INFORMATION TECHNOLOGY

INFORMATION KIOSKS

CAPE GRACE

Cape Grace Hotel

CONTENTS

	PAGE
SCENARIO AND SCOPE	3
USER REQUIREMENTS CASE DIAGRAM	4 -5
FLOW DIAGRAM	6-12
DATABASE - DESIGN	13
GUI - DESIGN	14-21
DATA DICTIONARY	22
SOFTWARE TOOL - IPO TABLE	23-37

An Information kiosk is a self-service kiosk that helps people to get a better idea about that particular location. In many specific public areas, you can find these kinds of kiosks available where you get information that you want. It is both efficient and visually pleasing.

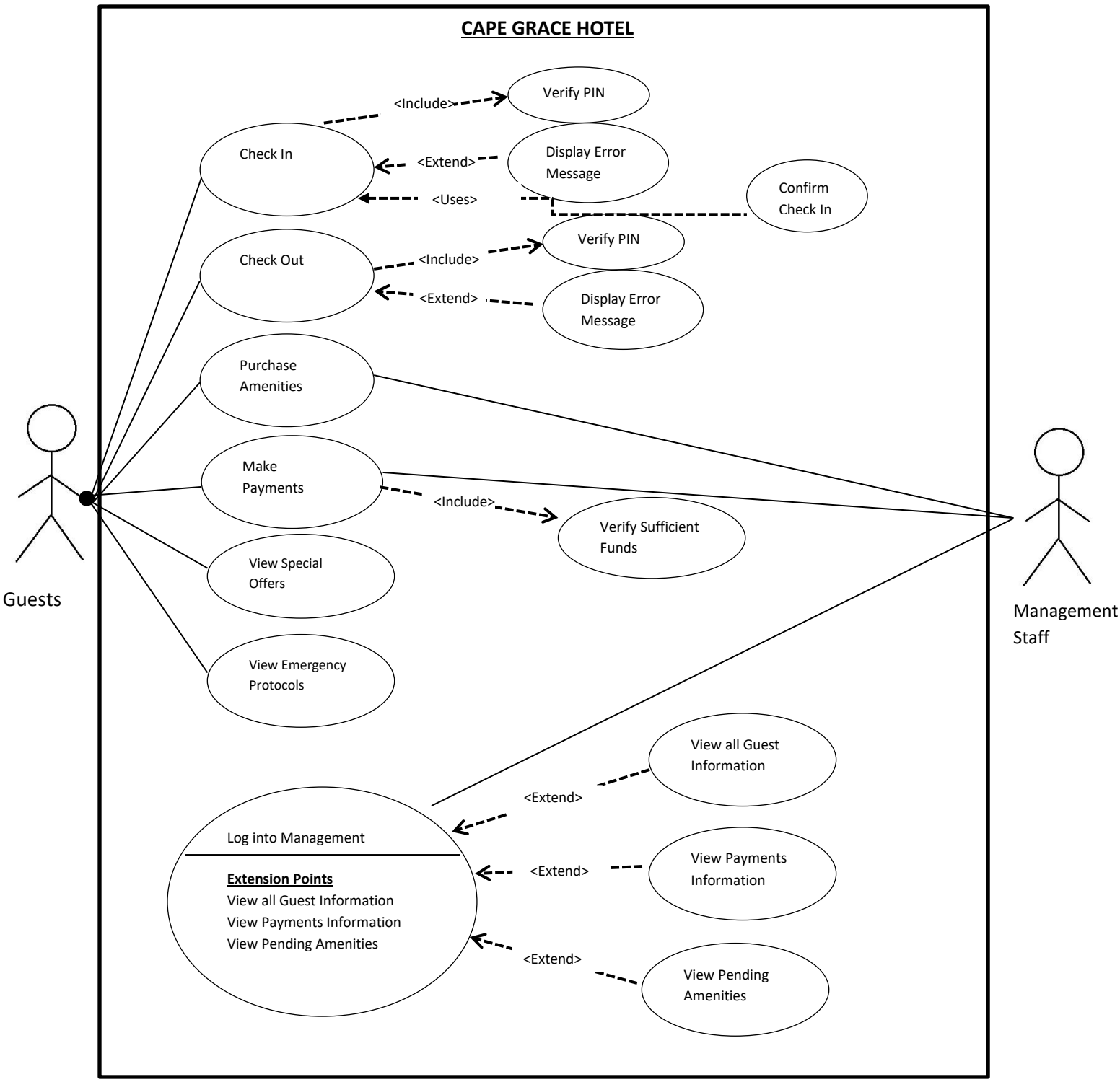
Cape Grace Hotel is situated on a private quay between Cape Town's bustling V&A Waterfront and the tranquil yacht marina decorated with exquisite furniture, rare fabrics, intriguing artefacts and original antiques. This hotel is facing a problem with the number of guests booking and checking into the hotel. At this moment, the hotel does not use any form of self service and wishes to implement this technology.

I will be designing and writing a program for Cape Grace Hotel which will be accessible on many information kiosks situated around the hotel, where the guests, can check in on their own by simply entering their booking code and PIN they received through an email confirming their stay at the hotel. Others may want to upgrade their room, redeem special offers and purchase additional amenities, all in a leisurely and effortless way which they can do themselves. If the guest wishes to pay their account, their account will be accessible and they may enter their banking details so that the payment will be made. This way guests can start enjoying their holiday sooner.

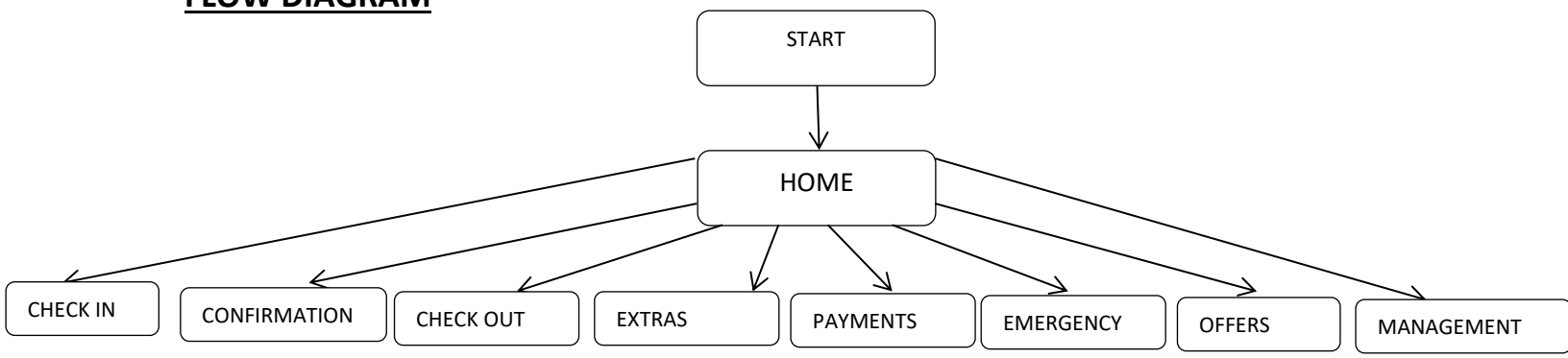
During the traditional check-in process, they have to stand in line and fill out paperwork that often involves information already supplied during the booking. Using the program, I have designed, it will make sure there is organization, money saving and less work needed by the staff themselves.

