

ASSIGNMENT 3



Nadim Uddin 14100462

Perform queries using multiple tables and multiple criteria (P5)

Include an advanced feature in a database design (P6)

Test a relationship database (P7)

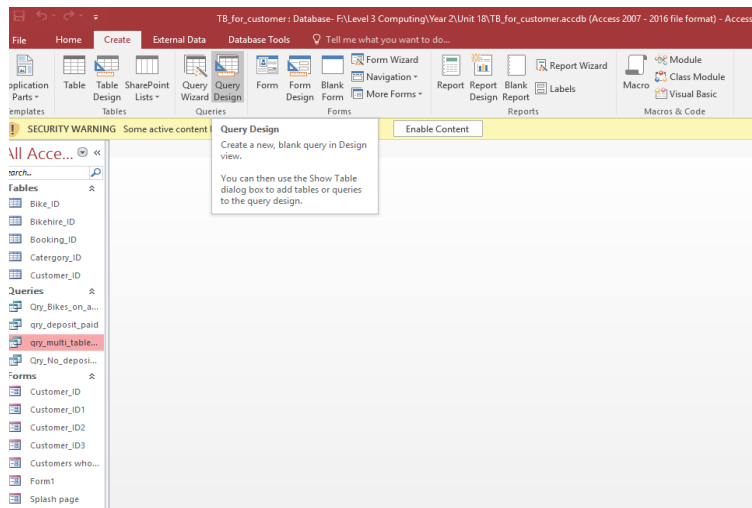
Implement an automated function (M4)

Evaluate a database against the specified user need (D2)

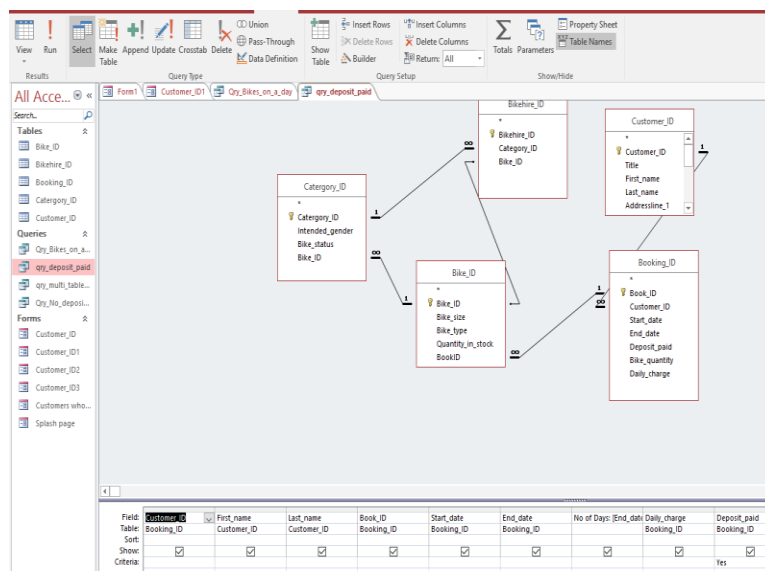
Perform queries using multiple tables and multiple criteria (P5)

Introduction: In this criteria I will be showing which customers have paid their deposits and also show a list of bikes including category that are hired in a certain date using queries.

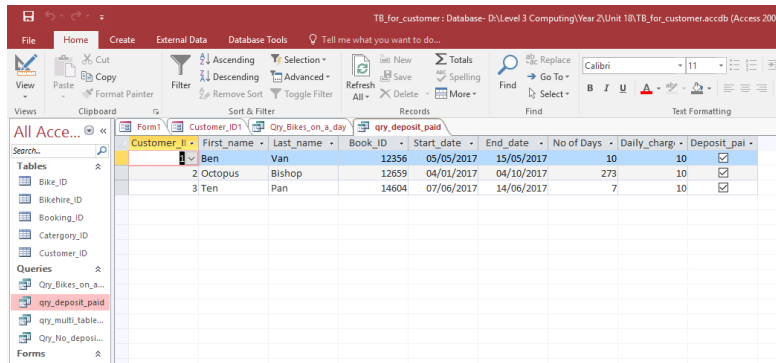
Deposits



To create a query and go to the create tab and click on query design.

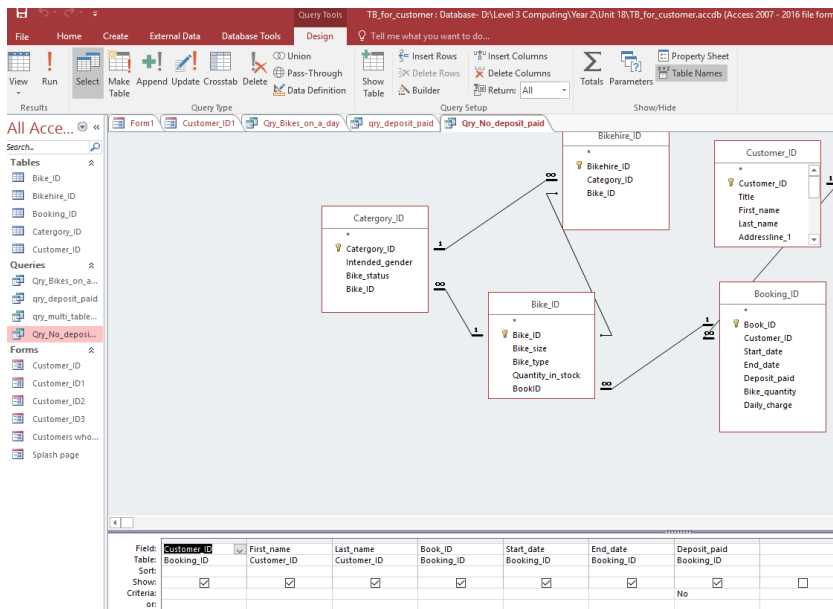


Here I included all my database tables. My query will include everything shown on the fields including any criteria's made.



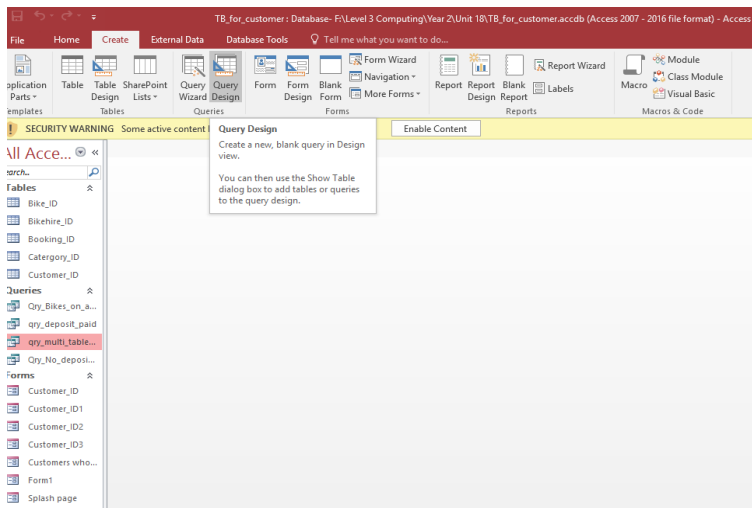
Customer_ID	First_name	Last_name	Book_ID	Start_date	End_date	No of Days	Daily_charge	Deposit_paid
Ben	Van		12356	05/05/2017	15/05/2017	10	10	Yes
2	Octopus	Bishop	12659	04/01/2017	04/10/2017	273	10	Yes
3	Ten	Pan	14604	07/06/2017	14/06/2017	7	10	Yes

This shows that I have displayed who and who hasn't paid their deposit on my database with the query.

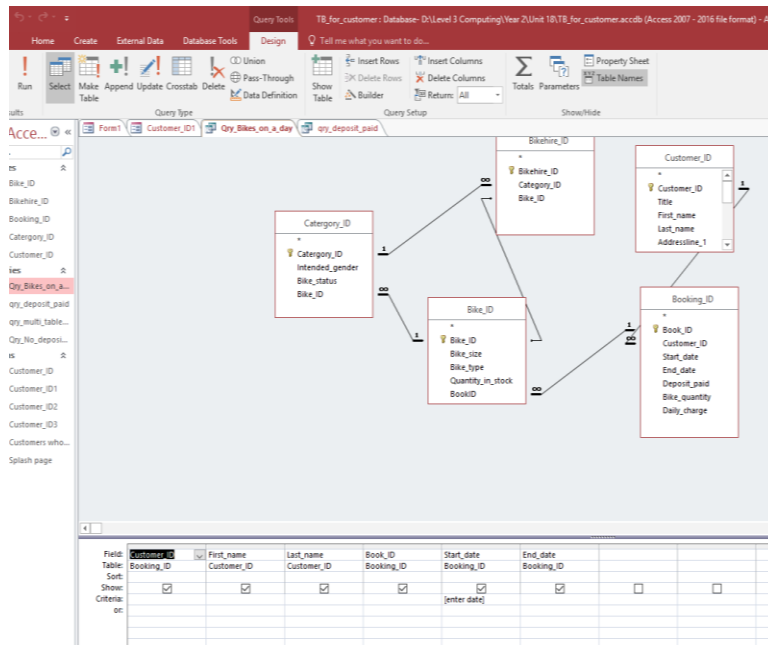


I've also created a query that tells you who hasn't made a deposit.

List of bikes that are hired on a certain date



To create a query and go to the create tab and click on query design.



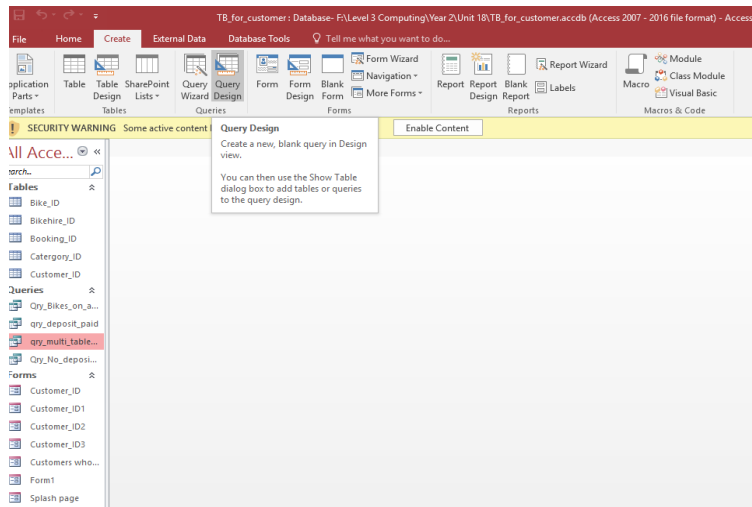
Here I inputted all my database tables into my query design. Next I added the following fields and the criteria. In one of the criteria I included "[enter date]".

Since I inputted "[enter date]" as a criteria, every time you click on your query on the side it will ask you to input a date.

