Introduction to Relational Database Concepts

Project 3 Specifications - 30 Points

I. BACKGROUND INFO

We have several clients who sign contracts for ACME to perform photo shoots. We do want to keep track of clients who do not have any contracts with us now… as they might in the future. We are very optimistic! We want to keep track of the client's business name (if have one), contact first and last name, contact phone number, and contact cell phone number (if available). Every contract we have belongs to one specific client. We would like to keep track of the contract date, contract dollar amount, and contract completion date (once finished). We often get repeat business from our clients, so we don't limit the number of contracts that a client can have. Every contract must have at least one photo shoot associated with it. However, each contract can contain several photo shoots. Each photo shoot must belong to only one contract. We would like to keep track of the length of a photo shoot (in hours, 2, 3.5, etc…), the proposed date of the photo shoot, and the actual date of the photo shoot. We need to know if the client attended the photo shoot.

Normally, our clients want to select from different locations for a photo shoot. Because of this, each photo shoot will have at least one location, but may have several locations. A location may be used in one or more different photo shoots. We would like to keep track of a description of the location, if a permit is required (yes/no), if a fee is involved (if so, how much), and any general location comments. Also, we want to know how much time (in minutes) that we spent at that location for a particular photo shoots' location.

II. PROJECT REQUIREMENTS

1. Using Visio, draw an ERD relationship to represent the entities in the business rules described above (**10 points**)

a. Using the fields provided above, normalize the information to the 3rd normal form.

b. Each table should have a primary key identified. Use the standards for determining a good primary key**.** *If you do not have a candidate for primary key, create a surrogate*.

2. Once your ERD is complete, create the database tables in Access. Call the database, **Project3Acme.accdb**. Be sure to given each field a correct data type and set the field length property for all Text fields. (**10 points**)

a. Pick one field in any of your tables to have a validation rule. Set the validation rule and validation text for that field in the table definition. List the table and field name here.

➔ _____

b. Pick one field in any of your tables to have a default value. Set the default property for that field in the table definition. List the table and field name here so I can check it.

➔ _____

c. Pick one field in any of your tables that could possibly be a look-up field. Set the appropriate properties for that field. List the table and field name here so I can check it.

➔ _____

3. Set up the Relationships between the tables in the Relationship Window of Access (**4 points**)

4. Enter at least 5 records of data into each table you have. You can make up the data. Try to be as realistic as possible with the data (**4 points**)

5. Create a form for one of your tables. Use the Form Wizard and select all fields for the table and columnar format. Name the form appropriately. (**2 points**)

To submit, You must turn in your Visio diagram and your database file in Blackboard by the due date.

Hint: There are 4 Domain entities. Your ERD will have 5 entities however because 2 of the Domain entities have a many-to-many relationship between them that must be converted to 2 one-to-many relationships by creating a linking (junction, associative, etc…) table between them.