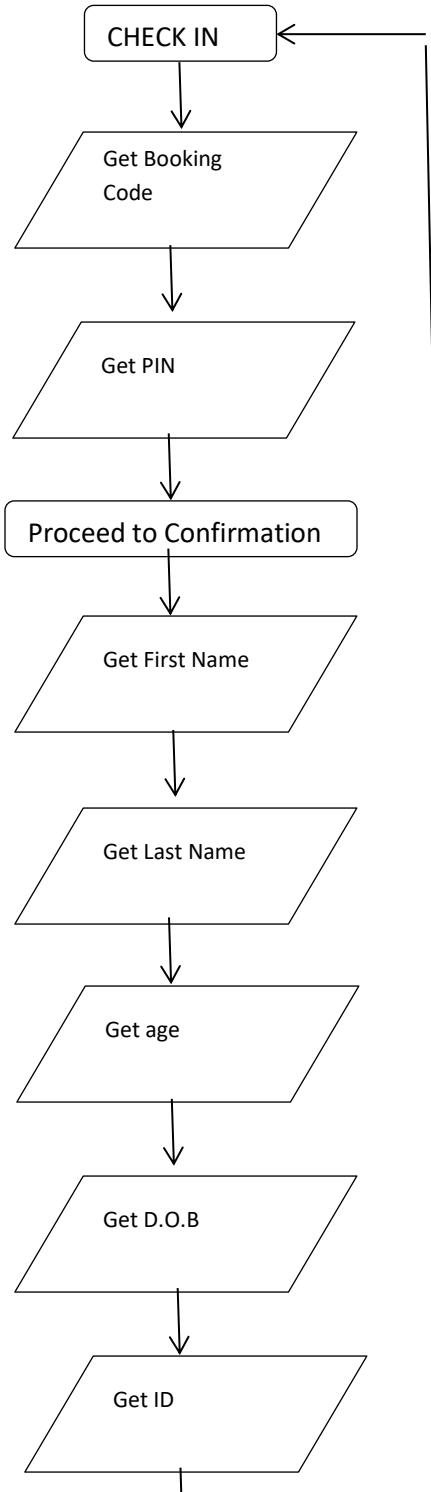
The program will have a main interface, where the guest can choose what they want to do, may it be: Check In, Check Out, do Payments, check what special offers are available and get room service. There will be many help tabs telling the guest what exactly to do as well as good feedback. The second interface will allow the management to access all the guests' information in case a problem is faced.

