**Information Technology/Ultimo**

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| **Learner Number** | 807135473 | **Learner Name** | Alex Goulden |
| **Unit code** | ICTDBS504 | **Unit name and release number** | **Integrate database with a website** |

**Please note that TAFE NSW is required to retain copies of all completed assessments, where practical, for a *minimum* period of three (3) years (or in accordance with regulatory/licencing requirements) after the completion of a learner’s studies. *Refer to procedure to determine the retention period required.***

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| **Assessment Instructions** | | **This is assessment event number** 2 **of** 2 events for this unit |
| **Type of Assessment** | Written assessment. Theory and research | |
| **Instructions for Written Assessment** | Answer all tasks.  Ensure the answers are in your own words.  Ensure your name and student ID is on every page.  Fill in the feedback form section with your name, email and student ID.  Submit to your trainer by due date. | |
| **Submission instructions** | You must deliver your assessment by two methods:   * Edit this document and submit it electronically * Print this whole document with your answers (include a cover page) and delivery it in class. | |
| **What do I need to do to achieve a satisfactory result?** | To successfully complete this assessment event **all questions** must be answered correctly | |
| **Due date/time allowed** | Week 18 | |
| **Assessment feedback, review or appeals** | Feedback must be provided to you no later than 10 days after all assessment activities have been conducted.  If you want a review of your results or if you have any concerns about your results, you can contact the teacher/assessor or your Head Teacher.  You have three weeks from the date you receive your results in which to make an appeal and/or request a review.  You should receive a response within ten days of the receipt of the request.  Teachers and their Head Teacher will address any appeal in accordance with [Assessment Guidelines for TAFE NSW.](https://staff.tafensw.edu.au/policies-procedures/student-administration/assessment-guidelines/) | |

# Submission cover sheet

# and declaration

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| **Learner number:** | | 807135473 | **Learner name:** | | **Alex Goulden** | |
| **Unit code:** | | **ICTDBS504** | **Unit name:** | | **Integrate database with a website** | |
| **Assessment event number** | | **2 of 2** | **Assessment title** | | Technical Journal | |
| **Learner declaration** | | | | | | |
| This assignment 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 assignment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.  I understand that plagiarism in 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 assignment is plagiarised.  I understand that TAFE NSW is required to retain copies of all my completed assessments, where practical, for a period of 3 years (or in accordance with regulatory/licencing requirements) after the completion of my studies | | | | | | |
| **Learner Signature:** |  | | | **Date**: | | 2/07/2020 |

### Questions

Describe a database structure

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| Databases are compromised from tables, which hold rows and columns. Data in columns are a group of data relating to the same title (FirstNames), data in rows relate to each other - usually in the form of an entity (a person’s info filled in FirstName, LastName, Address). These are contained in tables which are a way of categorising on a global scope (Users, Orders, Products) |

Answers correct ☐ Yes ☐ No

Outline internet technology as it relates to the use of databases

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| Databases are a vital part of internet technology and act as a form of memory. Without databases information uploaded would quickly disappear or become unusable due to lack of cataloguing. Databases ensure that server items and info can be retrieved / stored efficiently |

Answers correct ☐ Yes ☐ No

Identify programming control structures, including object-oriented programming and structured query language (SQL)

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| OOP is based on the concept of ‘objects’ interacting with each other to produce outcomes, this is achieved through giving objects attribute/properties built from procedures.  Procedural programming is based on the concept of ‘procedure call’ in which routines and functions contain a sequence of steps that are carried out to produce outcomes.  SQL is designed to get information in and from a relational database. Queries are made using a command language with pre-programmed actions. |

Answers correct ☐ Yes ☐ No

Explain web programming concepts, including:

* authentication and web security
* hypertext transfer protocol (HTTP)
* session management
* defining the principles of stateless programming.

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| Authentication and web security refer to the processes of identifying individuals (user or in some cases a program) and protection of important functions/information.  HTTP refers to the design of which a majority of data is transferred over the web, most commonly seen in the url of a webpage.  The handling of an interaction between two or more devices (user and database).  Stateless programs do not keep information from previous interactions/events, meaning any data given through a stateless program must be maintained in someway if it wishes to be used more than once or through a linked program |

Answers correct ☐ Yes ☐ No

### End of questions

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| Make sure you have written your name on each page  (for written assessments only)  then submit this whole document to your teacher/assessor for marking |

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| **IMPORTANT NOTE: When this document is complete, the assessor must**   * mark the answers using the relevant marking guide * attach it to the learner’s *Unit outcome and event results* document * complete the relevant details in the learner’s *Unit outcome and event results* document |

## **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:

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### Student acknowledgement of assessment outcome

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| Would you like to make any comments about this assessment? |

### Student name, signature and date

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***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.***

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