

CLASSWORK 1: CONSTRUCTING AN ENHANCED ENTITY RELATIONSHIP MODEL

THIS IS AN INDIVIDUAL TASK AND MUST BE ACCOMPLISHED WITHOUT COLLABORATION, COLLUSION OR THE SHARING OF SOLUTIONS. FAILURE TO FOLLOW THIS INSTRUCTION WILL RESULT IN DISCIPLINARY ACTION BEING TAKEN.

Aim Of The Assignment:

Your task during this classwork exercise is to construct an enhanced entity relationship diagram to represent the scenario.

Learning Outcomes:

After completing this assignment you will have gained experience of analysing a scenario and extracting an entity relationship structure.

Task:

Read the following description of a data model. From the specification, produce the following:

- A list of the entities and a sentence giving the meaning of each entity.
- A list of attributes for each entity with the identifier underlined;
- A list of the relationships giving for each: a relationship name, the names of the entities related, the degree of the relationship and the optionality of the relationship.
- An enhanced entity relationship diagram.
- A list of any assumptions you have made.

Art Gallery

The art gallery holds paintings on behalf of their owners so that the **paintings** can either be permanently on display in the gallery or on loan to **exhibitions** around the country. **Each owner may have introduced one or more other owners to the scheme.** The catalogue of paintings held by the gallery records the name of the artist, the title of the painting, its estimated value and current **location** within the gallery or the venue of the exhibition at which the painting is currently on show. In addition, the gallery must record a paintings acquisition date, insurance value and owner. The location for a painting is the room number of one of the buildings owned by the gallery. Each location is maintained at a specific temperature and humidity. For the artists, basic details of name, date of birth, date of death (if applicable) and nationality are held. In order to maintain a record of the history of a particular painting, the gallery keeps details of the current owner and all **previous owners**. The gallery keeps a record of all exhibitions to which each painting has been loaned while it has been held at the gallery (loans when the painting was not held at the gallery are not recorded). Exhibitions to which the gallery loans paintings are all privately sponsored and the gallery wants to keep records of which **sponsors** have sponsored exhibitions where their paintings have been shown. Each exhibition has a venue, a unique title, a start and finish date and details of the exhibition sponsors.

Marking Criteria:

Your submission must have a maximum of **two** pages (single-sided) include only the following elements in the order given:

- i. A list of the entities and a sentence giving the meaning of each entity. (10%)
- ii. A list of attributes for each entity, indicating an identifier; (10%)
- iii. A list of the relationships giving for each: a relationship name, the names of the entities related, the degree of the relationship and the optionality of the relationship. (20%)
- iv. An enhanced entity relationship diagram. (50%)
- v. A list of any assumptions you have made. (10%)

Due Date:

The classwork should be submitted as a pdf file on Myplace by 12.00 noon on Monday 4th February