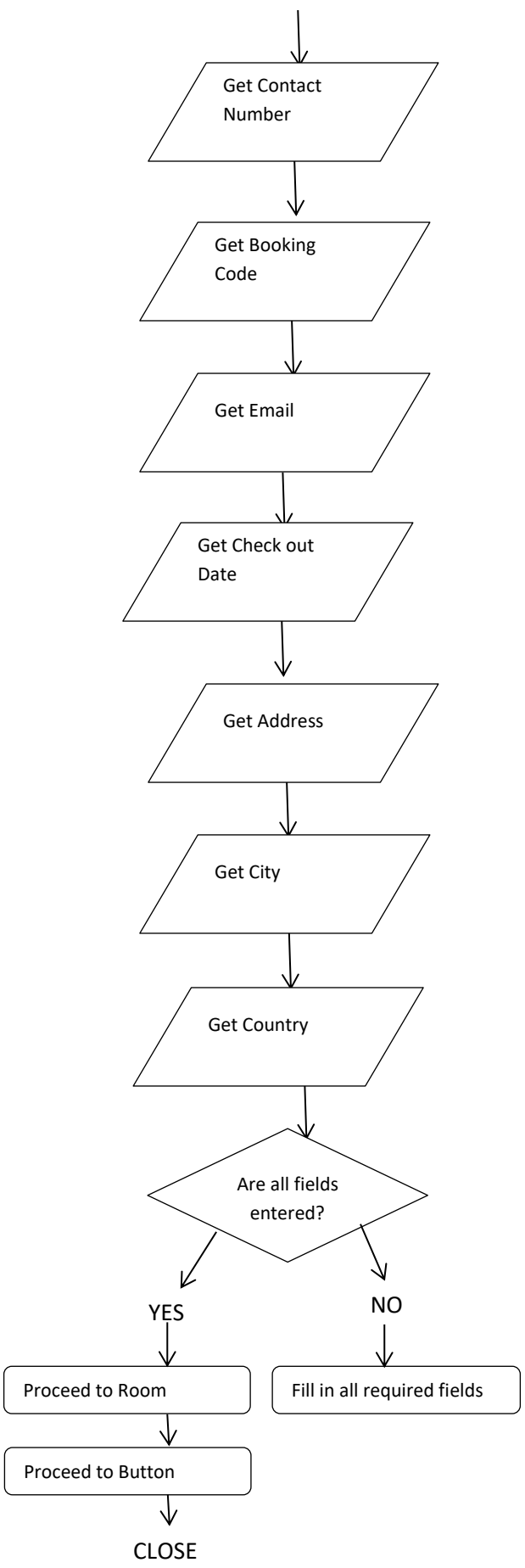
USER REQUIREMENTS

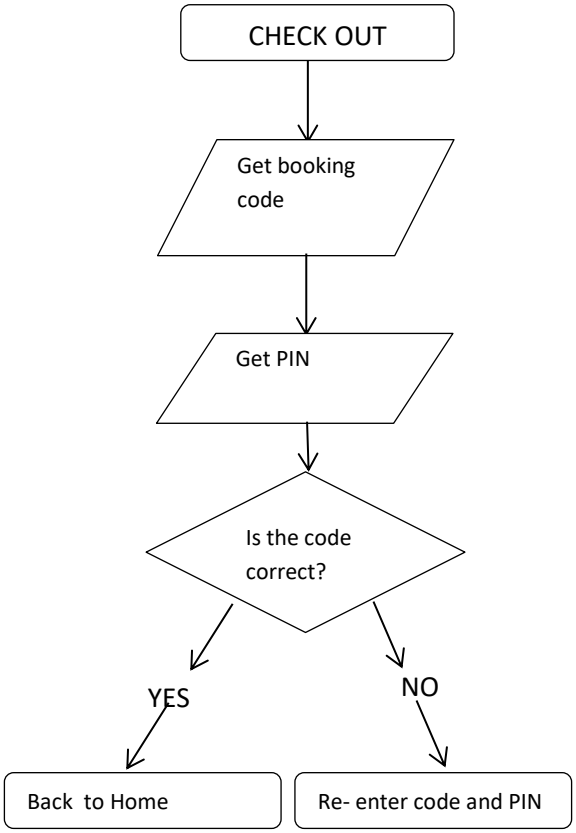


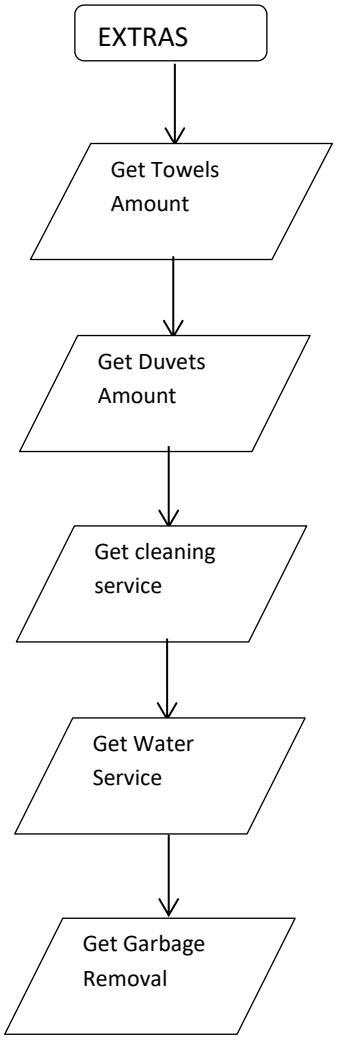
FLOW DIAGRAM

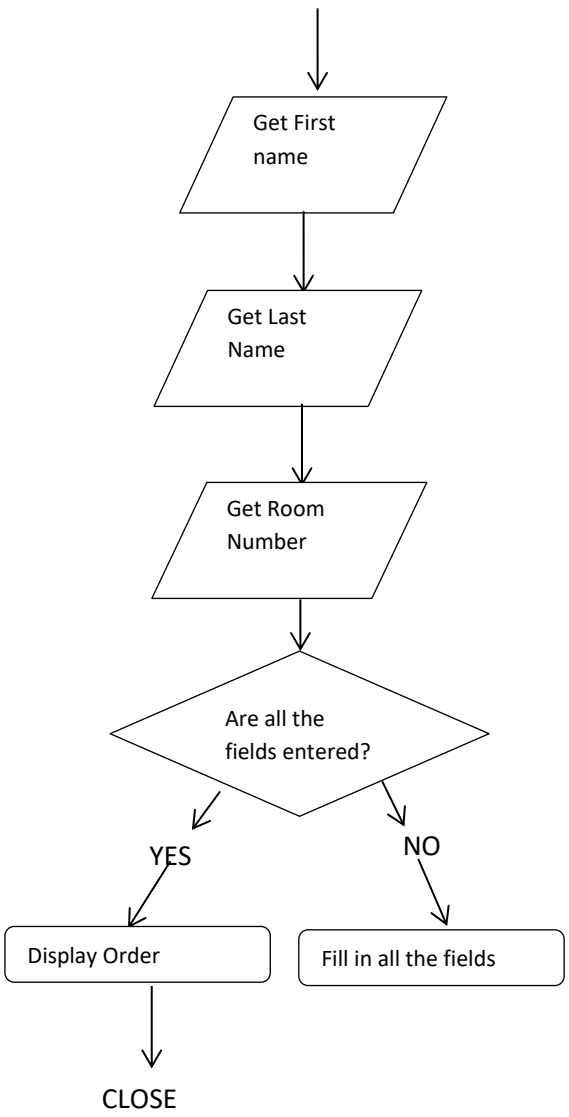


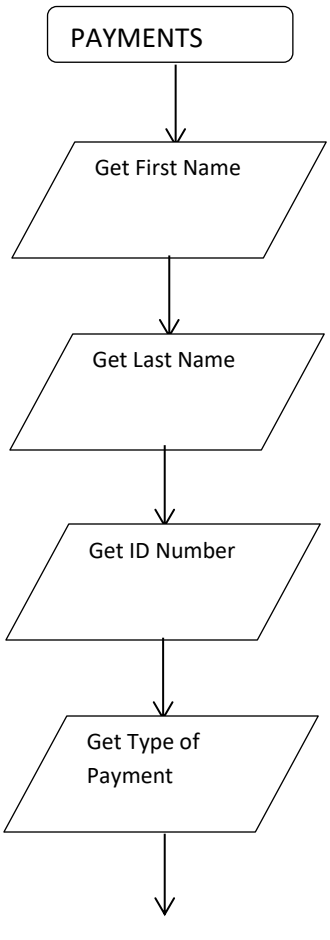


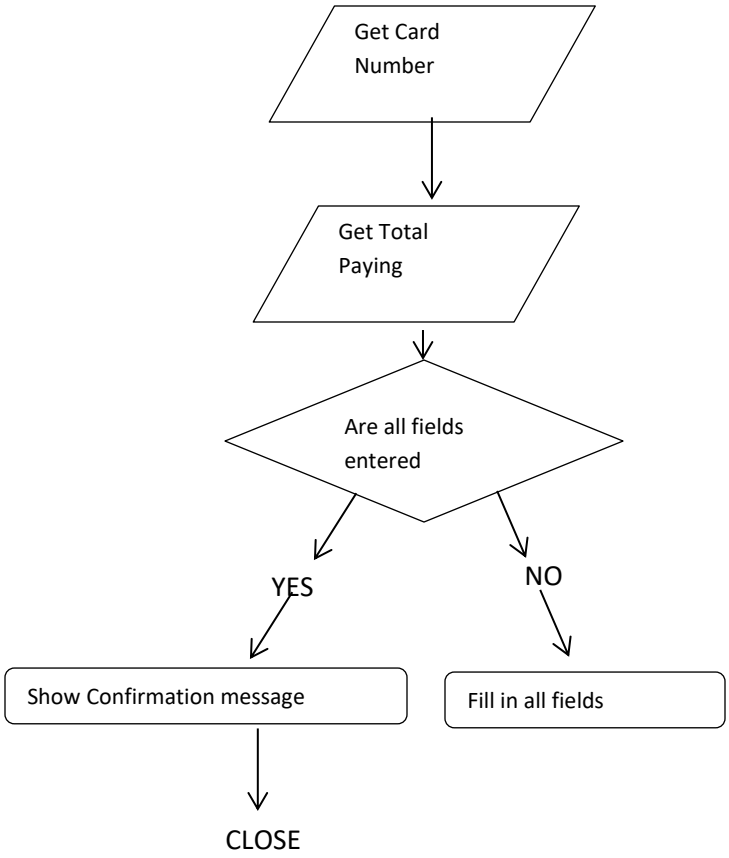

Get Contact Number
Get Booking Code
Get Email
Get Check out Date
Get Address
Get City
Get Country
Are all fields entered?
YES
NO
Proceed to Room
Fill in all required fields
Proceed to Button
CLOSE

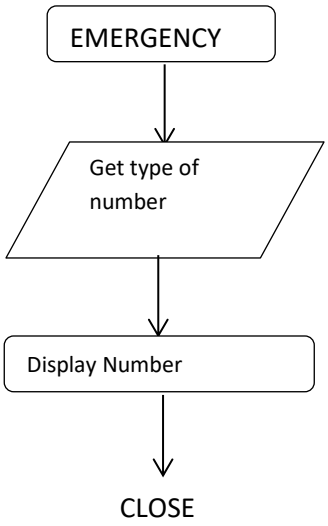

CHECK OUT
Get booking code
Get PIN
Is the code correct?
YES
NO
Back to Home
Re- enter code and PIN

