Gorgeous Cupcakes. Specifically, you will need to store the category name and a brief description of the category. |

Your task is to create the components and functionality of the Gorgeous Cupcakes database and website as listed below and directed by your teacher.

**Portfolio tasks**

1. Reverse engineer the database structure, display in a designer tool the relationships between the tables of Gorgeous Cupcakes

Screenshot your findings in a Microsoft word document named ‘Task 1’. Show your teacher or upload the completed assessment task, as directed by your teacher.

1. Test and debug the display and functionality of each web page of the Gorgeous Cupcakes website. Testing must include checks to confirm the following:
2. The registration form functions correctly i.e. a new user can register an account and all user details are stored in the appropriate database table/s.
3. An appropriate error message is displayed on the registration page if the submitted registration details are not valid e.g. required fields are blank, password is less than eight characters, and email is invalid.
4. The login form functions correctly i.e. a user can login in using a valid username and password that is stored in the appropriate database table.
5. An appropriate error message is displayed on the login page if incorrect login credentials are entered.
6. All authorised pages are inaccessible without login.
7. All product data is extracted from the appropriate database table/s and displayed correctly on the product page.
8. Product data is extracted from the appropriate database table/s and displayed in the correct category on the category page.
9. An existing product can be updated via the product update form and the data is updated in the appropriate database table/s.
10. A new product can be added via the add product form and the data is inserted into the appropriate database table/s.
11. An existing product can be deleted via the website interface and the data is deleted from the appropriate database table/s.

You must keep track of any bugs found, take a screenshot of the bug, and fix any code to ensure all elements of the website function correctly. You must record your testing and debugging in a Microsoft Word document named ‘Task 10’. Your document must include screenshots of any bugs, an explanation as to how you fixed each issue, and a screenshot after debugging.

1. Locate a PHP file that uses the PDO API. Identify a try/catch statement to handle the errors. Comment each line of code to explain the individual purpose. Screenshot your edits and insert ‘Task 3’ into a word document.
2. Find the queries, and name the files that: Retrieve data from the product table and category table of the Gorgeous Cupcakes database using SQL SELECT statements that display on the Gorgeous Cupcakes site. Include a comment for each block of code to explain its purpose. Provide screenshots to prove which SELECT statements are involved. Document ‘Task 4’ in word in the same way Task 3 & 2 have been.
3. Check the security of the database and webpage, identify the code to be certain all form data on the Gorgeous Cupcakes website is using prepared statements. Provide screenshots to prove that the INSERT/UPDATE/DELETE statements are coded correctly. Comment each line of a prepared statement from connection to completion. Compile screenshots into word as ‘Task 5’ that prove your understanding.
4. Alter the PHP number\_format() function to format the price of products displayed in the Gorgeous Cupcakes website to one (1) decimal place. And rounded to the nearest 10 cents. Include a comment for each block of code you change to explain their function. Provide screenshots of database, and associated web pages that prove that the necessary function(s) work correctly. Show code in ‘Task 6’ section of your portfolio.
5. Alter the PHP date() function to format the copyright date in the footer of the Gorgeous Cupcakes footer. Your footer should include your name, the HTML copyright entity [&copy;], and the current month & year formatted using the PHP date() function e.g. Julie Johns © July 2015. Comment each block of code to explain its purpose. Provide screenshots to prove that the date() function works correctly in-browser and code.
6. Create a new web page on the Gorgeous Cupcakes website and include an update category form using HTML5 and CSS. The update category form must include fields to update the category data including category name, category description. You must include an update option for each category and use a SELECT query to populate the update category form you create with the selected category data. You must use an UPDATE statement to update the product data in the Gorgeous Cupcakes database via the website interface upon form submission. Include a comment for each block of code to explain its purpose. Provide screenshots of the website interface and database before and after update to prove that the UPDATE statement works correctly. Compile and screenshots into a folder and name it ‘Task 8’.
7. Create a new web page on the Gorgeous Cupcakes website and include an add category form using HTML5 and CSS. The add category form must include fields to add new category data including category name, category description. You must use an INSERT statement to add the new category data to the Gorgeous Cupcakes database via the website interface upon form submission. Include a comment for each block of code to explain its purpose. Provide screenshots of the website interface and database before and after update to prove that the INSERT statement works correctly. Compile all files and screenshots into a section and name it ‘Task 9’.
8. Include a delete option for each category and use a DELETE statement to delete category from the Gorgeous Cupcakes database via the website interface. Include a comment for each block of code to explain its purpose. Provide screenshots of the website interface and database before and after delete to prove that the DELETE statement works correctly. Compile all files and screenshots into a section and name it ‘Task 10’.
9. Add a quantity field to the product table, so that each item for sale can show how many of the listed item is in stock. Change add/update forms with a dropdown that lists from 0-99 so admins can enter the quantity on hand. Change the display of a single item to show this quantity value. Screenshot the files you edit, and browser screenshots into a section and name it ‘Task 11’.
10. Add client-side form validation using HTML/CSS/JS to all the forms in Gorgeous Cupcakes website as listed below:
11. Enforce Size constraints of form fields to ensure data is not truncated into the database, by giving a size equal to that of the database character limit.
12. Disallow submission of the form if any/all fields are empty. Display an explaination dialogue onSubmit when this happens.
13. Enforce numeric data, and dis-allow alpha characters
14. Ensure e-mail address has an @ and a full stop (.).

Include a comment for each block of code to explain its purpose. Provide screenshots to prove that the empty(), is\_numeric(), and filter\_var() functions work correctly. Compile all files and screenshots into a folder and name it ‘Task 11’. Show your teacher or upload the completed assessment task, as directed by your teacher.

1. Validate all the web pages of the Gorgeous Cupcakes website using the W3C Markup Validation Service available at <http://validator.w3.org/>. You must rectify all issues, or provide an appropriate explanation if a page is not valid e.g. some features of HTML5 not yet supported by the validation tool. You are also required to validate the CSS file of the Gorgeous Cupcakes website using the W3C CSS Validation Service available at <http://www.css-validator.org/>. You must rectify all issues, or provide an appropriate explanation if a page is not valid e.g. some features of CSS3 not yet supported by the validation tool. Record your findings in Microsoft Word document named ‘Task 12’. Your document must include screen captures of the W3C report for each validated web page and the CSS, as well as a list of any issues you cannot fix with an appropriate explanation.