



Cleaner (staffNo, fName, lName, address, salary, taxCode, homeTelNo, supervisorStaffNo)

Primary Key staffNo

Foreign Key supervisorStaffNo references Cleaner(staffNo)

Admin (staffNo, fName, lName, address, salary, taxCode, homeTelNo)

Primary Key staffNo

Client (clientNo, name, address, telNo, faxNo)

Primary Key clientNo

Equipment (eqptNo, description, usage, cost)

Primary Key eqptNo

Requirement (reqtNo, startDate, startTime, duration, comments, clientNo)

Primary Key reqtNo

Foreign Key sclientNo references Client(clientNo)

Assigned (staffNo, reqtNo)

Primary Key staffNo, reqtNo

Foreign Key staffNo references Cleaner(staffNo)

Foreign Key reqtNo references Requirement(reqtNo)

Booked (reqtNo, eqptNo)

Primary Key reqtNo, eqptNo

Foreign Key reqtNo references Requirement(reqtNo)

Foreign Key eqptNo references Equipment(eqptNo)

## **Access Project**

### **Molly-Maid Cleaning Company**

#### **Synopsis**

Using Microsoft Access 2007 or 2010, implement the Molly-Maid database. Your project will need to include the following:

#### **Tables**

- Create all of the tables specified in the Relational Model above. It is acceptable to use the “Create Table” wizards when building your tables. However, it is NOT acceptable to use the “Database Wizard” to create your entire database. Following are some additional specifications for table creation:
  - Make sure that your primary keys are assigned in each table.
  - Verify that all of your fields are assigned an appropriate data type.
  - Verify that all of your fields are assigned an appropriate field length
  - Use input masks where appropriate (i.e. phone number or zip code fields).
  - Use combo boxes (i.e. drop down menus) where appropriate to denote primary key-foreign key relationships.
  - Use default values where appropriate (i.e. default for “startDate” as today’s date).
  - Use the Relationships screen to define the relationships between your tables and illustrate referential integrity.

#### **Data**

Enter enough data into your tables (minimum of five rows) to fully demonstrate your working queries and reports. Note that there are some specific pieces of data required to show that a query works.

#### **Main Switchboard**

Create a Main switchboard which opens automatically when you open the database. Your Main switchboard should include four buttons - one button for each additional switchboard (forms, queries and reports) and a close button. Your close button should close your database AND exit Microsoft Access. All of your additional switchboard forms should have a “home” button for easy navigation back to the Main switchboard.

#### **Forms Switchboard (4)**

You must create a switchboard to run four of your forms. Each form should have its own button. Following are some additional specifications:

- There must be a form for each table in your database.
- At least one of your forms must open in Edit Mode.
- At least one of your forms must open in Add Mode.
- At least one of your forms must include a subform (illustrating a 1-Many relationship).
- All of your other forms can be in any format that you choose.

### Queries Switchboard (6-7)

This switchboard form should include a way to run all of the assigned queries in your database. Following are some additional specifications:

You have the option of creating a separate button for each query OR using a drop down menu (combo box) which lists all queries and a button to open the query.

The total number of queries is specified by the *Data Queries* section.

### Reports Switchboard (3)

You should develop three reports based on the queries of your choice from the assigned queries. Following are some additional specifications:

- All of your reports should include a footer with the current date in the format *Month, Day, Year* (i.e. January 1, 2012), and page number.
- One of your reports should be able to accept a parameter.
- At least 1 report must include a grouping level.

### Data Queries

Include these five queries on your Switchboard.

1. Determine which equipment has the same usage. (section 9.3.3)
2. Determine the number of times each piece of equipment is used for each client. (sections 9.2.3, 9.3.2)
3. Determine which cleanings don't require any specialized equipment. (section 9.3.4)
4. List when each equipment is used, automatically filling in the equipment description as well as details about when the equipment is used. (section 9.3.5)
5. For all cleanings that occurred before a specific date, create an archive table that includes the cleaning requirement details as well as the client name. (sections 9.3.1, 9.4.1)

**Security** A database user should not be able to gain access without a password. The Administrator should be able to access and modify all objects. Set the password as 'cis317'.

NOTE: Always make a backup of your database before you attempt to implement security.

We do not have a way to unlock your database once you have done this.