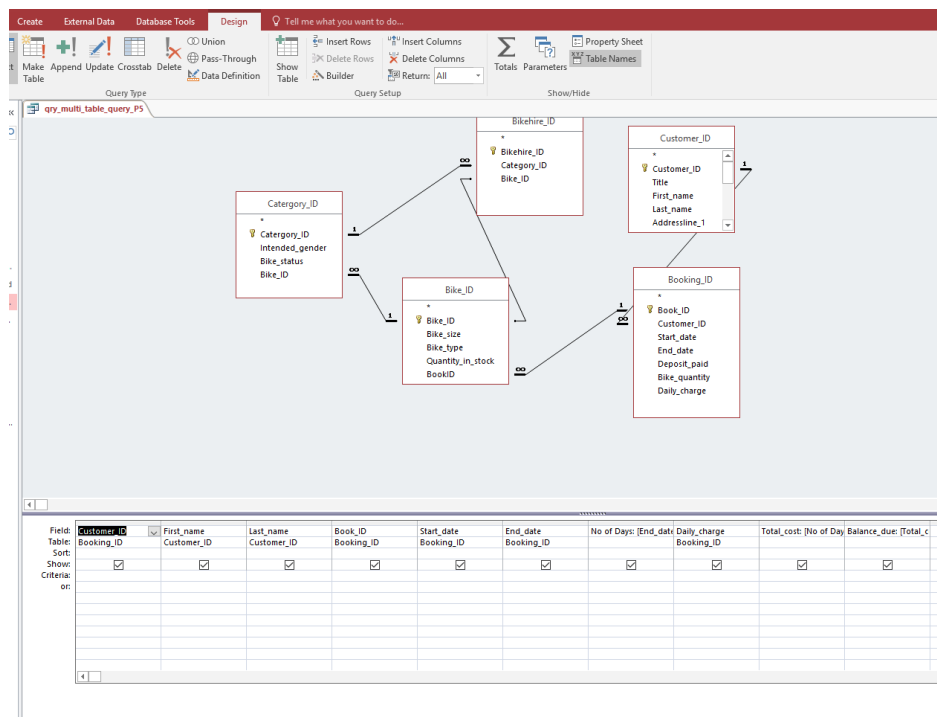
Customer_ID	First_name	Last_name	Book_ID	Start_date	End_date
12659	Octopus	Bishop	12659	04/01/2017	04/10/2017

This shows a list of bikes hired on a certain date.

Multi table query



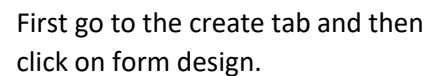
To create a query and go to the create tab and click on query design.

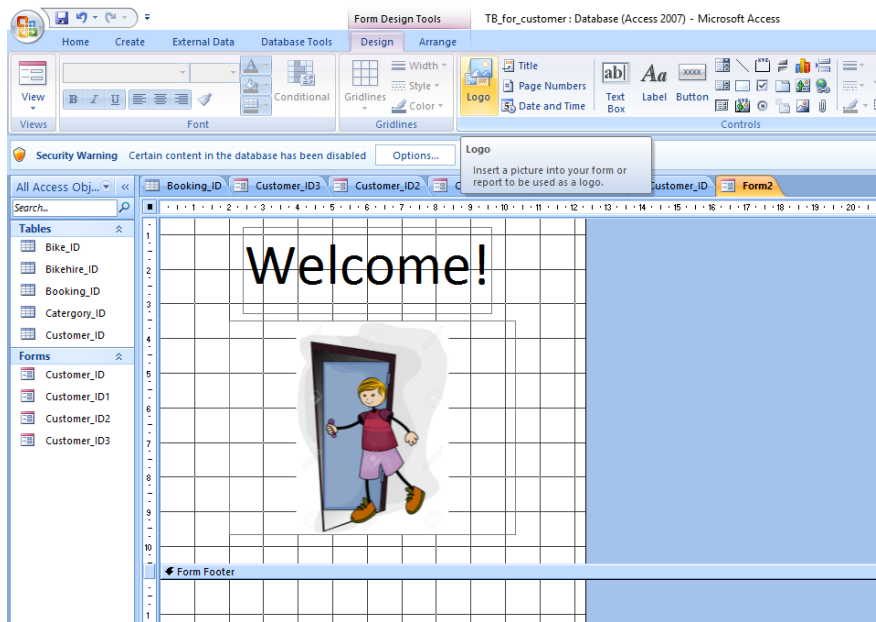


On the query design I include all my database tables and inputted the followings fields.

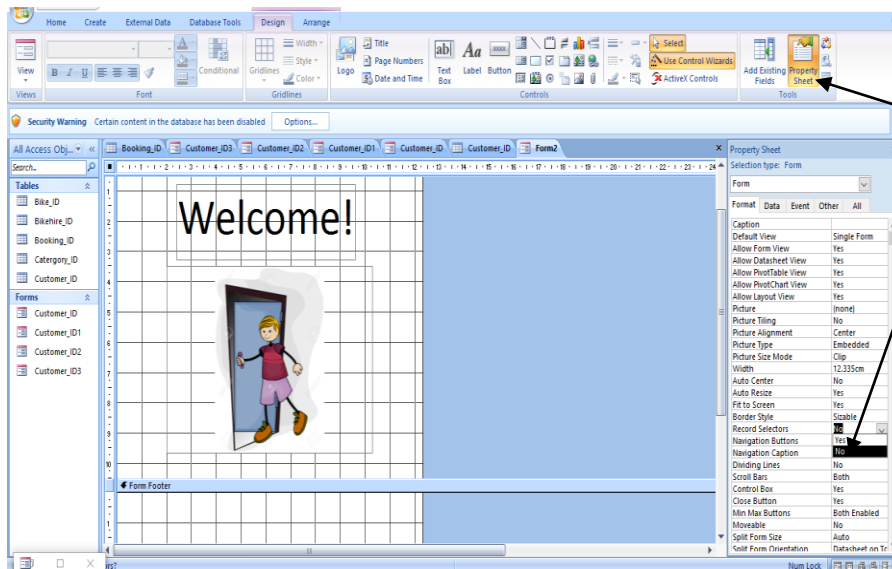
This is the information shown from the query design.

Introduction: In this criteria I will be implementing an advanced feature onto my access document called splash page.

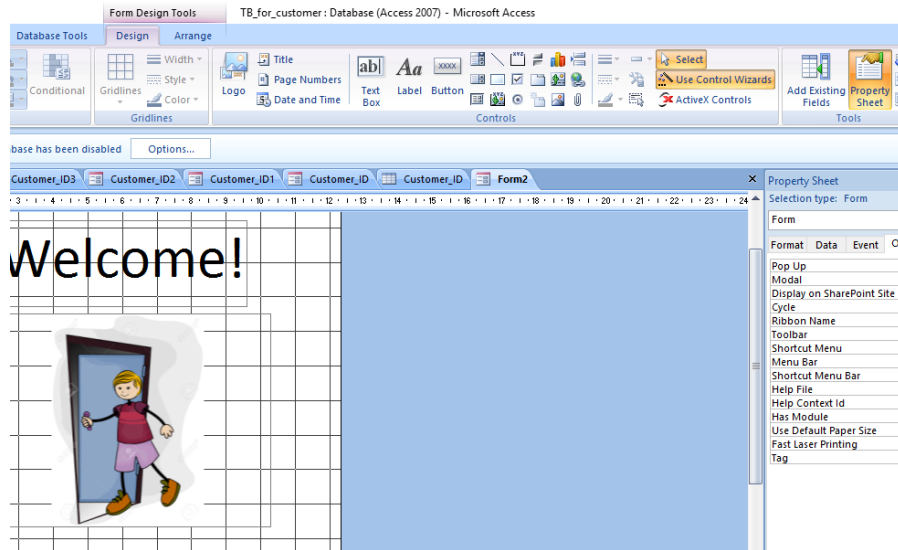




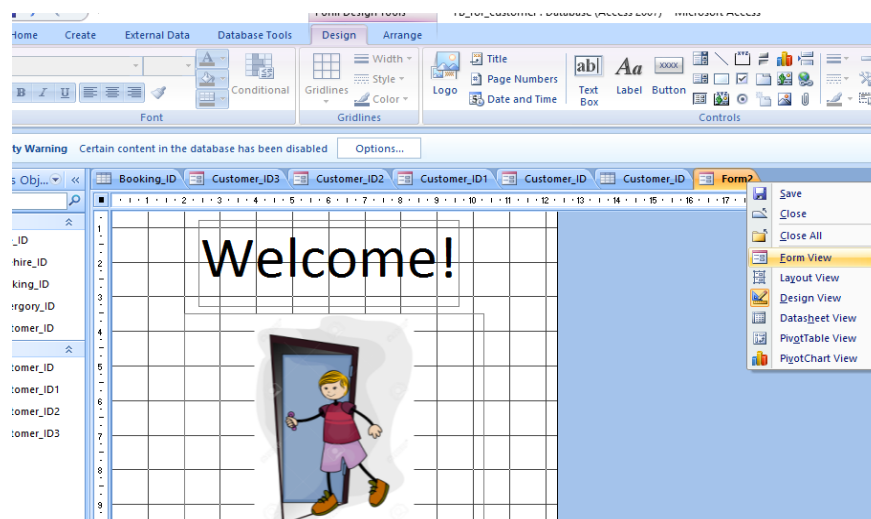
To input an image once in form design, go to the design tab and click on logo. You should then be able to browse your system for an image.



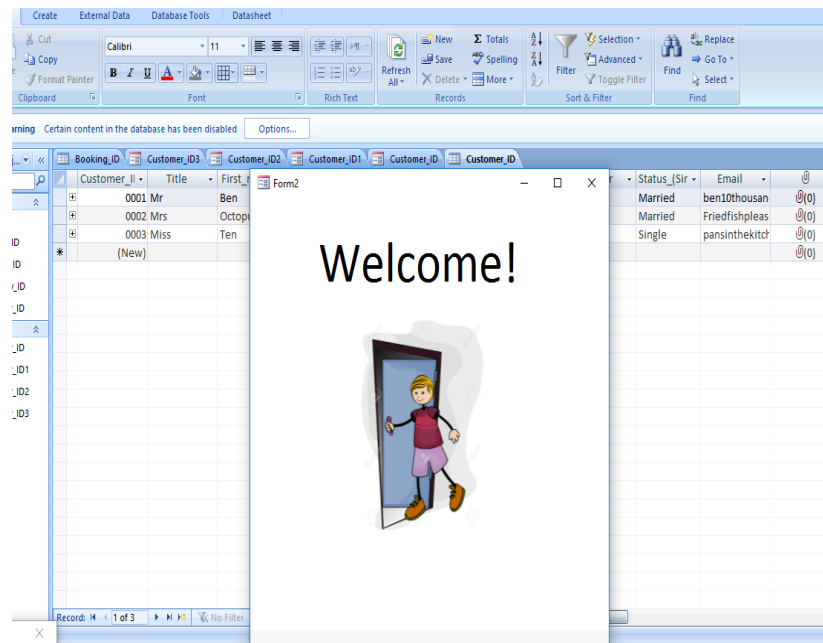
Next you adjust the form design by clicking on property sheet. Here I'm writing No on record selectors.



