**EX16\_AC\_CH01\_GRADER\_CAP\_HW - Home Sales**

**Project Description:**

*An independent real estate firm that specializes in home sales needs to create a database in which to store its records. In the following project, you will open a database containing information about the properties the real estate firm has listed. You create a new table in which to store agent information, add records, and then sort the table. You create a relationship between two tables and enforce referential integrity. You also apply filters, sort a table, and save the results.*

**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 downloaded Access file named *exploring\_a01\_grader\_h2*. | 0 |
| **2** | *As a real estate agent for this company, it would be advantageous to know which properties each agent is working on. You know that doing this in a database would work best. You already have information about the properties; however, you still need to add information about the agents into the database. This information is placed into a table. To begin creating a new table, one of the most important things to consider is what will be the “Primary Key” for that table. The Primary Key is a unique value to each row of the table to easily identify the agent. A good example of a Primary Key is your Social Security Number. Someone can put that information into a search and find the individual associated with that SSN, so it is important that each agent is identified by the unique value.*  Create a new table in Design view. Add the field name **AgentID**. Change the Data Type for AgentID to AutoNumber and set AgentID as the Primary key for the table. | 15 |
| **3** | *After you have decided on the Primary Key for the table, the next step is to add “fields”. The fields are the column names and should be descriptive. A best practice is to not have spaces in the field names.*  Add the following field names to the table: **FirstName**, **LastName**, and **Title** (in that order). Accept Short Text as the data type for all fields. Save the table as **Agents**. | 10 |
| **4** | Switch to Datasheet view and add the following records letting Access assign the AgentID number:   |  |  |  | | --- | --- | --- | | FirstName | LastName | Title | | **Guillaume** | **Picard** | **Broker** | | **Keith** | **Martin** | **Agent** | | **Usa-chan** | **Yang** | **Agent** | | **Steven** | **Dougherty** | **Agent in Training** | | **Rajesh** | **Khanna** | **Agent in Training** | | **Juan** | **Rosario** | **President** | | 10 |
| **5** | *Sorting the data is a task that is often completed while using a database. It’s important to separate the first and last names of individuals when creating a table in a database. In this case, if you use “Name” as the field; you won’t be able sort by just the last name.*    Sort the Agents table by the LastName field in ascending order. | 10 |
| **6** | *This type of “sort” allows you to filter out some data from the table field that you are not interested in viewing. The agents in training will not have any properties yet, so it is not important to know who these individual are at this time. You are simply filtering out some of the data and will not lose it.*  Apply a selection filter so that everyone with a title other than *Agent in Training* displays. **SAVE** the changes to the table design and close the Agents table. | 10 |
| **7** | *Another important concept about databases is the “data type” for each field. Setting the data types restricts what someone can enter for that field. In the Properties table, for example, the Date Listed field is set for “Short Text”. This means one person could use Sept. for the month and another person could use September. This would be a problem when you are trying to find the correct date when the house was listed. Setting that field as “Date/Time” and formatting correctly will ensure the data entered is easily retrieved.*  Open the **Properties table** in Design View. Change the data type for the specified fields as follows:   |  |  | | --- | --- | | Field Name | Data Type | | DateListed | Date/Time | | ListPrice | Currency | | SqFeet | Number | | Beds | Number | | Baths | Number | | AgentID | Number |   Save the changes to the design of the table and then view the table in Datasheet View. | 15 |
| **8** | Sort the records in the Properties table by the ListPrice field from largest to smallest. | 10 |
| **9** | *This method of filtering allows you to display records based on multiple criteria. It is a quick way to filter out the data and only see the criteria that you specify.*  Use Filter by Form to create a filter that will identify all properties with a list price less than $300,000 with two bedrooms. Apply the filter and preview the filtered table. Close the table and save the changes. | 20 |
| **10** | Close all database objects. Close the database and then exit Access. Submit the database as directed. | 0 |

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