

# Database Project Guidance

## (200 Points Possible)

Find something, preferably at work, that is suitable for automation with a relational database. If you really can't find anything at work, you may choose to implement one of the attached projects.

1. User menu must greet the user when the database opens.
2. Must include multiple tables including relationships.
3. Some fields must have default values other than null.
4. You must write requirements and then build the database to meet those requirements.
5. The finished database must be well documented. Field level help must be included.
6. Use queries with and, or features.
7. Include a user entered parameter query.
8. Must have one or more queries that use more than two tables at the same time.
9. At least one calculated field must be included in a query.
10. Must have one or more reports that include grouped data.
11. A report must be included which is based on two or more tables or queries.
12. A macro must be used someplace in the database to automate an activity.
13. There must be data validation on some fields.
14. A report must have calculated fields - sums, counts, etc.
15. Data entry must be facilitated with a database form.
16. Must include an action query.
17. Must have an event activated feature.
18. A form must use a combo box or list box.
19. All database tables must be at third normal form.
20. Use a sub-form or sub report in the data base.



## HOME EQUIPMENT SERIAL NUMBER TRACKER

This database will be used to track serial numbers of appliances and other equipment found around the home. It should include, but is not limited to, the following capabilities:

1. The database should support items that have components with multiple serial numbers. For example a computer with one or more hard disk drives. All serial numbers must be tracked.
2. The manufacturer of each component must also be tracked.
3. Information about the repair history must be tracked at the component level.
4. The member of the household that bought or owns the equipment should be tracked along with the original purchase price.
5. A report is needed that shows the repair costs for equipment over user supplied time periods.
6. Record should be able to be marked for deletion with final deletion occurring later. This capability to delete later should be included.
7. The user should be able to add change and delete records in the database. They should not be able to change the acquisition cost or any repair record after it is entered.
8. A report should be generated that shows the age of each major item sorted from the oldest to the newest.
9. The database should not allow the entry of a record without an owner and cost. It should notify the user of the problem.
10. A form should be included with a graphic logo or photo.
11. A report that counts items and provides a total acquisition cost and total repair cost is needed.
12. A form that shows all of the component serial numbers for each item in the database.

Note: You may have to include additional capabilities in order to get credit for each of the great of all items for this assignment.

## TRAVEL SCHEDULING AND COST TRACKING SYSTEM

This database should allow users to plan for schedule, and track the costs for trips. It should include but is not limited to the following capabilities:

1. Trips must be planned and scheduled for both individuals and groups of people. Each traveler files and individual travel claim for mileage and or airfare, hotel costs, and actual food costs. An easy method of entering this database should be provided.
2. A form with a graphic logo or picture is needed that shows the total cost for all attendees on individual trips.
3. A report is needed that shows the individual trip cost along with a total for a group trip.
4. Users should be able to add and change trips before they are taken. They should be able to add expense data when the trip is completed. However, once expense data is entered into the database changes for the dollar amounts should not be allowed.
5. A report should be generated that shows the total expenses for every traveler for a user specified time period.
6. Changes to these requirements are possible if they are successfully negotiated with the customer (instructor).
7. A form that shows each traveler and the trips that her/ she has taken should be shown on the same screen.

Note: You may have to include additional capabilities in order to get credit for each of the great of all items for this assignment.