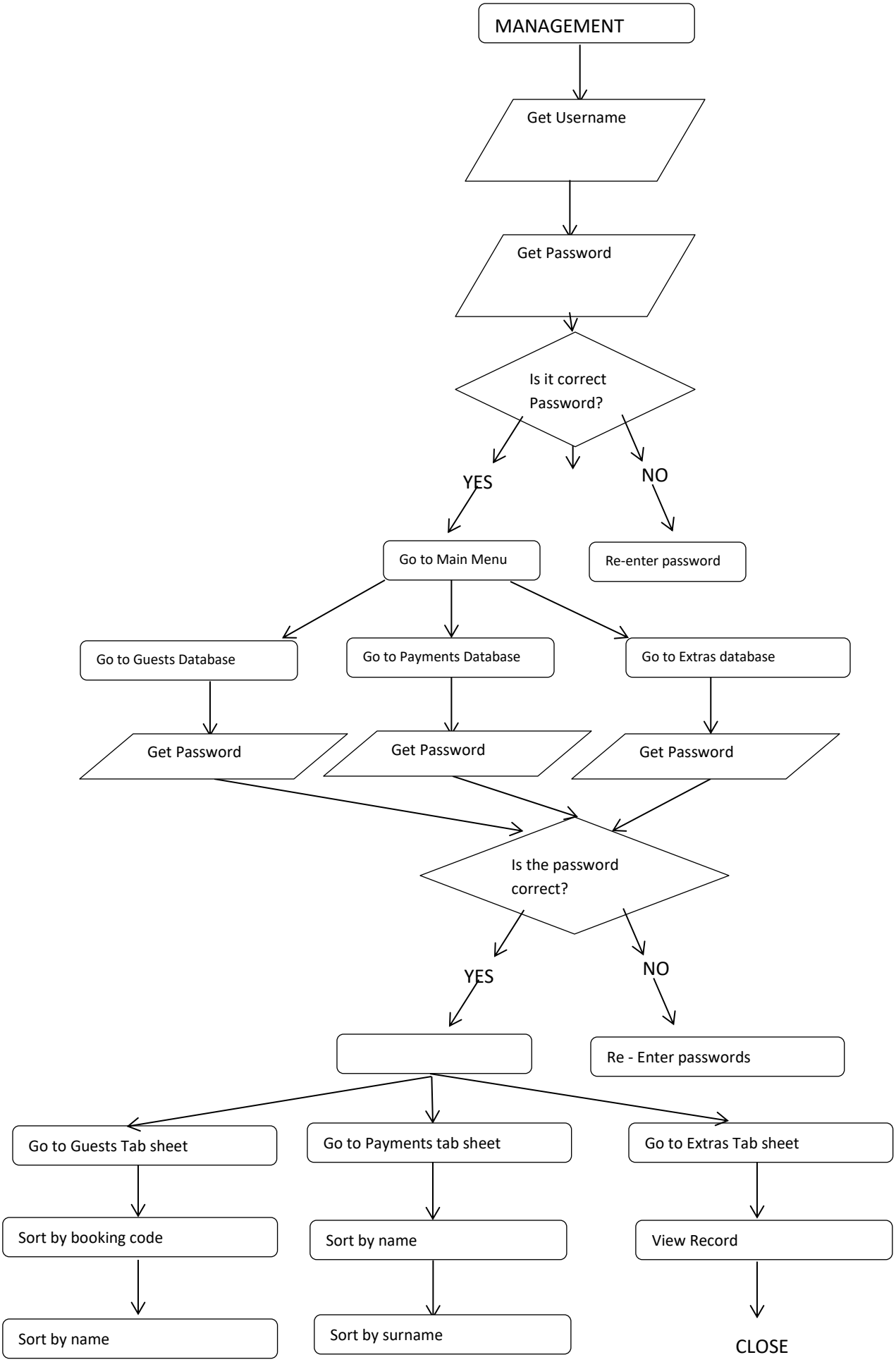

EXTRAS
Get Towels Amount
Get Duvets Amount
Get cleaning service
Get Water Service
Get Garbage Removal

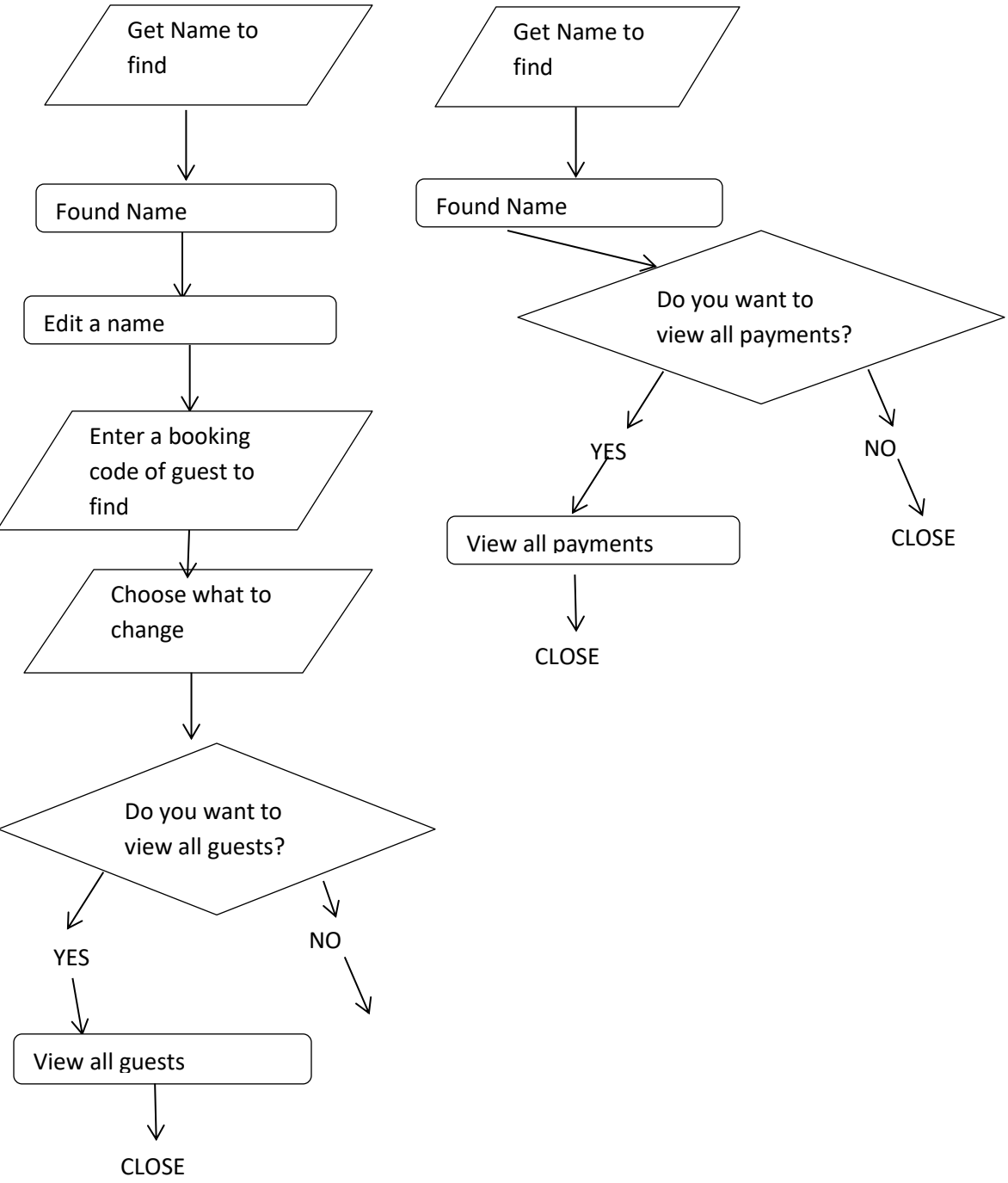

Get First name
Get Last Name
Get Room Number
Are all the fields entered?
YES
NO
Display Order
Fill in all the fields
CLOSE


PAYMENTS
Get First Name
Get Last Name
Get ID Number
Get Type of Payment


Get Card Number
Get Total Paying
Are all fields entered
YES
NO
Show Confirmation message
Fill in all fields
CLOSE


EMERGENCY
Get type of number
Display Number
CLOSE


MANAGEMENT
Get Username
Get Password
Is it correct Password?
YES
NO
Go to Main Menu
Re-enter password
Go to Guests Database
Go to Payments Database
Go to Extras database
Get Password
Get Password
Get Password
Is the password correct?
YES
NO
Re - Enter passwords
Go to Guests Tab sheet
Go to Payments tab sheet
Go to Extras Tab sheet
Sort by booking code
Sort by name
View Record
Sort by name
Sort by surname
CLOSE



DESIGN - DATABASE

DATABASE - GUESTS

tblGuests

Field Name	Datatype	Size	Description
Booking_Code	Auto		
First_Name	String	20	
Last_Name	String	20	
Date_Of_Birth	String	20	
Age	Integer		
Address	String	20	
Contact_Number	Integer		
Email	String	20	
Arrival	Medium Date		
Check_Out_Date	Medium Date		
City	String	20	
Country	String	20	