Next on the other tab in the property sheet and wrote yes on popup so every time access is opened the form will open.



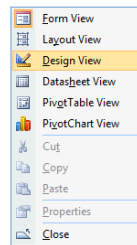
Next I right clicked on the form tab and clicked on form view.



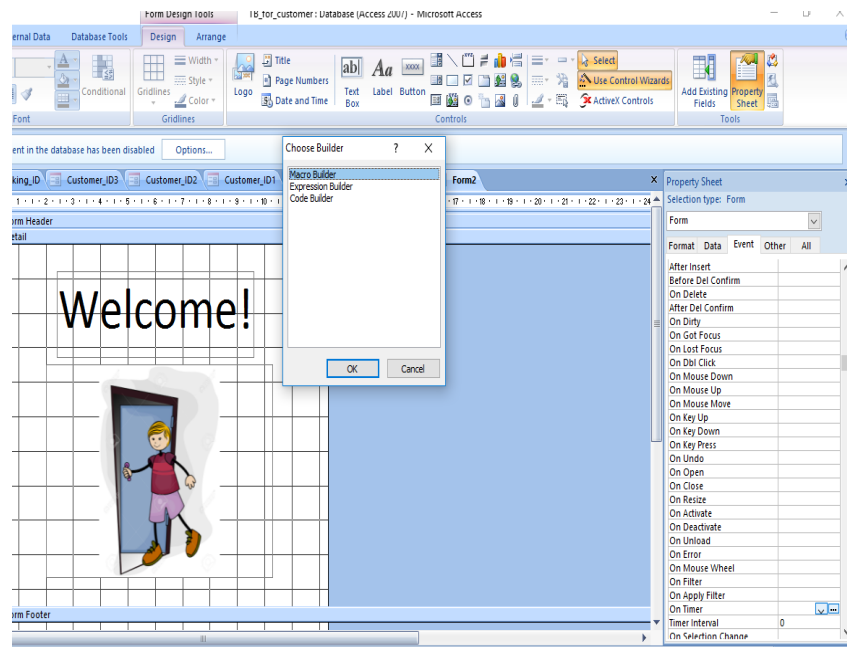
Now you can see visibly
how your form appears.

Form2

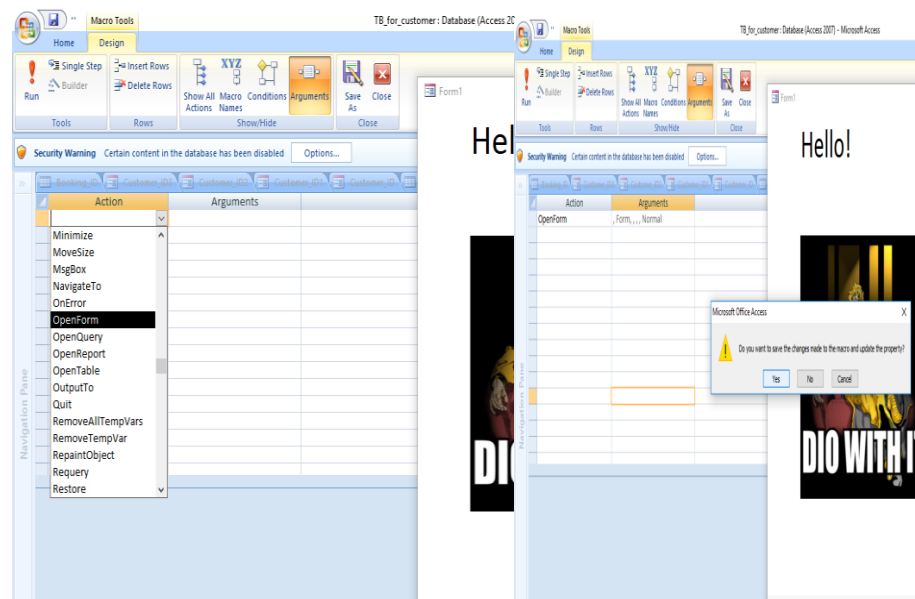
Welcome!



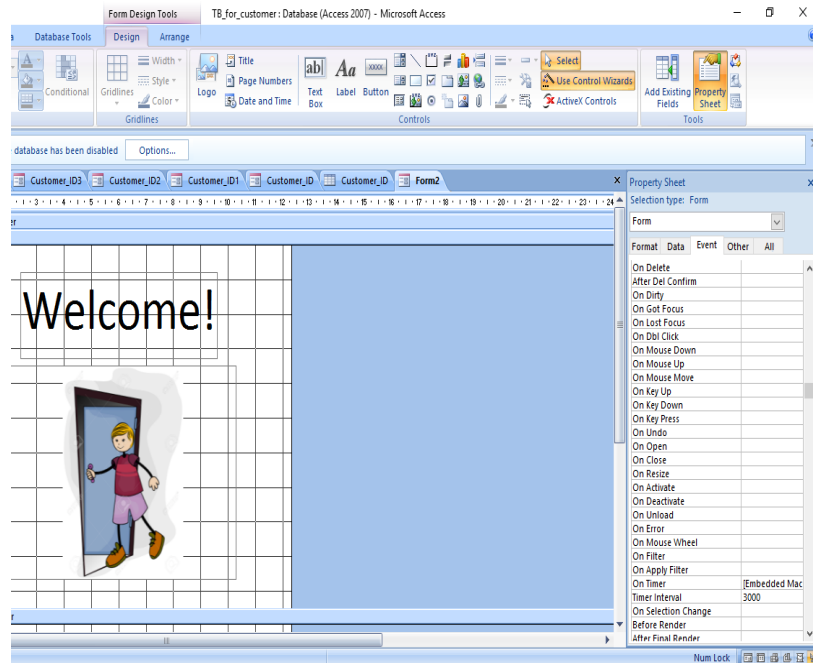
If you right click on the form you can
return to design view.



Next I went to the event tab in the property sheet and clicked on the dots which is in the on timer column.



Here I'm able to apply a macro. I included the action open form.

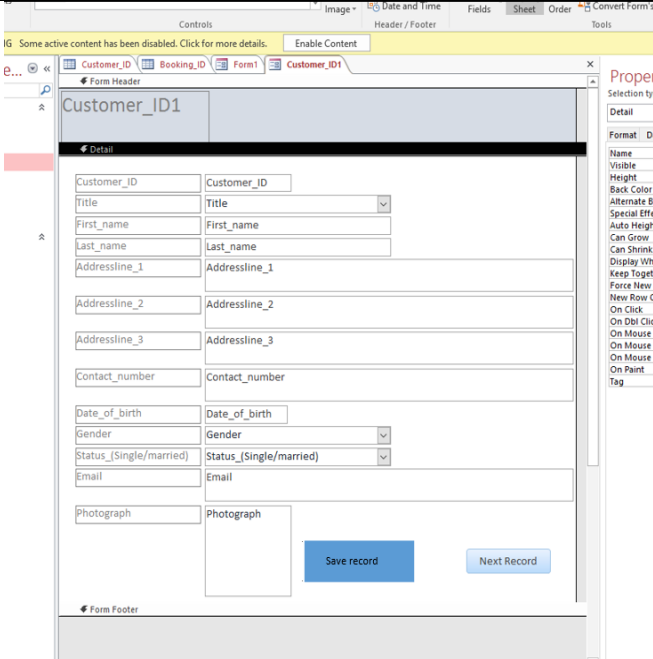
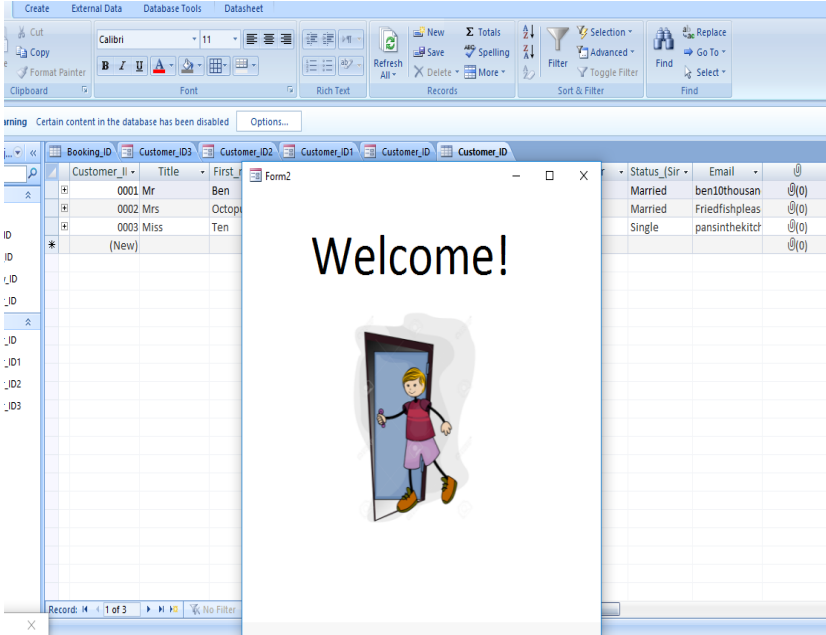


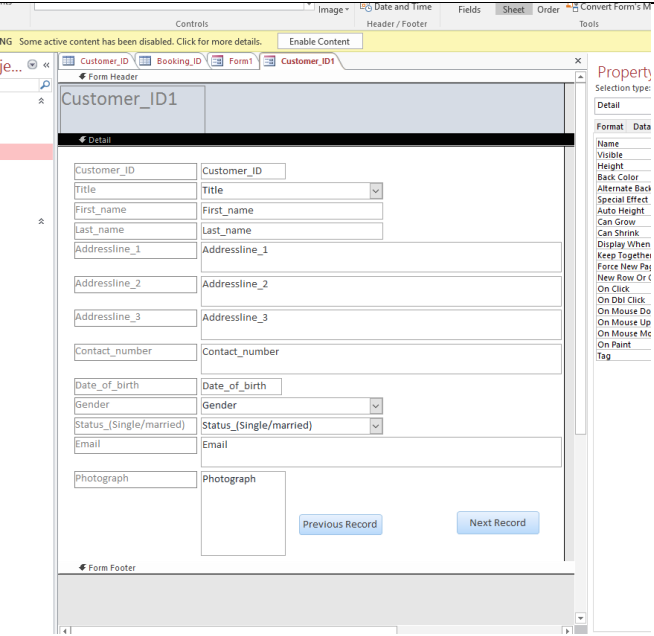
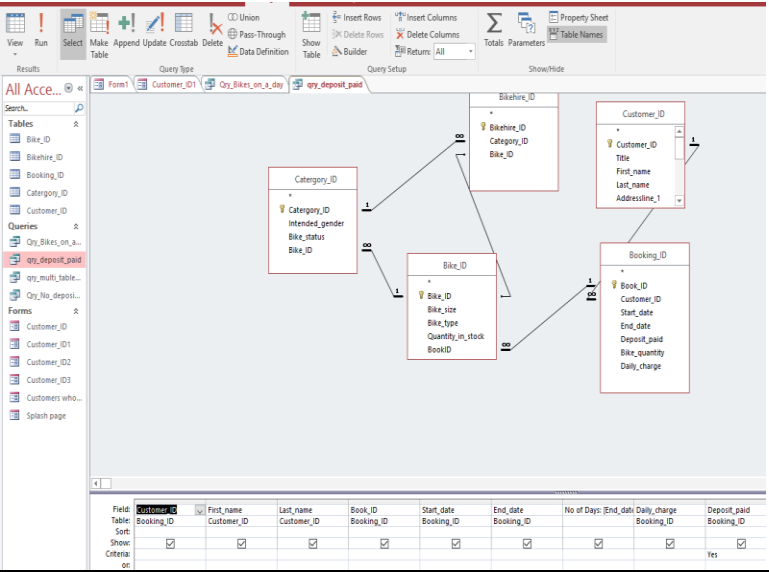
In the event tab in the timer interval column I added 3000 milliseconds (3 seconds) to the form on how quick it appears once access opens.

