Evaluation

The Functional Specification

- Controlling the availability and preventing overbooking of rooms.
 - a. Checking on available and unavailable room will not take more than 20 seconds.
 - b. Setting up a room to available or unavailable will not take more than 20 seconds.

This user need was met at the standards of the user. Controlling the availability can be done easily. This can be done through the Booking Data Entry form. Changing the availability doesn't require complex computer skills. By doing this process overbooking of room can be prevented. Availability of a room is sorted as Available Rooms and Unavailable Rooms, these can be seen separately.

I have used my own VBA code to make the Room as Available and Unavailable. I have not used built-in function macros to do this process. I think using VBA code made this process smoother and easy to use.

- Making the users work run smoother and well organized.
 - a. Entering details will not be handwritten. Every detail will be typed using a computer.
 - b. Collecting sheets of papers and trying to organise them will not be necessary, because every details will be organised by the database itself.

This user need was met at the standards of the user. Work is easy to understand and learn. The user will not need to write anything in paper base materials, everything is been entered through the computer itself.

- Guarantee customer satisfaction.
 - a. It will not take more than 5 minutes to make a reservation for the guest. It depends on how fast the guest provides his/hers details to the user or how fast the user types.

This user need was met at the standards of the user and as well as the customer. The customer will not need to write anything in papers. The customer will need to simply tell his/her details so that the user can enter the details. Making a reservation for a guest will not take more than 5 minutes. This was tested by me and it takes no more than 5 minutes. The reservation involves entering guest details, checking available of rooms and selecting the room that the guest wishes to buy, entering booking details and finally making the payment.

When I say it takes 5 minutes to make a reservation, I don't mean it is the exact time duration. The time duration will depend on how fast the guest provides his/hers details to the user or how fast the user enters the details. The users typing skills will be built up with practice.

- Enable the user to add new or edit existing Guest Detail.
 - a. Adding a guest detail will not take more than 1 minute.
 - b. A hyperlink is placed on the GuestID, so editing a guest details will not be difficult to do.

This user need was met at the standards of the user. Editing an existing Guest Detail can be done very easily. I have set a hyperlink to the GuestID, so by clicking on it that particular guest can be edited in no time.

When entering a Guest Detail it is not possible to leave out an important detail of the Guest. The Important details are been marked with a star (*), so the user can recognized that it is important to

enter. I wrote my own VBA code behind the Guest Data Entry form, so if a Guest Details is left out, a user-friendly message will pop up to warning the user that a detail is empty.

- Enable the user to add new or edit existing Room Detail.
 - a. Adding a new room details will not take more than 1 minute.
 - b. If a new room details is been entered, at the same time the user can state whether that room is available or not.
 - c. A hyperlink is placed on the RoomID, so editing a room details will not be difficult to do.
 - d. Finding a room detail will not involve the user to type anything.

This user need was met at the standards of the user. Editing an existing Room Detail can be done very easily. I have set a hyperlink to the RoomID, so by clicking on it that particular room can be edited in no time.

When entering a Room Detail it is not possible to leave out an important detail. The Important details are been marked with a star (*), so the user can recognized that it is important to enter. I wrote my own VBA code behind the Add New Room Data Entry form, so if a Room Details is left out, a user-friendly message will pop up to warning the user that a detail is empty.

- Enable the user to add new or edit existing Booking Detail.
 - a. Adding a new booking detail will not take more than 2 minutes.
 - b. A hyperlink is placed on the BookID, so editing a booking details will not be difficult to do.
 - c. Finding a booking detail will not involve the user to type anything.

This user need was met at the standards of the user. Editing an existing Booking Detail can be done very easily. I have set a hyperlink to the BookingID, so by clicking on it that particular Booking can be edited in no time.

When entering a Booking Detail it is not possible to leave out an important detail. The Important details are been marked with a star (*), so the user can recognized that it is important to entered. I wrote my own VBA code behind the Booking Data Entry form, so if a Booking Details is left out, a user-friendly message will pop up to warning the user that a detail is empty.

- Enable the user to add new or edit existing Extra Charge Detail.
 - a. Adding a new Extra Charge detail will not take more than 1 minute.
 - b. A hyperlink is placed on the ExtraChargeID, so editing an extra charge details will not be difficult to do.
 - c. Finding an extra charge detail will not involve the user to type anything.

This user need was met at the standards of the user. Editing an existing Extra Charge Detail can be done very easily. I have set a hyperlink to the ExtraChargeID, so by clicking on it that particular Extra Charge can be edited in no time.

