

# Database: design, create, populate, and test



Criteria reference To achieve the criteria the evidence must show that the learner is able to: Task NO. Create and populate a database [SMS] 3 Import data from an external source Create features in data entry forms to ensure validity and integrity of data Perform queries using multiple tables and multiple criteria Export data to an external source Include an advanced feature in a database design Implement an automated function Discuss how potential errors in the design and construction of a database can be avoided [III] 4 Evaluate a database against the specified user need

Learner Declaration I certify that the work submitted for this assignment is my own. I have clearly referenced any sources used in the work. I understand that false declaration is a form of malpractice. Learner Signature: Date: Assignment Title Design, create, populate and describe the features of a relational database. Purpose of this assignment The aim of this unit is to enable students to understand the features of relational databases and develop the necessary skills to design, create, populate and test a relational database incorporating advanced features.

Task 3 - Scenario Implement the database design from task 2 in Microsoft Office Access Task 3: 3. 1 Implement the database design from task 2 in Microsoft Office Access by creating at least five tables. Set up relationships and enforce referential integrity to allow cascade updating and deletion of linked records Populate tables with valid and sensible test data Export all table definitions to a Word document This Provides evidence for [UP] 3. 2 Create test data in a spreadsheet and import into the relevant tables. You will need to document each step of this process

This Provides evidence for [MM] 3. 3 Design and implement all the forms (including at least one sub-form) that have been outlined in the Requirements Specification (see task 2 in the Systems Analysis and Design assignment). A consistent of style must be used in order to create a professional image to allow users to interact with the system. Your implementation must include at least three features for ensuring data validity. Demonstrate and explain your forms to your tutor who will provide a witness statement confirming your success. This Provides evidence for [UP] 3. 4

Perform three different types of queries using multiple tables and multiple criteria to search and sort data that are required from the output requirements (see task 2 in the Systems Analysis and Design assignment). Demonstrate and explain your queries to your tutor who will provide a witness This Provides evidence for [AS] 3. 5 Export the results of a query to another application. This Provides evidence for [MM] 3. 6 Design and implement all the reports that have been outlined in the requirements Create a " Main Menu" form as detailed in the requirements and implement at least en advanced feature.

This Provides evidence for [MM] 3. 7 Demonstrate and explain the process to your tutor who will provide a witness Implement at least one automated feature from the list below: Macro Scripts Program code This Provides evidence for [UP] 3. 8 Once you have completed the database, you will need to make sure that the database is working correctly. You are required to create a test plan that tests the main database functionality. Any test

failures should be corrected and annotated using screen shots in a test log.

This Provides evidence for [UP]

Student Note You must reference any sources used from your research appropriately. Task 4: 4. 1 In a written report discuss a range of common errors (e. G. Different data types in related tables, etc. ) in database design and construction. In your discussion you should: What would be the impact on the data of such identified errors? This Provides evidence for [Del] 4. 2 In a report, evaluate your database against the case study. Include: Three strengths Three weaknesses Fitness for purpose Justification of features and functions used