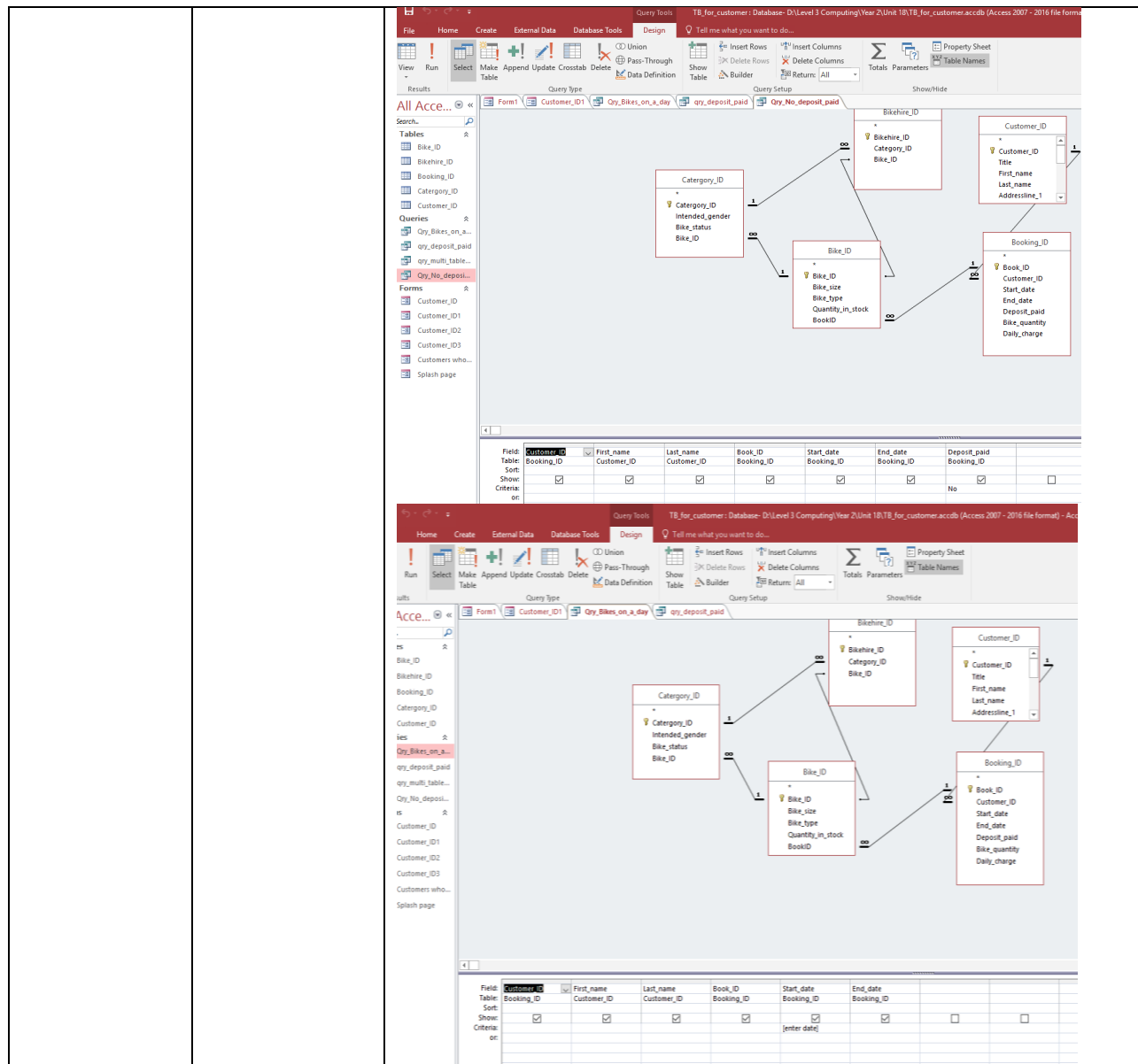
Test a relational data base (P7) (Test date type, macro, test queries, test results, bug results)

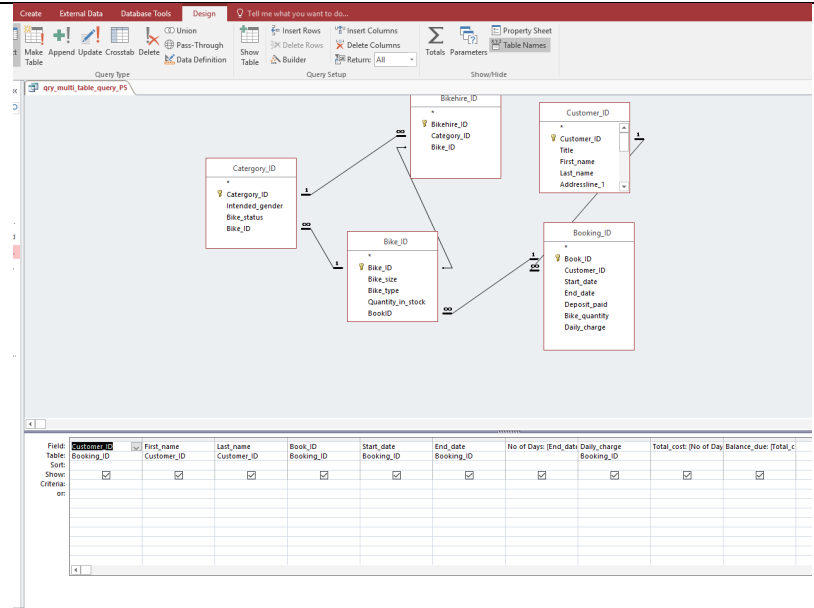
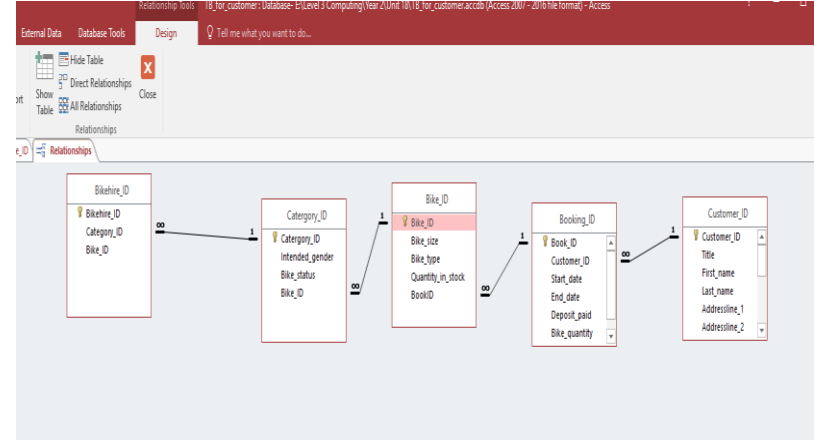
Introduction: In this word document I will be testing out areas of my database to show that it is functional and meets user needs.

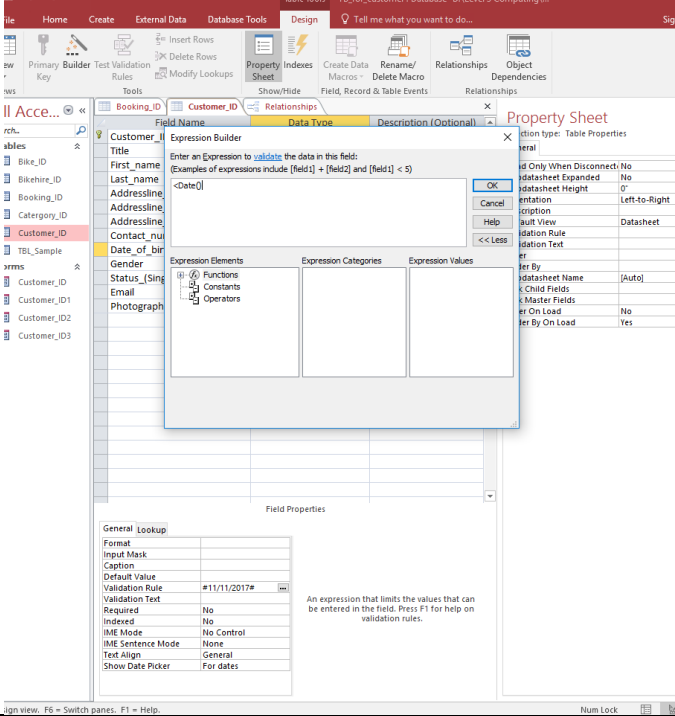
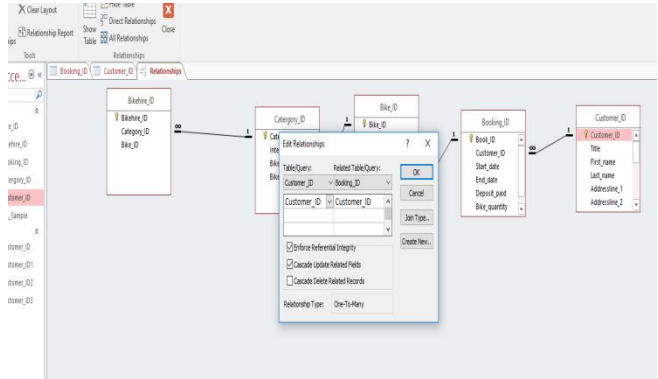
Test plan	Expectation	Final outcome
Including forms that include a save button	I will include a save feature onto my forms.	This screenshots displays that you can save the form after making changes to it.

