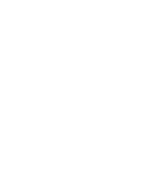
**DBAS 1007**



**Tech Check #1 – Basic Database Design**

**10**

Value of overall course mark: **4%.**

Time to complete the assignment: **45 minutes.**

**Instructions**

Using Visual Paradigm, create an Entity Relationship Diagram (ERD) to accommodate all database requirements presented by the scenario listed below.

**Requirements**

Your completed ERD should meet the following requirements:

* Include all recognizable entities.
* Include all appropriate relationships.
* Include all attributes.
* Identify and/or include a primary key for every entity.
* Identify and/or include a foreign key for every relationship.
* Matching datatypes and sizes for all foreign keys with their associated primary keys.
* Appropriate data-types and sizing for all attributes.
* Appropriate decisions on which attributes should be mandatory or not.
* Crow’s-foot notation and physical data-types displayed, with a clear, readable layout.

**Submission**

Once your ERD is complete or the writing period has expired, please upload your as an image (In Visual Paradigm, choose Export --> Active Diagram as Image) to the Tech Check 1 dropbox on Brightspace. Make sure you confirm that the instructor received the file before you leave the class.

**Scenario**

You have been approached by an insurance saleswoman to make a database that will enable her to keep information on her clients. She wants to track data for her insurance products, such as whole or term life insurance, savings and investment accounts. Information she keeps on clients includes name, address, phone, email, job, number of children and products they have previously purchased. She would like the database to be capable of storing data that tells her, for each client:

1. When was the last time she contacted them;
2. What product(s) did she talk to them about;
3. What was the dollar amount and expiry date of the product(s) discussed; and
4. Which of the products discussed did the client actually end up buying (if any).

TC1 - Database Design Rubric  
Top of Form

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Criteria** | **Yes** | **Partial** | **No** |
| Entities | 2 points  All entities included. Derived entities created where required. | 1 point  Most requirements met, but an error or omission exists. | 0 points  Requirements not met, or multiple errors/omissions exist. |
| Relationships | 2 points  All relationships established as described in the scenario. All entities have at least one relation. Types and cardinality of relationships appropriate. | 1 point  Most requirements met, but an error or omission exists. | 0 points  Requirements not met, or multiple errors/omissions exist. |
| Attributes | 2 points  All attributes described in scenario included in diagram. All attributes added to most appropriate entity. Reasonable application of mandatory attributes where appropriate. | 1 point  Most requirements met, but an error or omission exists. | 0 points  Requirements not met, or multiple errors/omissions exist. |
| Primary/Foreign Keys | 2 points  All entities include an appropriate PK attribute. Where applicable, FK attributes used to describe all entity relations. Datatype/sizes match between related PK/FKs. | 1 point  Most requirements met, but an error or omission exists. | 0 points  Requirements not met, or multiple errors/omissions exist. |
| Datatypes | 1 point  Appropriate datatypes and sizes used for all attributes. | 0.5 points  Most requirements met, but an error or omission exists. | 0 points  Requirements not met, or multiple errors/omissions exist. |
| Presentation | 1 point  Crow's-Foot notation used. Physical datatypes displayed in ERD. Presentation layout is clear, clean and readable. | 0.5 points  Most requirements met, but an error or omission exists. | 0 points  Requirements not met, or multiple errors/omissions exist. |
| **Overall Score** | **Competent 8 or more** | **Sufficient 6 or more** | **Insufficient 0 or more** |
|  |  |  |  |

Bottom of Form