



Unit: Databases

Assignment title: Universal Conference Management

December 2015 – Sample Assignment

Important notes

- Please refer to the *Assignment Presentation Requirements* for advice on how to set out your assignment. These can be found on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- You must read the NCC Education documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensure that you acknowledge all the sources that you use in your work. These documents are available on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- You **must** complete the *Statement and Confirmation of Own Work*. The form is available on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- Please make a note of the recommended word count. You could lose marks if you write 10% more or less than this.
- You must submit a paper copy and digital copy (on disk or similarly acceptable medium). Media containing viruses, or media that cannot be run directly, will result in a fail grade being awarded for this assessment.
- All electronic media will be checked for plagiarism.

Introduction

This assignment contains three parts: design; data and queries; and an assessment. All parts of the assessment relate to the *Universal Conference Management* scenario below.

Scenario

Universal Conference Management is an events management company that organises scientific conferences for universities, private companies and government departments. They want you to design and implement a database that meets the requirements for its data. These requirements are specified in this scenario and the examples of paper documents kept by the company are shown below.

Universal Conference Management organise events for customers. For example, a customer might want a three-day conference on current biological research. This would include various types of staff such as guest speakers, chair persons, and hospitality and catering staff. When a customer books an event, it is classified by event type. Staff members are all assigned to the event and are classified by type. Events will require certain types of items such as PA equipment, laptops, projectors, specialist scientific equipment and catering equipment. *Universal Conference Management* has some of these items themselves but also get items from suppliers. Over the years, the company have built up a good reputation and some customers come back to them to organise lots of different events.

Note: The data shown in the assignment is not necessarily normalised and it is your task to organise the data in the most optimal way possible. For example, the paper records shown below will not necessarily map directly to database tables. You are expected to use these tables as a starting point for your own normalisation and optimisation of the *Universal Conference Management* data.

You should show all SQL scripts along with their results.

Below are samples of the paper records currently kept by *Universal Conference Management*:

Event Form with required Items

Event No.	Customer Name	Customer Organisation	Item ID	Item Name	Supplier
3221	Sally Orion	University of Hampton	2	Laptop	n/a
3221	Sally Orion	University of Hampton	6	PA System	Edison Sound and Light
3221	Sally Orion	University of Hampton	7	Lighting Rig	Edison Sound and Light
3422	Satpal Singh	Department of Science	2	Laptop with iTunes	n/a
3523	Fatima Khan	Department of Food Production	1	Full Silver Service	Mack Catering

Internal Staff Record Sheet

Staff ID	Name	Staff Type
S102	Tara Patel	Chef
S105	Andrew West	Sound Engineer
S204	Cathy Edwards	Waiting Staff
S333	Monty Smith	Waiting Staff
S405	Serena Khan	Chairperson
S431	Naseema Alum	Chairperson
S567	Hussain Khan	Lighting Rigger

Events and Internal Staff Record

Event ID	Event Type	Internal Staff Required	Event Title
3221	Conference	S102	"Recent Advances in Molecular Biology"
3221	Conference	S105	"Recent Advances in Molecular Biology"
3221	Conference	S204	"Recent Advances in Molecular Biology"
3221	Conference	S333	"Recent Advances in Molecular Biology"
3221	Conference	S405	"Recent Advances in Molecular Biology"
3422	School Demonstration	S405	"Promoting Science at Key Stage 1"
3523	School Demonstration	S431	"Promoting Astronomy in Schools"

Event Guest Speakers

Event ID	Event Title	Guest Speaker	Guest Speaker Organisation
3221	"Recent Advances in Molecular Biology"	Professor Steve Marsh	University of Adelaide, Australia
3221	"Recent Advances in Molecular Biology"	Dr Amina Khoussi	Bioscience Incorporated
3221	"Recent Advances in Molecular Biology"	Dr Roy O'Leary	Open University
3422	"Promoting Science at Key Stage 1"	Tim Nelson	University of East Kent
3523	"Promoting Astronomy in Schools"	Anisa Khan	University of Jersey

Task 1 – Design (40 Marks)

- a) Produce an entity relationship model for the proposed database system for Universal Conference Management. This should be a fully normalised model to third normal form (3NF). **You do NOT have to show the steps you took in normalising the data.**
- b) Produce a data dictionary for the entity relationship model showing all attributes, with data types and identifying primary and foreign keys.

Task 2 – Data entry and Data Manipulation (45 Marks)

- a) Create all the tables using SQL. Show your 'create table' scripts and the finished tables.
- b) Enter data on all the events shown in the assignment.
- c) Enter data for FIVE (5) customers and associate them with events. Note that a customer might have more than one event associated with them.
- d) Enter data on staff and items taken from the assignment. Give a listing of this.
- e) Write a query that selects all the events ordered by a particular customer.
- f) Write a query that selects the staff and items assigned to an event.
- g) Write a query that selects all the customers' details for events that require a laptop.
- h) Write a query that counts all the birthdays that need equipment from Edison Sound and Light.
- i) Write a query that shows all the events and their customers that need a waiter.
- j) Update the item table so that Item 2 is no longer a laptop but a 'tablet'.
- k) Update the staff table so that Tara Patel is now known as Tara Williams.

Task 3 – Assessment (15 Marks)

Give an assessment of how the work you have done has met the requirements of Universal Conference Management.

Submission guidelines

- Your submission should be in the form of a single word-processed document that includes any necessary diagrams.
- The word count for the document is **1250 words** (excluding text in any diagrams). You should explain any assumptions you have made.
- A digital version must be submitted on a CD, USB flash drive or other similarly acceptable medium, **along with a copy of the developed database.**

Candidate checklist

Please use the following checklist to ensure that your work is ready for submission.

Have you read the NCC Education documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensured that you have acknowledged all the sources that you have used in your work?

Have you completed the *Statement and Confirmation of Own Work* form and attached it to your assignment? **You must do this.**

Have you ensured that your work has not gone over or under the recommended word count by more than 10%?

Have you ensured that your work does not contain viruses and can be run directly?