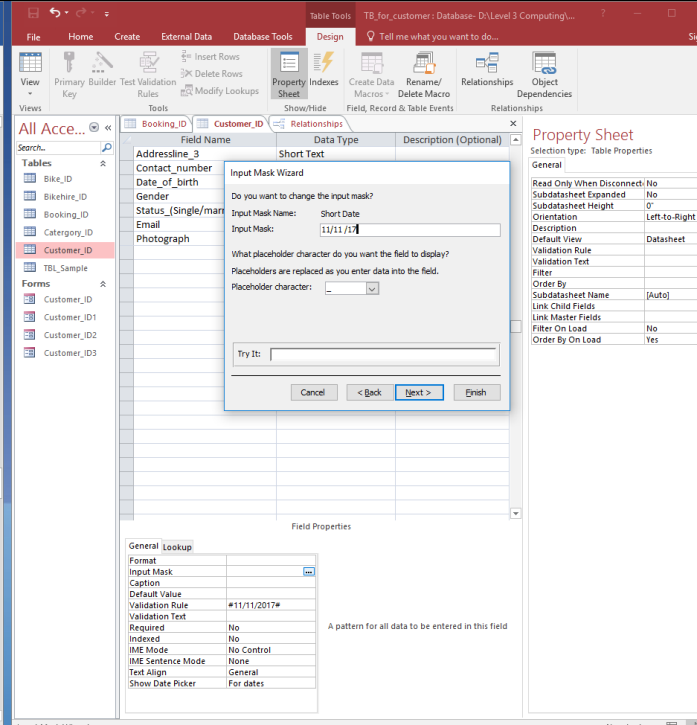
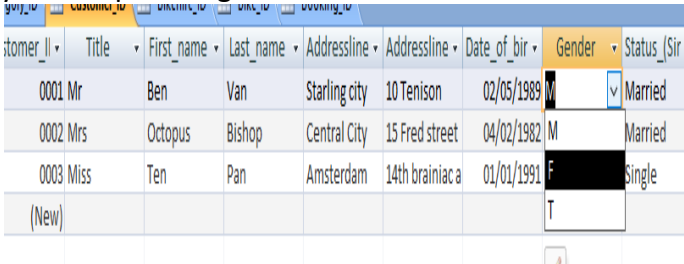
		
Splash page	In my database design I will be inputted a splash page which will include a timer on when it will appear.	<p>When the database opens on Microsoft access this image saying welcome appears after 5 seconds</p> 
Navigation buttons	In the database there should be buttons allowing you to navigate through different	<p>Here I have created forms with buttons that allow you to navigate between different forms using the previous record button and the next record.</p>

	queries.	
Queries	There will be queries allowing quick accessibility to access customer details are essential	<p>For the queries that have been created I have all fields in the table showing and changes can be made whilst it is displayed. The query I have created include who have paid their deposit and who hasn't, list of bikes hired on a certain date and how much the daily charge over a number of days.</p> 



		 <p>The screenshot shows the Microsoft Access database design view. It features four tables: Category_ID, Bikehire_ID, Bike_ID, and Booking_ID. Category_ID has fields: Category_ID, Intended_gender, Bike_status, and Bike_ID. Bikehire_ID has fields: Bikehire_ID, Category_ID, and Bike_ID. Bike_ID has fields: Bike_ID, Bike_size, Bike_type, Quantity_in_stock, and BookID. Booking_ID has fields: Book_ID, Customer_ID, Start_date, End_date, Deposit_paid, Bike_quantity, and Daily_charge. There are also fields for Customer_ID (Title, First_name, Last_name, Addressline_1) and Booking_ID (Book_ID, Customer_ID, Start_date, End_date, Deposit_paid, Bike_quantity, Daily_charge). The tables are connected by lines representing relationships. Category_ID is linked to Bikehire_ID and Bike_ID. Bikehire_ID is linked to Booking_ID. Bike_ID is linked to Booking_ID. The Booking_ID table is also linked to a Customer_ID table. The fields in each table are listed below the tables.</p>
Relationships	Have all data from each table connected to make it a relational database.	<p>The relationship that has been created works when viewed in a datasheet view. This also allows primary keys and foreign keys to be linked.</p>  <p>The screenshot shows the Microsoft Access database design view. It features five tables: Bikehire_ID, Category_ID, Bike_ID, Booking_ID, and Customer_ID. Category_ID has fields: Category_ID, Intended_gender, Bike_status, and Bike_ID. Bikehire_ID has fields: Bikehire_ID, Category_ID, and Bike_ID. Bike_ID has fields: Bike_ID, Bike_size, Bike_type, Quantity_in_stock, and BookID. Booking_ID has fields: Book_ID, Customer_ID, Start_date, End_date, Deposit_paid, Bike_quantity, and Daily_charge. Customer_ID has fields: Customer_ID, Title, First_name, Last_name, Addressline_1, and Addressline_2. The tables are connected by lines representing relationships. Category_ID is linked to Bikehire_ID and Bike_ID. Bikehire_ID is linked to Booking_ID. Bike_ID is linked to Booking_ID. Booking_ID is linked to Customer_ID. The fields in each table are listed below the tables.</p>
Validation rules		<p>Here I included a validation rule to make sure there isn't any invalid data inputted.</p>

		
Data redundancy	In my access document I will be cascading my relationships.	<p>Here I've shown that I have done data redundancy on my relationships in access.</p> 
Input mask	With the input mask I will be implementing dates for minimum and maximum time period.	<p>Here I have implemented an input mask onto my database which now controls the input of the date that is implemented onto the database.</p>

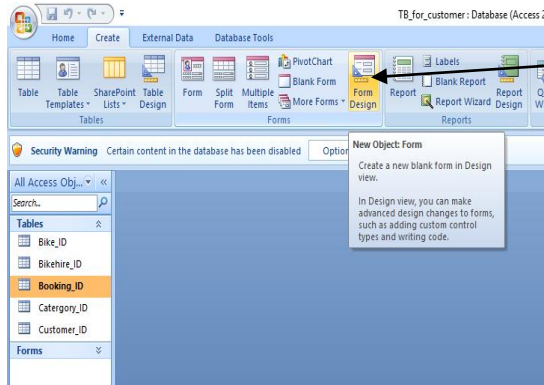
		
Drop down menu for customer gender	Include a drop down menu which allows you to quickly choose male or female when inputting data.	<p>This shows that I inputted a drop down menu which allows you to input the gender of the customer.</p> 
Start date before the end date	I will be including start date and end date on a query.	<p>These screenshots show start date and end date displayed on a query with additional information such as balance, number of days and daily charge.</p>

The screenshot displays the Microsoft Access interface. The top half shows the 'Design' view of a query named 'qry_multi_table_query_P5'. The query is based on four tables: 'Category_ID', 'Bikehire_ID', 'Customer_ID', and 'Booking_ID'. The relationships are as follows: 'Category_ID' is linked to 'Bikehire_ID' (one-to-many), 'Bikehire_ID' is linked to 'Booking_ID' (one-to-many), and 'Customer_ID' is linked to 'Booking_ID' (one-to-many). The bottom half shows the 'Table View' of the same query, displaying a table with columns: 'Customer_ID', 'First_name', 'Last_name', 'Book_ID', 'Start_date', 'End_date', 'No of Days', 'Daily_charge', 'Total_cost', and 'Balance_due'. The data is as follows:

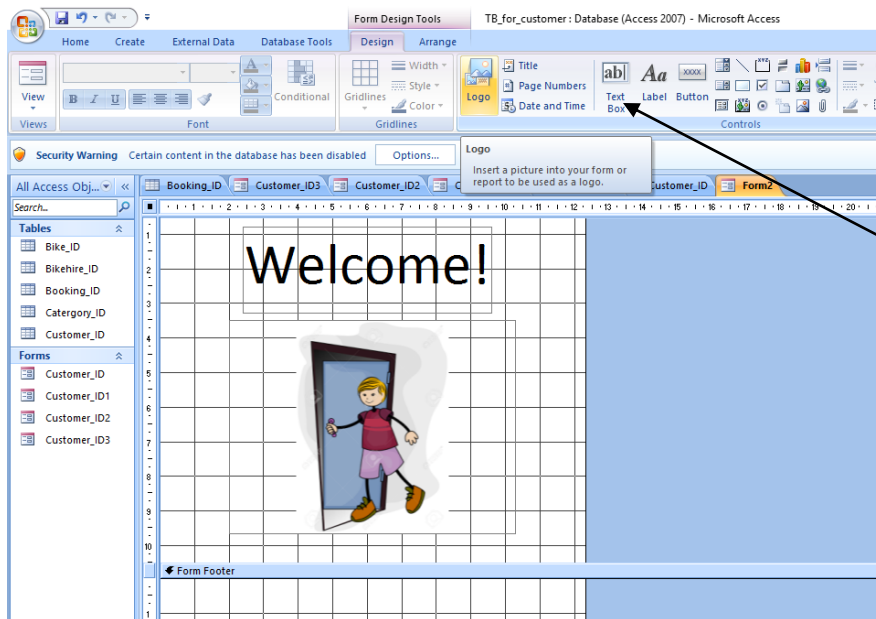
Customer_ID	First_name	Last_name	Book_ID	Start_date	End_date	No of Days	Daily_charge	Total_cost	Balance_due
2	Ben	Van	12356	05/05/2017	15/05/2017	10	10	£200.00	£201.00
2	Octopus	Bishop	12659	04/01/2017	04/10/2017	273	10	£8,190.00	£8,191.00
3	Ten	Pan	14604	07/06/2017	14/06/2017	7	10	£420.00	£421.00

Implement an automated function (M4)

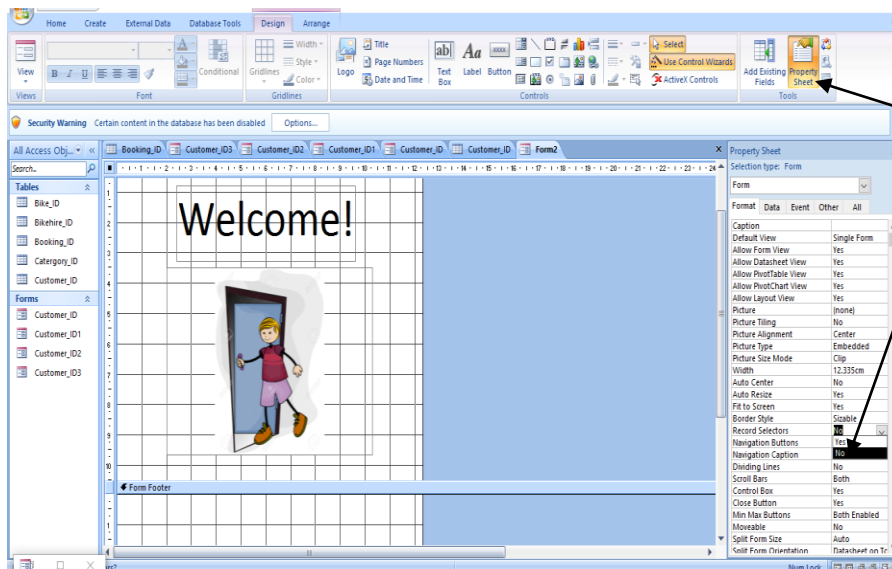
Introduction: In this criteria I will be implementing an automated function. Here I'm going to demonstrate a splash page.