When entering an Extra Charge Detail it is not possible to leave out an important detail. The Important details are been marked with a star (*), so the user can recognized that it is important to enter. I wrote my own VBA code behind the Add New Extra Charge Data Entry form, so if an Extra Charge Details is left out, a user-friendly message will pop up to warning the user that a detail is empty.

- Enable the user to add new or edit existing Payment Detail.
 - a. Adding a new payment detail will not take more than 1 minute.
 - b. A hyperlink is placed on the PaymentID, so editing a payment details will not be difficult to do.
 - c. Finding a payment detail will not involve the user to type anything.

This user need was met at the standards of the user. Editing an existing Payment Detail can be done very easily. I have set a hyperlink to the PaymentID, so by clicking on it that particular Payment can be edited in no time.

When entering a Payment Detail it is not possible to leave out an important detail. The Important details are been marked with a star (*), so the user can recognized that it is important to entered. I wrote my own VBA code behind the Payment Step one Data Entry form, so if a Payment Details is left out, a user-friendly message will pop up to warning the user that a detail is empty.

- Enable the user to delete a booking.
 - a. Deleting a booking detail will not take more than 30 second.
 - b. Deleting a booking detail will be done automatically.
 - c. A booking details can't be deleted accidently.
 - d. Finding a booking cancelation detail will not involve the user to type anything.

This user need was met at the standards of the user. Deleting a user will not take more than 30 seconds. This is done user built-in macros. The macro is running two queries that does the process of the deleting a booking. Before deleting a booking detail it will first store the booking detail to the Booking Cancelation table. This is to ensure that organisation keeps a record of that booking detail.

I did decide whether I'm going to use VBA code for this process but this is a simple and easy task to do, so I decided to use macro for this. As I mentioned in the Initial Designs that 'I won't be using Built-in macro for every step of the way'.

- Easy to navigate through Guest details, Room details, Booking details, Payment details, ExtraCharge details, Booking cancelation details and Reports. Every details are available in the Main Menu form.
 - a. Navigating through all the forms will not take more than 20 seconds.
 - b. Editing guest details and room details can be done in the Booking details form. Hyperlinks are placed on the GuestID and RoomID. This method is useful, because the user doesn't need to go to Guest details form or Room details form to edit the details. Guest details and room details can be edited while staying in the Booking details form.

This user need was met at the standards of the user. Navigating through every form is very easy to do. It doesn't need complex computer skills to do this process. There is no VBA code or built-in macros to do this processes. This is done using form navigation wizard which didn't take even 1 minute to create it.

- Enabling the user to view and print of reports.
 - a. Printing and view a report will not take more than 30 seconds.

This user need was met at the standards of the user. I have placed a Button to each and every report to get the print of that report. This process is easy to do with a single click of a button.

I did decide whether I'm going use VBA code for this process but this is a simple and easy task to do, so I decided to use macro for this. As I mentioned in the Initial Designs that 'I won't be using Built-in macro for every step of the way'.

- Generating monthly and annual income reports to see the outcome of the organisation.
 - a. Calculation should be 100% correct and done automatically.

This user need is also met at the standards of the user. The calculations are done correctly, so that the organisation can make analysis of the income. Monthly income and Annual income are two separate reports and show two separate results. This did not require me to use VBA code or macros to do this processes. I used SQL code to calculate the Income of the Month and the Annual.

- Creating a search that enables the user to find a particular guest.
 - a. This can be done within 20 seconds. This will be more useful for the user because there will be 100 of guest details in the form. So finding one guest won't be hard.

This user need is also met at the standards of the user. Searching a guest can be done with a click of a button. The reason I created this process is to make work easy for the user. As mentioned in the Company Introduction of the Functional Specifications, to find a guest detail will take a huge amount of time for the employees to search. And I solved this problem by adding a search guest button. If there are 100 of Guest Details the user can simply get the Guest NIC/Passport Number and search that particular guest. But without the Guest NIC/Passport Number this process is useless.

I did decide whether I'm going to use VBA code or Macros to do this process but since this task was complex to do using macros, I decided to use VBA code for this. I wrote my own VBA code behind the Guest Form. When I finished the VBA code I thought this was the best way to do this process.

- Grouping guests using their age, such as teens, adults and senior.
 - a. The age grouping will be used for generating reports related to the age group. This will be useful for the organisation to know in what age group has made more bookings.

This user need is also met at the standards of the user. Teens, Adults and seniors are three separate reports. The reason I created these three reports is that the organisation can know in what age group has made more bookings. These three report will be useful for the organisations future as well. By analysing these reports the organisation can make changes related to their analysis.