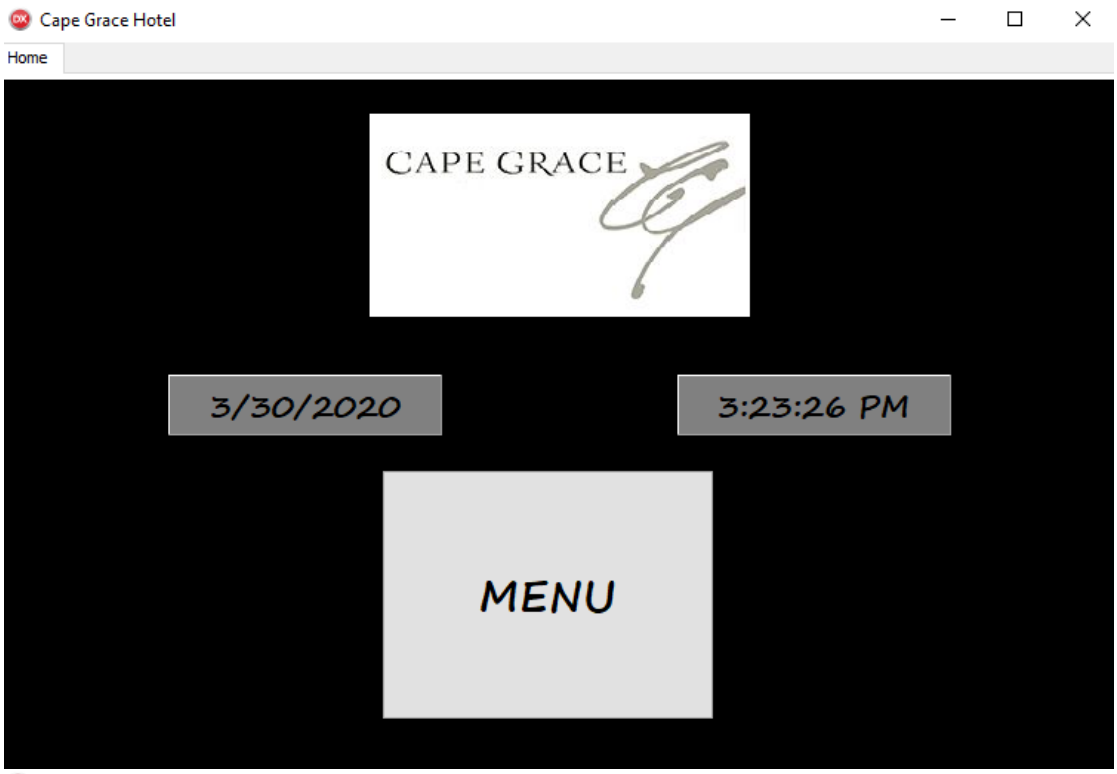
DATABASE - PAYMENTS

tblPayments

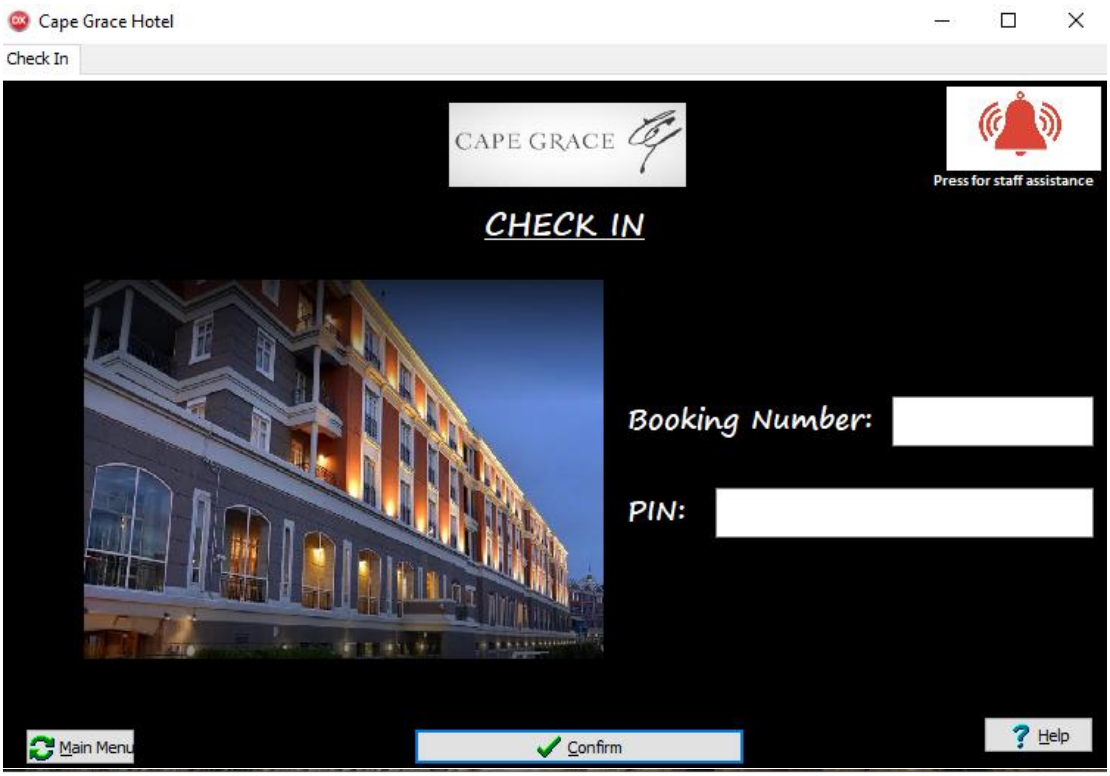
Field Name	Datatype	Size	Description
PayMentID (PK)	auto		
Type_of_Payment	string	20	
Card_Number	string	20	
Total _Paying	currency		
ID(FK)	number		

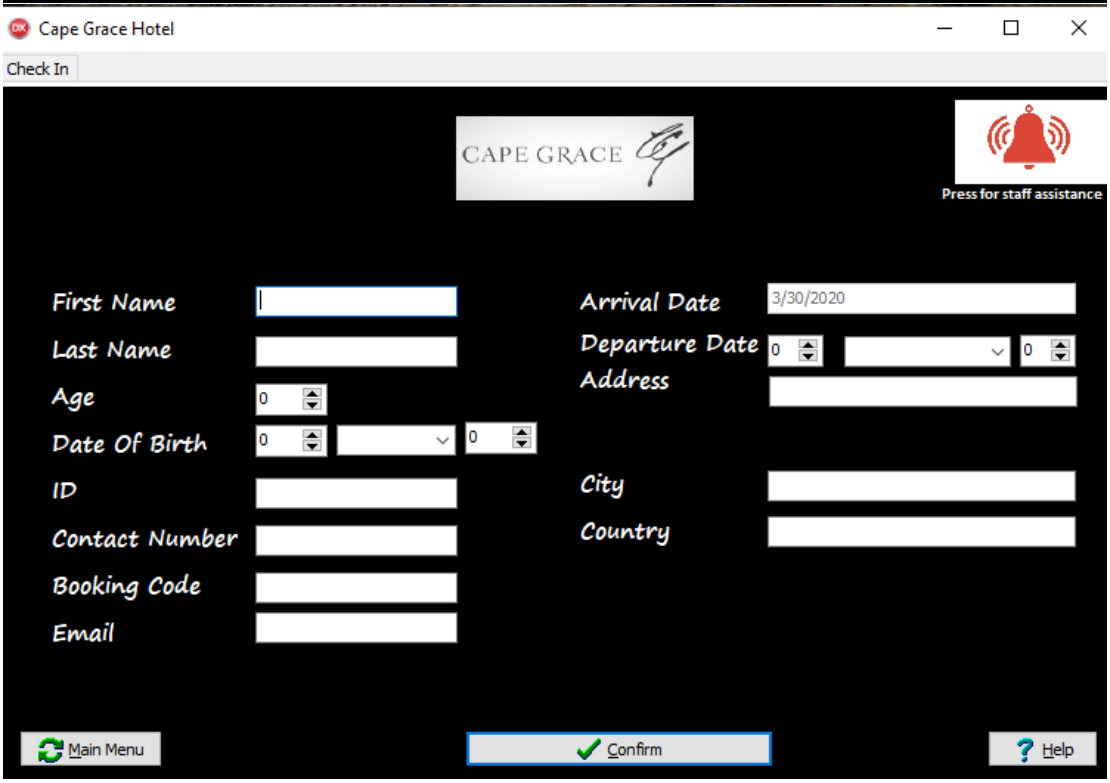
- All Text fields - 20 field size
- All number fields - integer field
- Date/ time fields - Medium date field