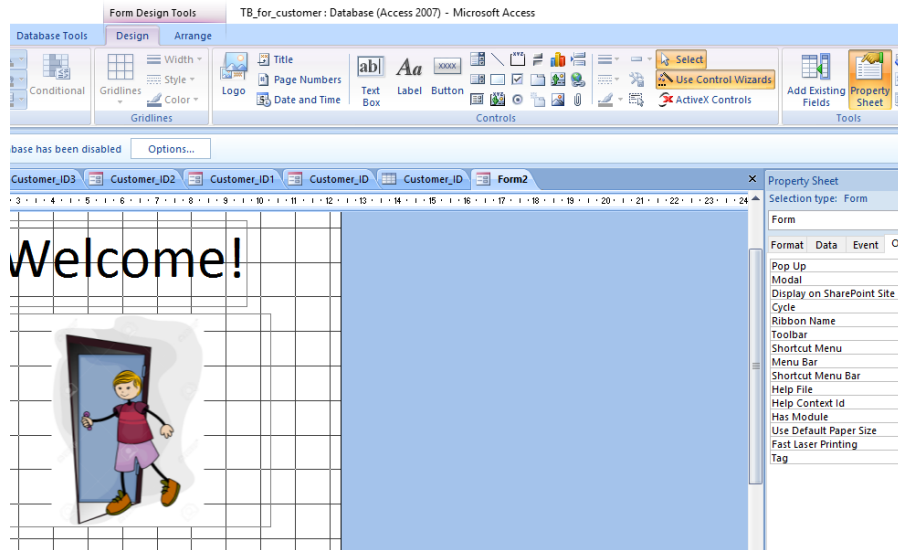
First go to the create tab and then click on form design.



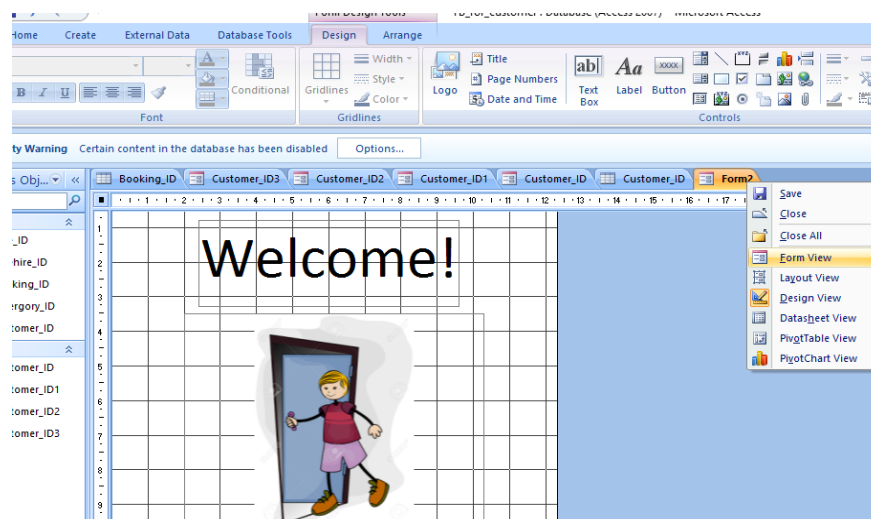
To input an image once in form design, go to the design tab and click on logo. You should then be able to browse your system for an image. You can also input text by clicking on the text box.



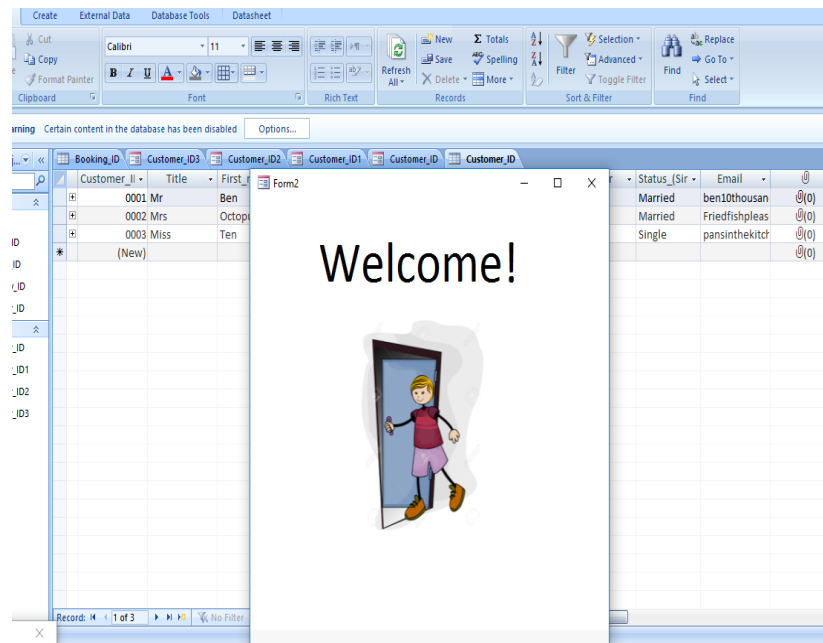
Next you adjust the form design by clicking on property sheet. Here I'm writing No on record selectors.



Next on the other tab in the property sheet and wrote yes on popup so every time access is opened the form will open.



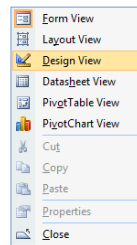
Next I right clicked on the form tab and clicked on form view.



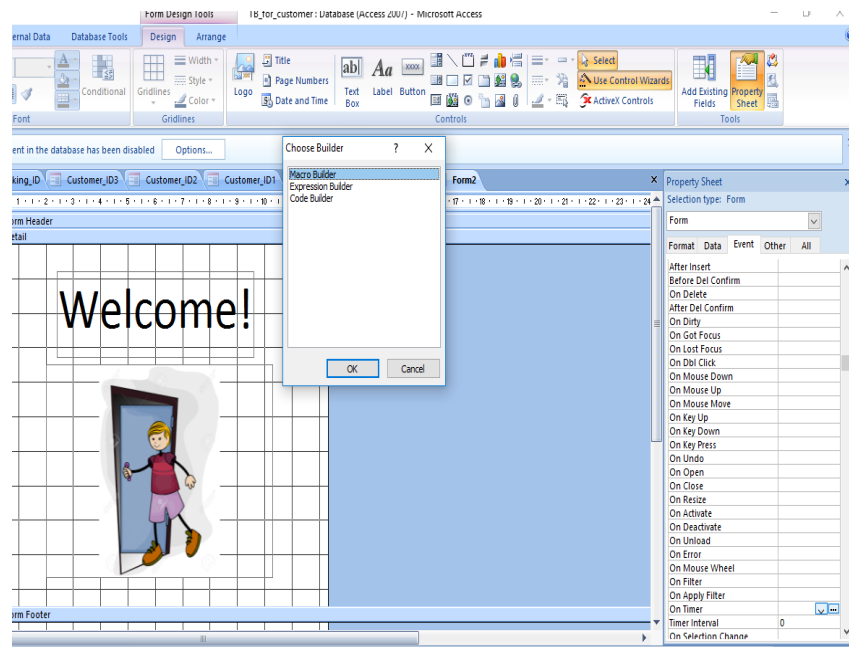
Now you can see visibly
how your form appears.

Form2

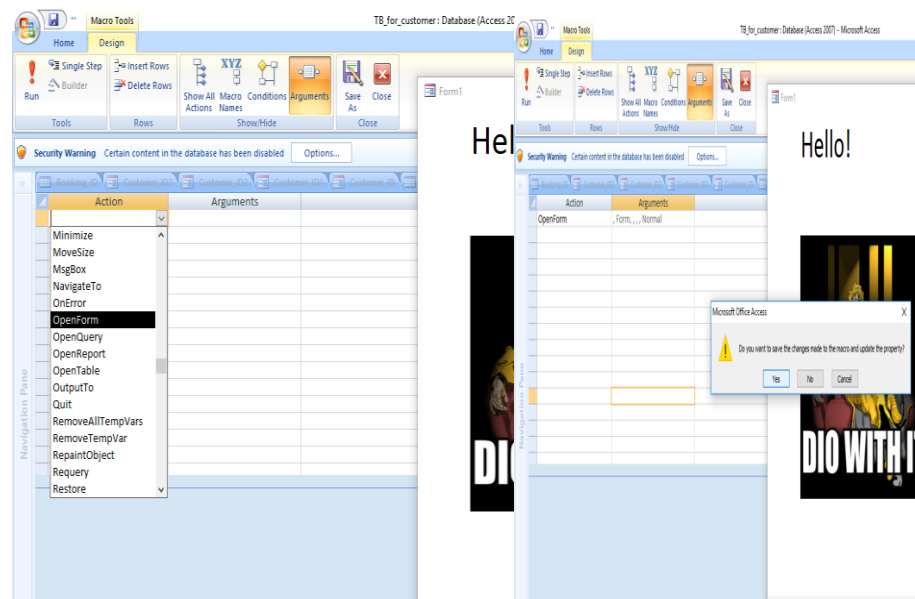
Welcome!



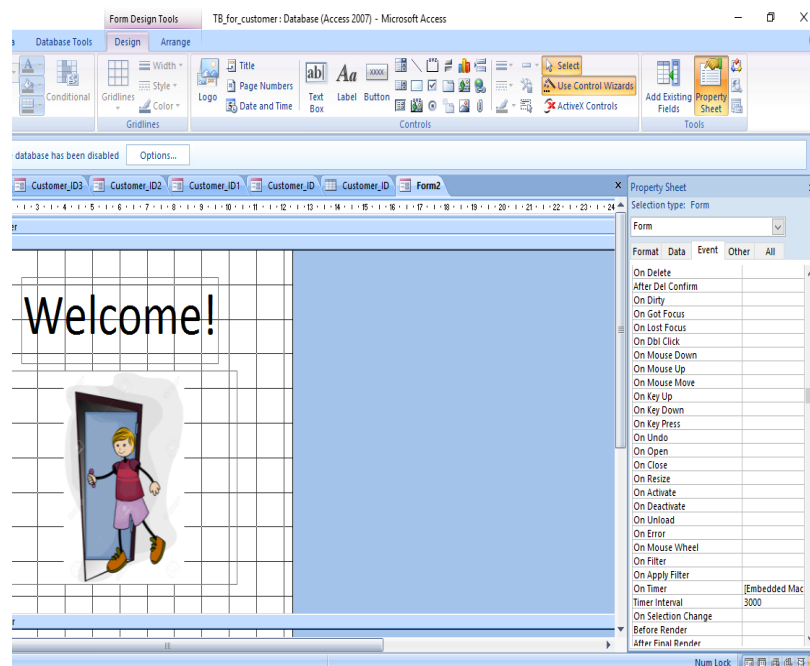
If you right click on the form you can
return to design view.



Next I went to the event tab in the property sheet and clicked on the dots which is in the on timer column.



Here I'm able to apply a macro. I included the action open form.



