**Evaluation**

**Forms**

During the development of my database system I have made sure that I have focused on my original user requirements. One of my original requirements was capturing data through the use of forms. I feel like I have done this successfully as the forms include all the fields that I initially said I would cover, for instance I originally stated that the customer form would have fields *“such as First Name, Surname, Address, Date of Birth and Email Address”* and I have therefore made sure these fields were included. Another requirement of the form was to have *“Navigational buttons to make it simple to switch between different records”* and also *“buttons to add, save, print and delete records”*. I have met this requirement well as all buttons have been created and added. Each button has a clear label to say what task it will perform. The buttons are kept in the same layout and size for each form which will make it easier for a user to locate them.

Each form has been created in a professional manner and the design has been researched thoroughly. For example to make sure that the best colour combination was chosen I researched on the Apple official website for their exact background colour (as explained in the user requirements). The forms all have the same colour combination which makes the database have a clean design to it. The existing products that Apple have released mostly have an apple followed by the product name as their marketing logo, my design links in with this as the title for each form has the same layout with the first letter of each being in the bite of the apple logo. I chose to do this because it creates a professional atmosphere.

I have also stated in the expected outcomes that I *“will be arranging the text boxes in columns for example on the Customer’s form the contact details (such as email and phone number) will be in a separate column to the personal information (such as date of birth and surname). This design provides a quick way to find specific fields based on what column they would be found in, it also produces a clear spaced out design that is easy to read.”* This requirement was met correctly as the column design has been organised in the same way as discussed in the expected outcome. The contact details in the Customer form (Mobile Number, Home Number and Email) are in one group which is spaced out from the personal data (Title, First Name, Surname and Date of Birth). The same design is used in all tables and it improves the look of the database because information is not cluttered, it is instead spaced out and easy to read (as the expected outcome stated).

Validation was used effectively in my database so that human errors were minimised. Combo boxes are used to provide limited options such as iPhone models and name titles. Combo boxes also make sure that users can type the minimal amount needed which makes using the system faster and more user-friendly.

The forms all work effectively but the design of them could be improved if I was to carry on developing the database. For instance I have left a lot of blank space on each of the forms; to fix this it would have been best to increase the font and label sizes as well as increasing the size of the buttons.

**Queries**

In the expected outcomes I stated that there would be *“six different queries which will have different criteria to fit the user’s needs”*. I have successfully created these six queries and each one meets the originally requirements well. I said that there would be “*two single table queries”,* the first is the customer query that only shows customers from the county which is specified in the criteria, in my database I have displayed only staff from the county of *Cambridgeshire.* This query works as intended to and only the staff members from *Cambridgeshire* are shown.

The second single table query is for the iPhone table which displays only iPhones from the colour that is specified in the criteria, in my database the colour specified was *Black*. This query also works as intended and only the iPhones in the colour black are shown.

In the expected outcomes I also said that there would be *“one query with no criteria which will link two tables together, this will display each customer and the order method they used to purchase iPhone’s”.* I have successfully created this query and the correct details are shown. I have also included a field that shows the customers full name (first name combined with surname) which may make it easier for users to identify the customer’s name.

The fourth query has the *“Staff table and orders table linked together”* and the criteria will *“search only for orders completed by a specified staff member”*. The staff member I used as the criteria had the surname as *Robinson.* The query successfully shows all the fields I wanted for the query such as “StaffSurname”, OrderMethod,” OrderID” and “OrderPostageType”. This query works successfully and there were not any faults discovered.

Another query was with the use of parameters for the iPhones table, I initially stated that it will *“ask the user to enter the megapixel of any iPhone”*. The query does this task successfully and when a megapixel is entered it will show all iPhones with the specific megapixel. This meets the user requirements correctly. However the only problem is that the input field is not very user-friendly since the user would have to type for instance “2.0 megapixels or “3.0 megapixels” instead of just “2” or “3”. This is a problem since if the word is misspelt or the number isn’t entered in the correct format no results will be found.

The last query was the delete query, in the expected outcomes I said that *“when run, this will delete staff members that are in the specified workplace”*. The workplace that I have used for the delete query in my database is “Leeds” and therefore when ran, all staff members from “Leeds” will be removed. This query works as expected and currently there is no problem with it. However I did run into a few problems regarding the links between two tables, instead of deleting all staff from Leeds, it left one person. After solving the problem by modifying the links between tables the query now works successfully.

**Security**

In my expected outcomes I stated that *“There will be password protection on the database to increase security”* and that *“If the password is entered wrong then the user will not be able to gain access to the database. If entered correctly then the user will be taken to the splash screen and switchboard”*. This expected outcomes has been met since I have successfully implemented a single password design that only allows access if the user provides the correct password. I have done this by using the built in password feature in Microsoft Access, the current password has been set as “toffee2015”. However there are a few disadvantages to using the built in single password feature. One disadvantage is the fact that if the user forgets the password there is no current way to retrieve it, therefore the system becomes unusable. Also there is no current way to change the default password, so if another user knows the password it affects the security data. Another disadvantage is when multiple people come to use the database, as they would in the company, the single password design may not be sufficient. This is because it is not secure to share the same password and it provides no ability to set access levels for certain staff.