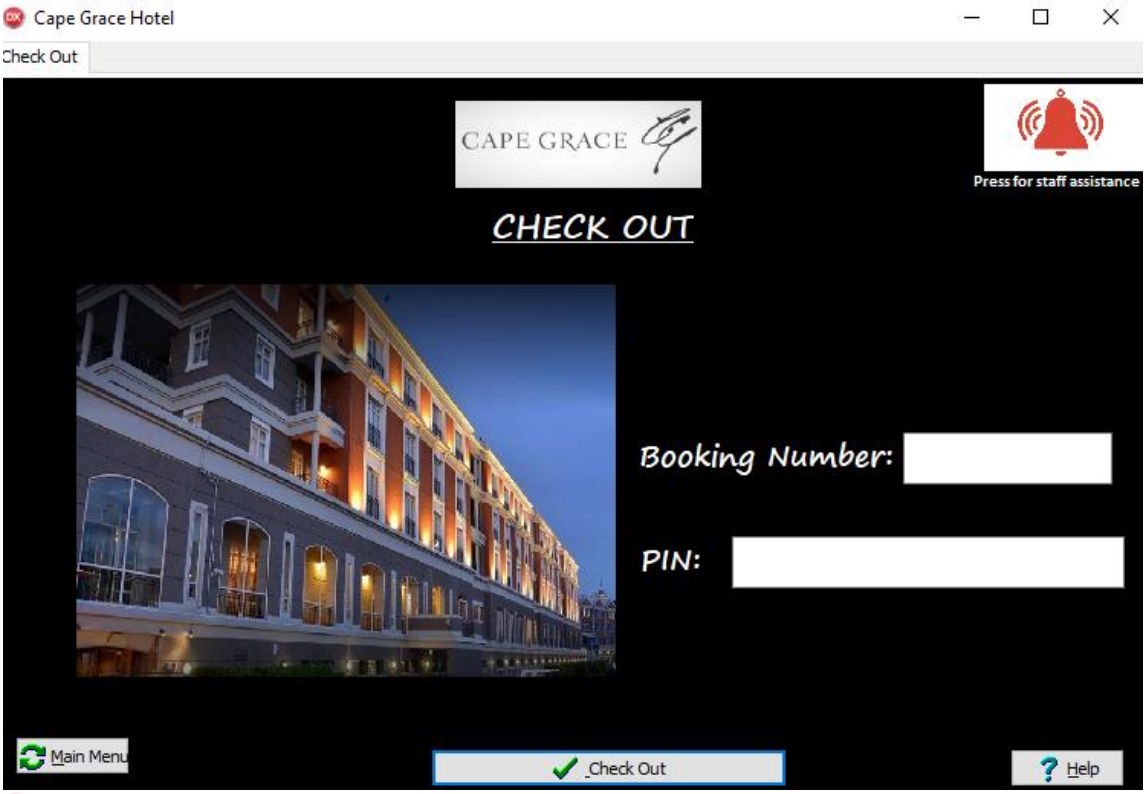
DESIGN - GUI

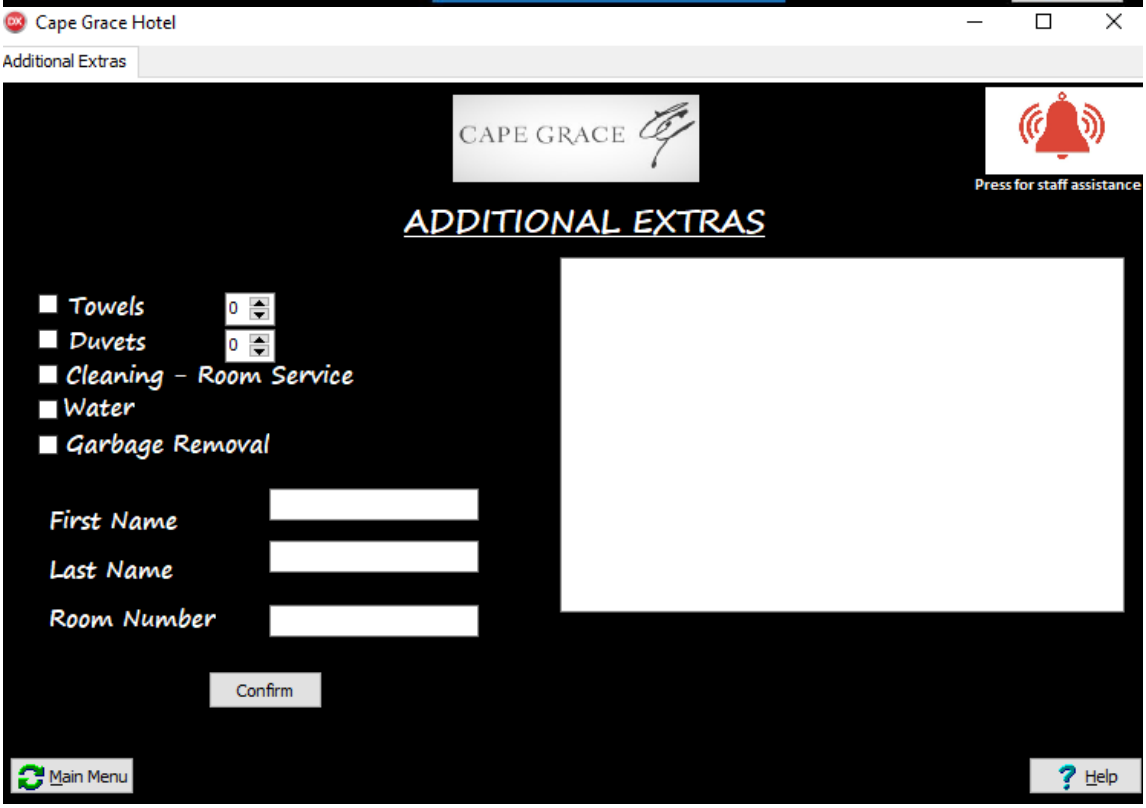

Cape Grace Hotel
Home
CAPE GRACE
3/30/2020
3:23:26 PM
MENU

Cape Grace Hotel
Main Menu
CAPE GRACE
Press for staff assistance
CHECK IN
Check In
Check out
Check Out
Additional Extras
Payments
Emergency
Emergency
CAPE GRACE
Special Offers
Special Offers!
Main Menu
Management
Help