In the event tab in the timer interval column I added 3000 milliseconds (3 seconds) to the form on how quick it appears once access opens.

Evaluate a database against the specified user need (D2)

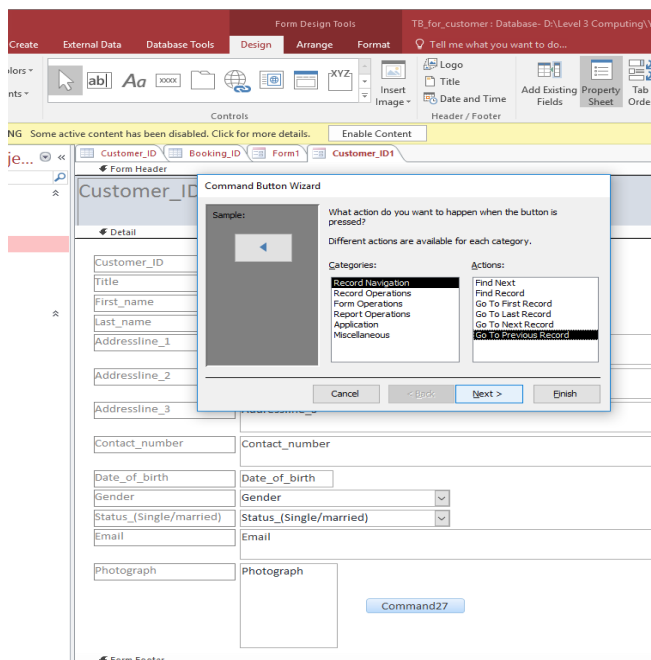
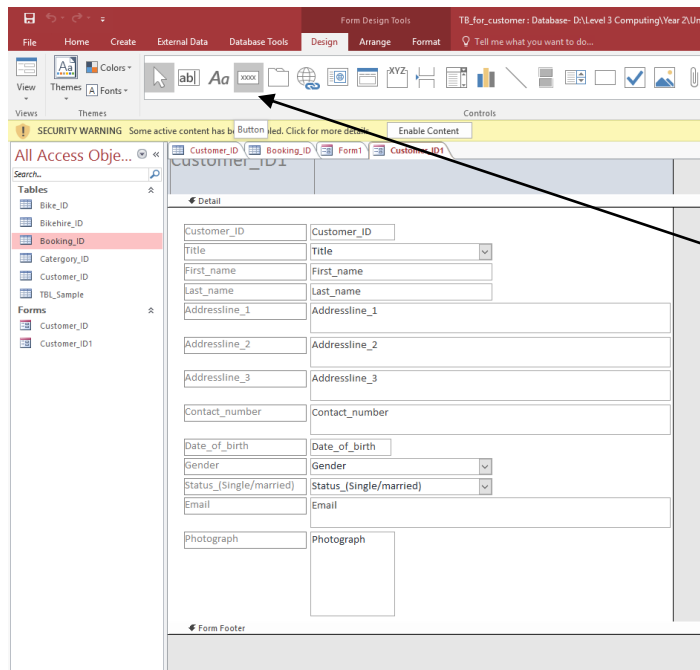
Introduction: In this area of the document I will be outlining how the systems meets the original user requirements and I will also be commenting on the strengths and weakness of my database.

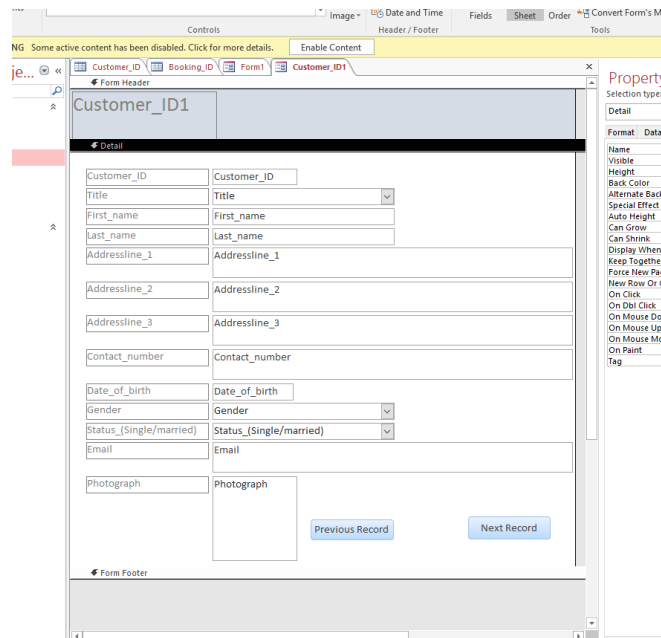
Evaluation (What it does and what It's about)

In Microsoft access I have created a database based on user requirements. My database is about a list of bikes that are hired. The essential information that is included in the database includes who has paid their deposit, balance paid, customers details including phone number and email address.

Forms / Buttons and queries

Forms created on my database allows inputting information to be much quicker and efficient as it allows you to input information in a more stylized and friendly way and it allows you to switch through records or modify areas of the form such as inputting an image. I also included queries onto my database allowing you to see who has made a deposit, list of bikes hired on a certain date and also the amount of money deposited from the amount of days hired.

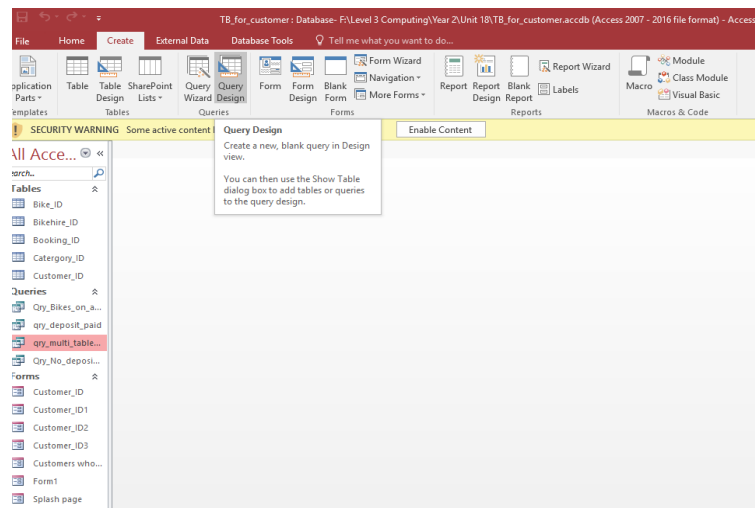




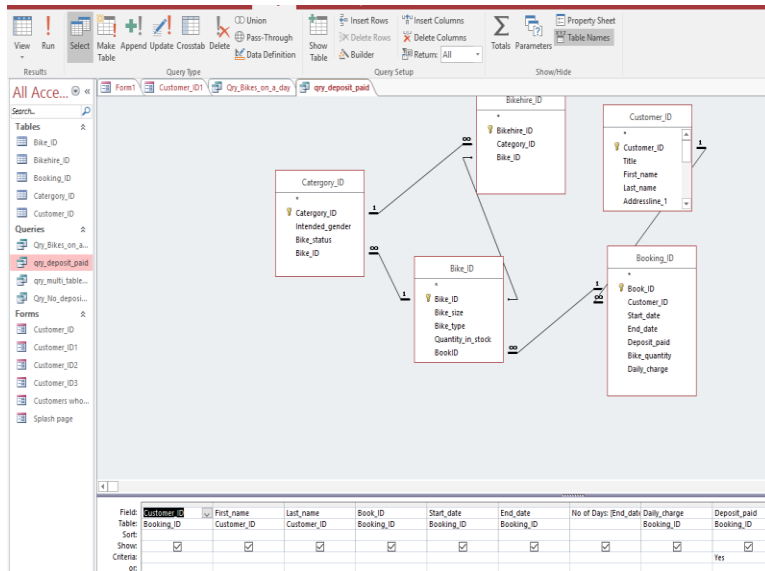
Here I've shown that I have created navigation buttons which allow me to go the previous or the next record.

Deposits

In my database I have clearly shown who has and who hasn't paid their deposit using queries.



To create a query and go to the create tab and click on query design.

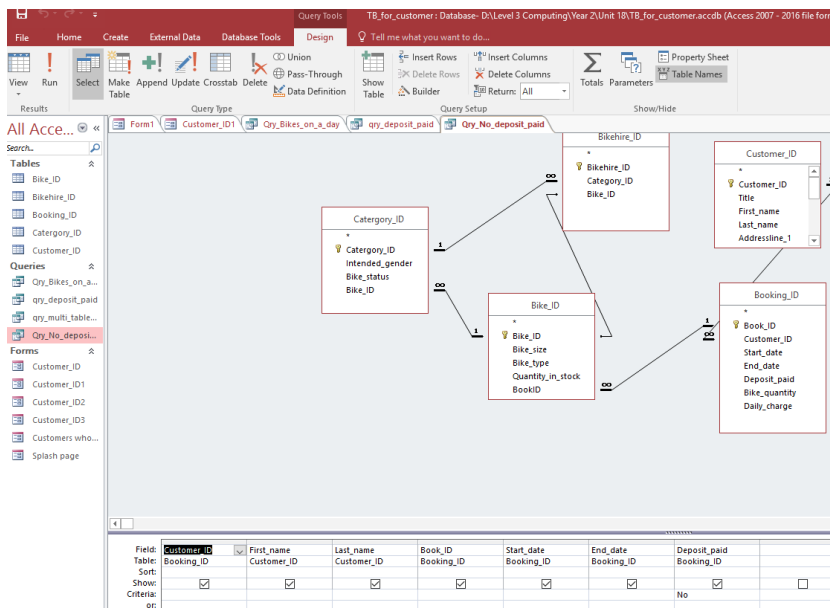


Here I included all my database tables. My query will include everything shown on the fields including any criteria's made.

Results of 'qry_deposit_paid' query:

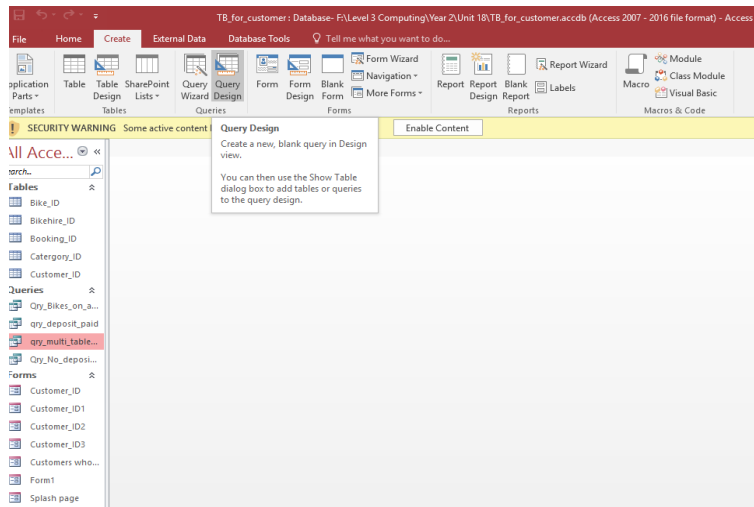
Customer_ID	First_name	Last_name	Book_ID	Start_date	End_date	No of Days	Daily charge	Deposit_paid
1	Ben	Van	12356	05/05/2017	15/05/2017	10	10	<input checked="" type="checkbox"/>
2	Octopus	Bishop	12659	04/01/2017	04/10/2017	273	10	<input checked="" type="checkbox"/>
3	Ten	Pan	14604	07/06/2017	14/06/2017	7	10	<input checked="" type="checkbox"/>

This shows that I have displayed who and who hasn't paid their deposit on my database with the query.