This did not require me to use VBA code or macros to do this processes. I used SQL code to display the three age groups separately.

- To provide accessibility control to data with respect to users.
 - a. Two user levels are introduced to the system, who are manager/organiser and staff. the manage/organiser will have full authority of the system, where the staff will have limited access.

This user need is met at the standards of the user. I have created two user levels as Manager and Staff. The user level Manager has the full authority of the Database. This is done using VBA Code behind the User login Form. It was easy for me to use VBA code instead of using macros. VBA code allowed me to use the function for this process.

- The ability to make bookings anytime.
 - a. The system is 24h available for the user to make bookings for the guest.

This user need is met at the standards of the user. The system can be operated at any time of the day

- To avoid manual and repetitive work.
 - a. Everything will be done automatically other than typing and navigation through forms.
 - b. Using the system will be a new and exciting thing for the user. They will also learn how the new technology works.

This user need is met at the standard of the user. I had to make a lot of changes to the database to avoid manual and repetitive work. I had to check every table in the database to make sure there won't be any duplicates. I did see duplicated data but by analysing and editing I managed to solve this problem.

- Creating a User Guide that will help the user to know how to install the system, use the system and how to troubleshoot problems.
 - a. If the user gets into trouble with the system or did something wrong, he/she can check the user guide and troubleshoot the problem.

The User Guide I built includes everything about the system that will help the user. This user need didn't meet to my standards because I feel that I could have done better and there are things to be improved. With the time constraint I had for this unit and unfortunately I'm out of time. But I wish to improve this in my own time. Overall I'm happy that the user guide met at the standards of the user.

- Disabling the Ribbon menu, navigation pane and the Shortcut Menu.
 - a. To make the database look more professional.
 - b. By disabling these features, it will help the user be more focused with work without getting distracted or interfered.

This user need is met at the standards of the user. Disabling these features made the database looked more professional which I think is very important. In appearance wise I'm happy with what I did.

This was done using VBA code. I knew these features can be disabled from the Microsoft Access settings itself. But I wanted to use the full potential of the VBA codes. It's amazing to see how a simple code can make a huge impact to the system. When I wrote the VBA code for disabling the Shortcut Menu I thought it would work for every form but I was wrong. It was my mistake for not testing every form, I did the testing but only with one or two forms. It seems that this process doesn't affect the Reports. It doesn't disable the Shortcut Menu in the Report view. By the time I found this problem, it was out of time for me. The deadline of this project was met. But now I know what the problem is so I wish to fix this in my own time.

Using a different platform to create the system

I thought about this many times before starting the Unit 12 project. I researched online and asked a lot of people about my statement. By doing a lot of research I came to a conclusion that I will use the SQLite software to create my tables and using Netbeans software for programming. I can program in Netbeans and combine it with my tables in SQLite. But one problem I found in Netbeans was that they won't support VBA so I thought learning Java was good. Then I could use Java Code to program my system. I talked with my lecturer about this and explained him what I wanted to do and what software I was going to use.

My lecturer did like this idea of mine but he told me since these are two new softwares, I'll need to learn it from the beginning and this needs time. Programming in Java also need a lot of practice and time. I thought about his statement and came to an understanding that I would not be using SQLite and Netbeans software to create my system. Because with the time frame I was afraid I would not be able to complete my system before the deadline of the project. Since I already know how to use Microsoft Access, I decided to go forward with it and improve on the way. I will be trying to learn about SQLite and Netbean in my own free time. I think that would help me in my university education years.

Own performance

By doing this Unit 12 project it allowed me to find my own strengths and the weakness. By doing Applied ICT as a subject for Alevels I got the opportunity to figure out what I want to be in the future. With the love of Coding I will pursue my future career in the Software Engineering industry.

One of my key strengths would be creativity. I figured out this while I was doing my projects. Finding my creativity allowed me to think out of the box and come up with ideas that helped me to improve my database. Another key strength is that my coding skills. I had limited time to code but I managed to learn the basics of coding and the basic rules. I got the help from my lecturer and by self-learning using the internet. This allowed me to use my coding skills for this unit.

The skills and knowledge I have gained from using Microsoft Word, Microsoft Access, Adobe Dreamweaver and Adobe Photoshop are endless. These each unique software helped me to find my designing and creative skill.

The main weakness I consider is that timing of the task I do. I wait till the last minute to do everything. This will be one of the biggest improvements that I will do in the future.

My greatest accomplishment is that I got the Database system to do what it requires to do. It does all the task it needs to do. I managed to give the Database system a professional look that the user will be excited to use.