**EX16\_AC\_CH05\_GRADER\_ML1\_HW - Hotel Chain**

**Project Description:**

*You are the general manager of a large hotel chain. Your establishment provides a variety of guest services ranging from rooms and conferences to weddings. The data entry accuracy of your staff could bear some improvement, so you have decided to move to Microsoft Access and implement several data validation techniques. You also will take advantage of Access's Expression Builder to help analyze data.*

**Instructions:**

For the purpose of grading the project you are required to perform the following tasks:

| **Step** | **Instructions** | **Points Possible** |
| --- | --- | --- |
| **1** | Start Access. Open the file named *exploring\_a05\_grader\_h2\_Hotel.accdb*. | 0 |
| **2** | *A very important concept with database design is something called “GIGO” (Garbage In – Garbage Out). It means if the data going into the database is flawed, the information coming out can be flawed also. There are a number of things that you can do to ensure entered data is valid. For example, if a phone number needs to be entered, you want to make sure the format of the phone number is consistent for all customers. Your employee will not be able to enter a phone number in the wrong format.*  Open the **Members** table in Design view. Add a phone number input mask to the Phone field. Accept all defaults. Save and close the table. | 10 |
| **3** | *There are some fields that are required. It is important that if someone entering data does not make a mistake and leaves those fields blank. Making them required will prevent these blank fields from happening.*  Open the **Location** table in Design view. Change the Required property for the City and Address fields to Yes. | 20 |
| **4** | *Using a “Lookup list” is another way of making sure the data is consistent and makes entering the data quicker. The person entering data for this field will have a drop down list and the user picks one of them.*  Convert the LastRenovation field to a Lookup Wizard. Look the values up in the **Renovation** table within the **LastRenovation** field. Save and close the Location table. Hint: Be careful on this step. Be sure to lookup the values in the Renovation table and only use LastRenovation field. | 15 |
| **5** | *A validation rule will ensure that when entering data, your employee will get an error message if it violates the rule. In this case, your room can not handle more than 75 people, so it would not be good for business if the room was promised to a customer that had a party of more than 75 people. This rule will make sure this will not happen.*  Open the Orders table in Design view. Add a validation rule that requires the value of the NumInParty field to be less than or equal to 75. Set validation text to **Party sizes cannot exceed 75.** (include the period). Save and close the Orders table. | 15 |
| **6** | Create a copy of the Average By Day query. Name the new query **Average By Month**. | 2 |
| **7** | *The built-in functions in Access are powerful. The date functions allow you to use existing data to extract information out of the field. This query lets you see the average number in a party per month without you having to figure out the actual month name. Letting Access do the work will make sure the data is accurate.*  Delete the ServiceDate field from the Average By Month query. Add a new column using the Expression Builder. Create a formula to extract the name of the month from the ServiceDate field using a combination of the DatePart and MonthName functions. Name the column **Month**, and move the Month field to the left of the NumInParty field. Run the query. Save and close the query. | 20 |
| **8** | Create a copy of the Average By Month query. Name the new query **Average By Month and Year**. | 2 |
| **9** | *Adding another group provides even better information to know the average number for each party for the year and month.*  Add a second grouping field between the Month and NumInParty fields. The field should display the four-digit year in the ServiceDate field. Name the new field **Year**. Sort by Year in ascending order. Run the query. Save and close the query. | 16 |
| **10** | Save the database. Close the database, and then exit Access. Submit the database as directed. | 0 |

| **Total Score** | **100** |
| --- | --- |