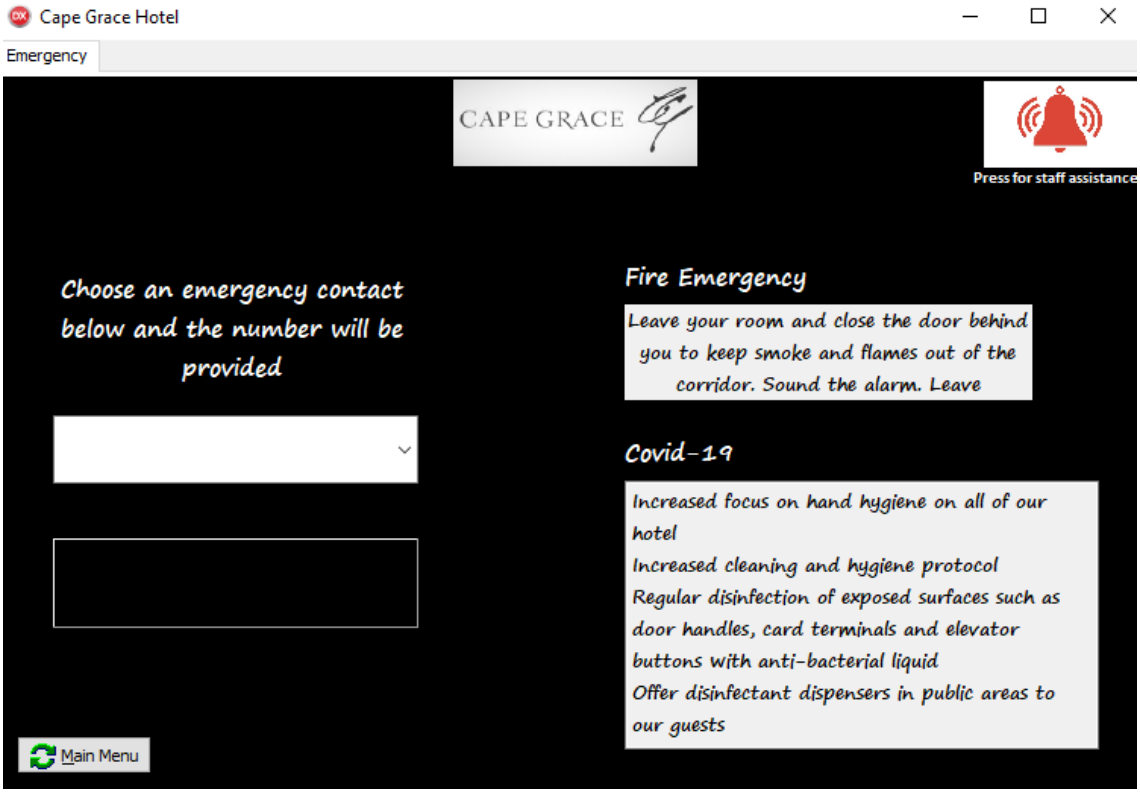

Cape Grace Hotel
Check In
CAPE GRACE
Press for staff assistance
CHECK IN
Booking Number:
PIN:
Main Menu
Confirm
Help

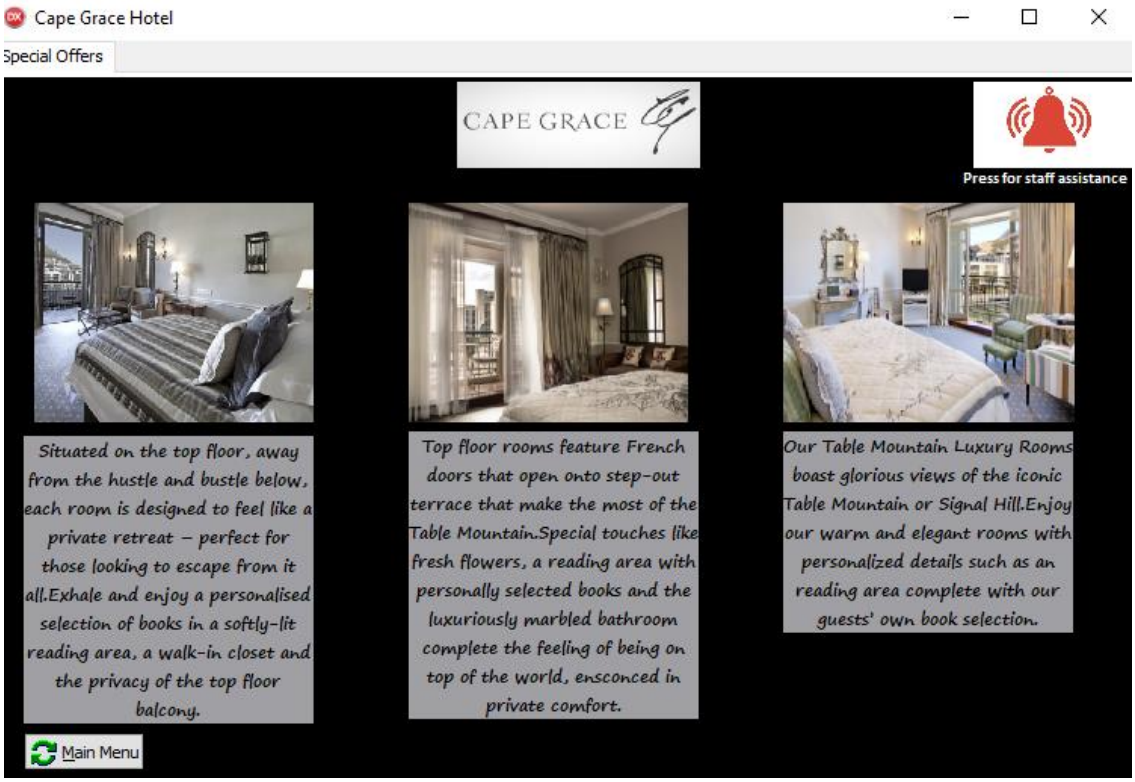

Cape Grace Hotel
Check In
CAPE GRACE
Press for staff assistance
First Name
Last Name
Age
Date Of Birth
ID
Contact Number
Booking Code
Email
Arrival Date
3/30/2020
Departure Date
Address
City
Country
Main Menu
Confirm
Help

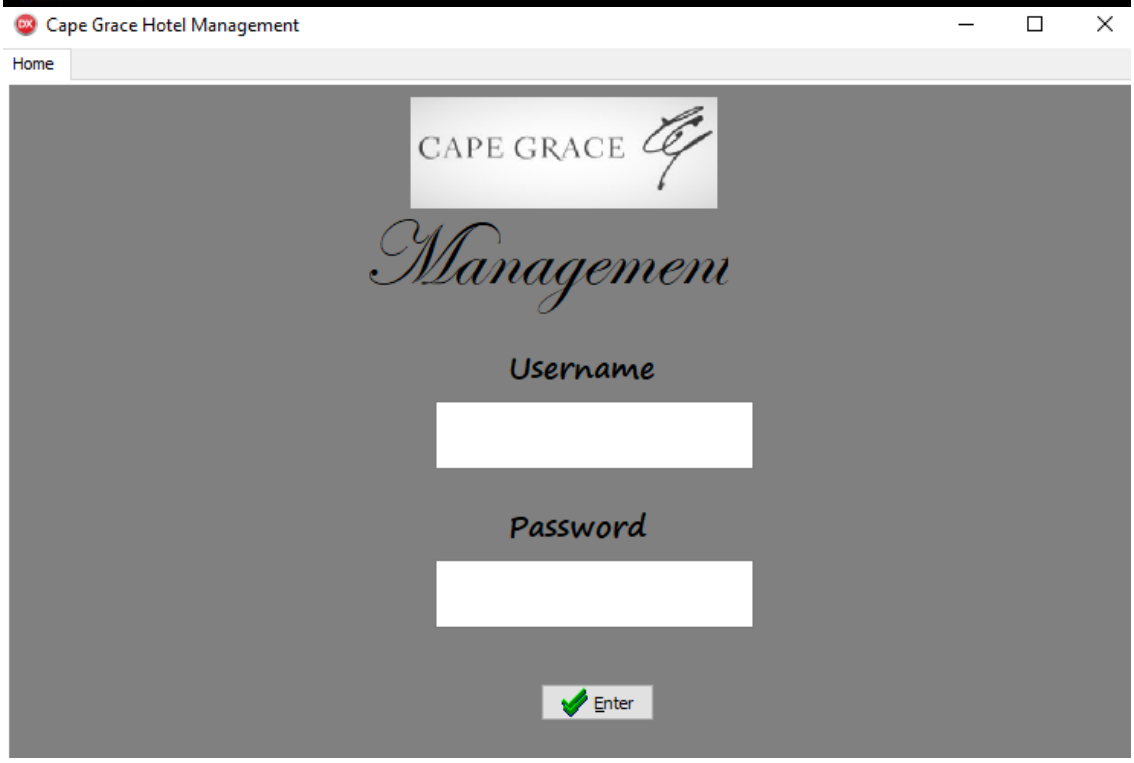

Cape Grace Hotel
Check Out
CAPE GRACE
Press for staff assistance
CHECK OUT
Booking Number:
PIN:
Main Menu
Check Out
Help