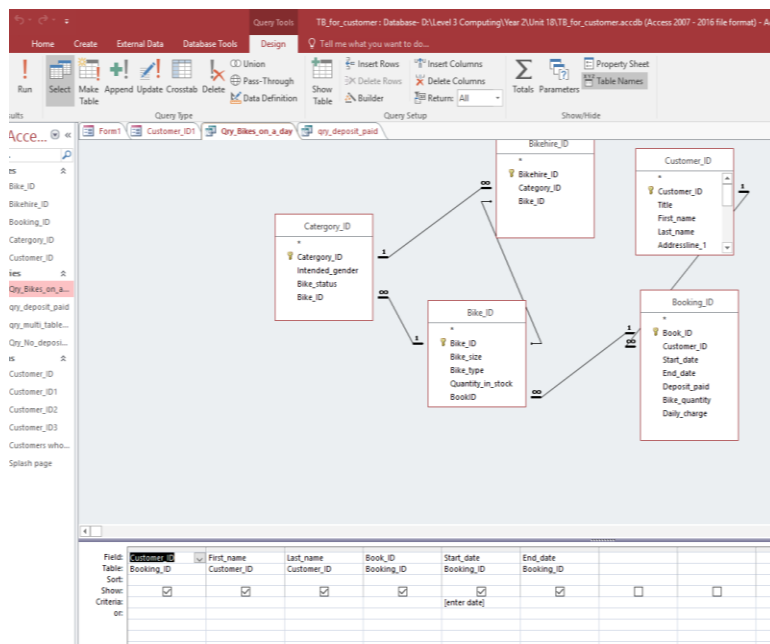


I've also created a query that tells you who hasn't made a deposit.

List of bikes that are hired on a certain date



To create a query and go to the create tab and click on query design.



Here I inputted all my database tables into my query design. Next I added the following fields and the criteria. In one of the criteria I included "[enter date]".

Customer_ID1

Customer_ID: 0001

Title: Mr

First_name: Ben

Last_name: Van

Addressline_1: Starling city

Addressline_2: 10 Tenson

Addressline_3: 10 Tenson

Contact_number: 0752548391

Date_of_birth: 02/05/1989

Gender: M

Status (Single/married): Married

Email: ben10thousand@yahoo.com

Photograph: [Empty field]

Previous Record Next Record

Enter Parameter Value ? X

enter date

04/01/17

OK Cancel

Since I inputted “[enter date]” as criteria, every time you click on your query on the side it will ask you to input a date.

Qry_Bikes_on_a_day

Customer_ID	First_name	Last_name	Book_ID	Start_date	End_date
0001	Octopus	Bishop	12659	04/01/2017	04/10/2017

This shows a list of bikes hired on a certain date.

Multi table query

Query Design

Create a new, blank query in Design view.

You can then use the Show Table dialog box to add tables or queries to the query design.

Enable Content

Tables:

- Bike_ID
- Bikehire_ID
- Booking_ID
- Category_ID
- Customer_ID

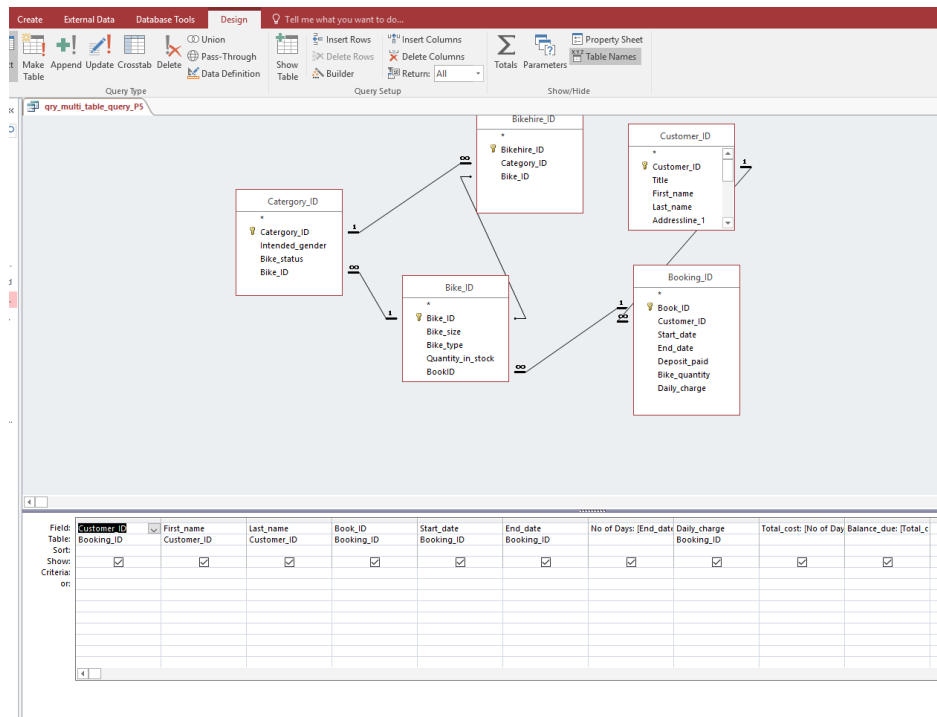
Queries:

- Qry_Bikes_on_a...
- qry_deposit_paid
- qry_multi_table...
- Qry_No_deposi...

Forms:

- Customer_ID
- Customer_ID1
- Customer_ID2
- Customer_ID3
- Customers who...
- Form1
- Splash page

To create a query and go to the create tab and click on query design.

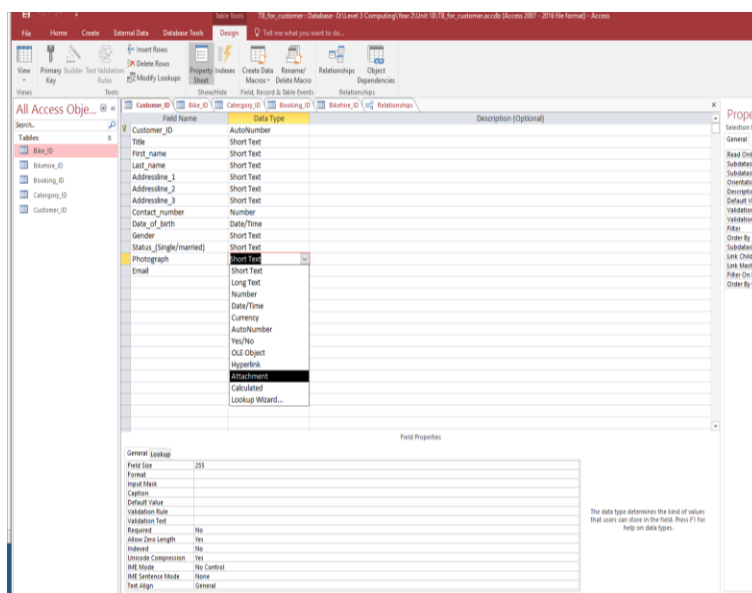
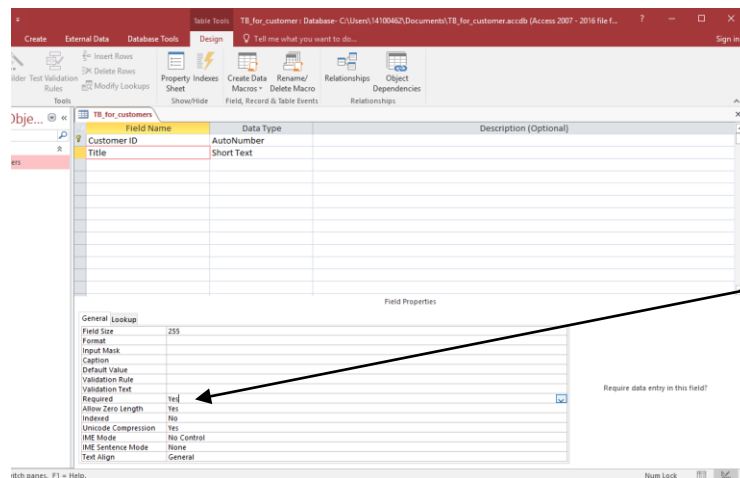


On the query design I include all my database tables and inputted the followings fields.

Customer_ID	First_name	Last_name	Book_ID	Start_date	End_date	No of Days	Daily_charg	Total_cost	Balance_due
1	Ben	Van	12356	05/05/2017	15/05/2017	10	10	£200.00	£201.00
2	Octopus	Bishop	12659	04/01/2017	04/10/2017	273	10	£8,190.00	£8,191.00
3	Ten	Pan	14604	07/06/2017	14/06/2017	7	10	£420.00	£421.00

This is the information shown from the query design.

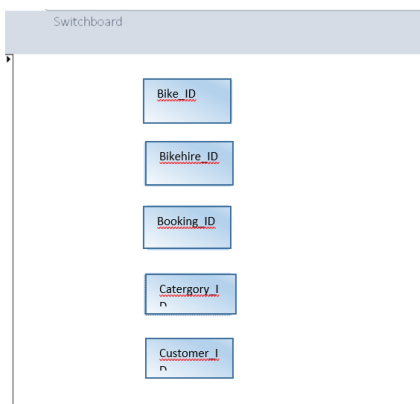
Validation rules and Macros



Here I included a validation rule to make sure there isn't any invalid data inputted.

Suggested improvements

There are many things I could of improved upon on my database design such as having a better looking form by making it more user friendly such as including more features such as payment options. I could have made the accessibility on the database much easier by including a switchboard which allows easy navigation.



The screenshot displays the Microsoft Access interface for a form named 'Customers who have not paid deposit'. The form is in Design View, showing a header section with the title and a detail section with various fields. The left pane shows the database structure, including Tables, Queries, and Forms.

Form Header:

Customers who have not paid deposit			
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Form Detail:

Customer Reference	Customer ID	Name	First name	Last name	Book ID	Start Date	End Date	Deposit Paid

Left Pane:

- Tables
 - Bike_ID
 - Bikehire_ID
 - Booking_ID
 - Category_ID
 - Customer_ID
- Queries
 - Qry_Bikes_on_a...
 - qry_deposit_paid
 - qry_multi_table...
 - Qry_No_deposi...
- Forms
 - Customer_ID
 - Customer_ID1
 - Customer_ID2
 - Customer_ID3
 - Customers who...
 - Form1
 - Splash page

(Compare to user requirements and comment on strength, weaknesses and room for improvement)