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| G:\Brooke Weston Logos\Bitmap Images\Logo Only\BW Logo 2007 Shape GIF.gif | **Brooke Weston Academy**  OCR Level 3 Nationals in ICT  **Unit 06 – Advanced Databases** |

##### Unit 06 – Structured Study Lesson for Week 2

**Lesson plan guidance: Week 2 (AO1)**

**Area of the Specification:**

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| **Assessment**  **Objective** | **Pass** | **Merit** | **Distinction** |
| **AO1**  Design a relational database to meet the needs of an organisation | Candidates produce a design for a working relational database.  The design includes purpose, audience, at least three tables showing the entities and attributes and an ERD diagram.  The entities and attributes **may not** be correct.  The database design may be normalised to 3rd normal form.  There will be **some** attempt to define the data validation required. | Candidates produce a design for a working relational database.  The design includes purpose, audience, at least three tables showing the entities and attributes, ERD diagram, user interface and forms.  The entities and attributes are **appropriate**.  The database design is normalised to 3rd normal form.  **Most** of the data validation required has been defined. | Candidates produce a design for a working relational database.  The design includes  purpose, audience, at least three tables showing the entities and attributes, ERD diagram, user interface, forms and reports.  The entities and attributes are **all** correct.  The designs for reports are for reports both printed and on screen.  The database design is correctly normalised to 3rd normal form.  **All** of the data validation required has been defined. |

**Lesson related objectives:**

Students to be able to:

1. Design a structure for the database system that could be used by a third party
   1. Identify and Illustrate the possible features the system could use
   2. Consider the needs of the client base on the scenario
2. Identify and explain how the structure links/connects together

**The Task: (make use of the PowerPoint and any other Word or PDF documents provided)**

***Task 5 (P / M / D)*** – Develop a data dictionary for the tables identified from the **3rd Normal Form (Task 4)**

* Ensure you cover the following areas:
  + Primary Key
  + Indexing column
  + Validation Rules
  + Input Masks
  + potential problems and justify how your design may solve these issues

For further information concerning ERD and examples refer to ***“Unit 06 – AO1 – Normalisation”*** and ***Unit 06 – AO1 – Database Notes”***

***Task 6 (P / M / D)*** – Produce an Entity Relationship Diagram for the Relational Database

* An Entity Relationship Diagram shows how tables are joined (related) to each other
* Tables are joined (related) in a Relational Database through Primary and Foreign Keys
* These relations come in three forms:
  + One-to-Many
  + Many-to-One
  + One-to-One

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| This is a homework task and you are expected to spend at least an hour on it. |

**What you should do (additional guidance):**

In preparation for next week, you need to do the following:

1. Consider the structure and layout of the database system
   1. Consider the colours, style, etc...