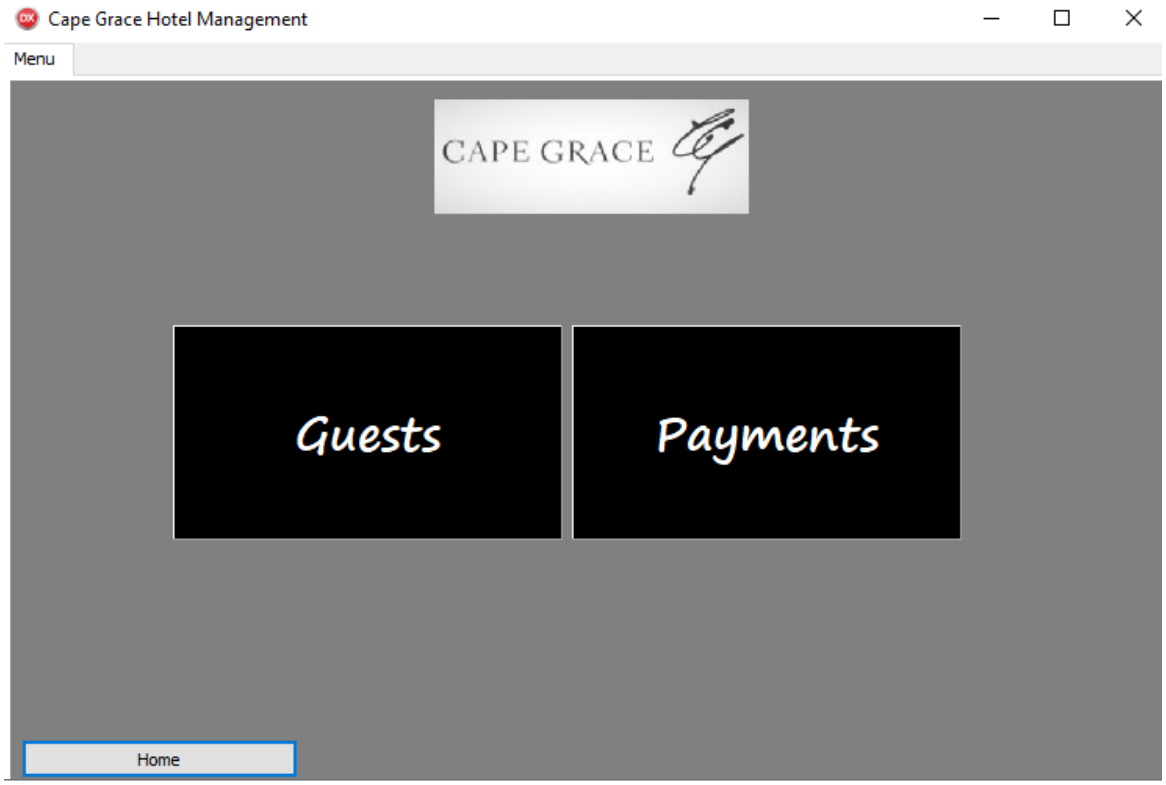

Cape Grace Hotel
Additional Extras
CAPE GRACE
Press for staff assistance
ADDITIONAL EXTRAS
Towels
Duvets
Cleaning - Room Service
Water
Garbage Removal
First Name
Last Name
Room Number
Confirm
Main Menu
Help

Cape Grace Hotel
Payments
CAPE GRACE
Press for staff assistanc
First Name
Last Name
ID Number
Type of Payment
Payment
Cheque
Savings
Credit
Card Number
Total Paying R
Confirm And Pay
Main Menu
Help

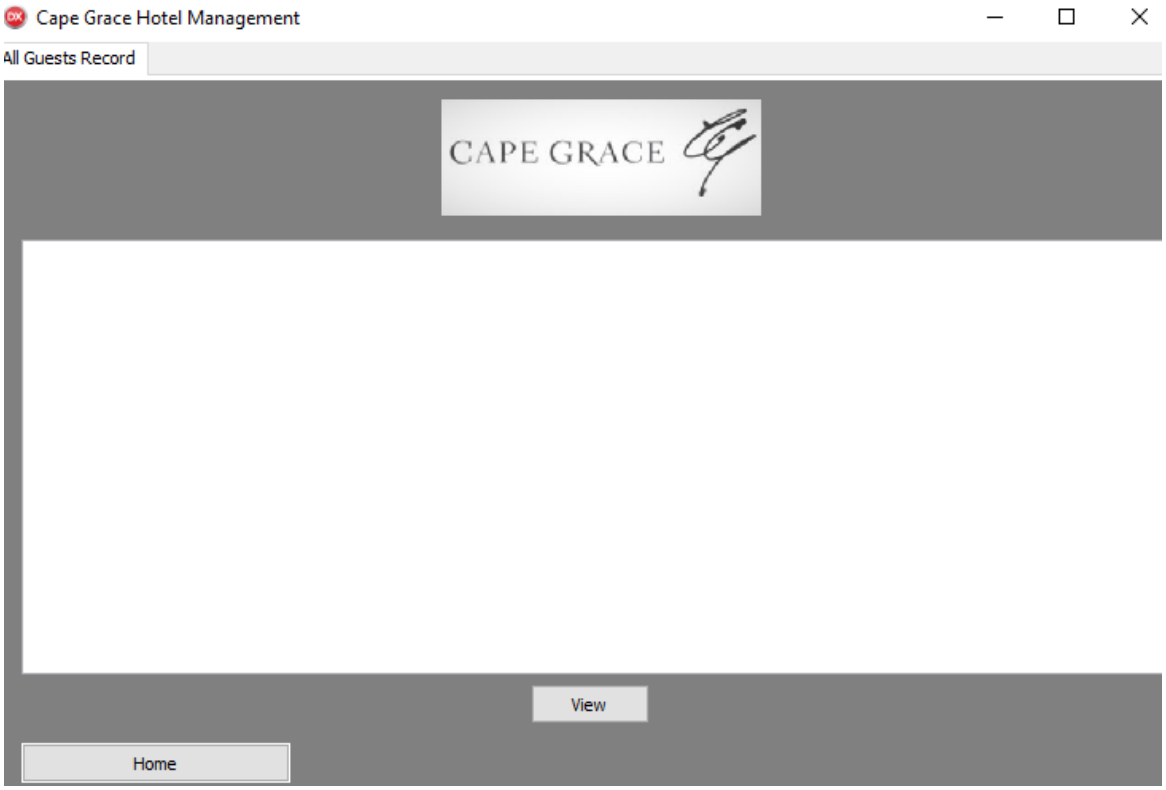

Cape Grace Hotel
Emergency
CAPE GRACE
Press for staff assistance
Choose an emergency contact below and the number will be provided
Fire Emergency
Leave your room and close the door behind you to keep smoke and flames out of the corridor. Sound the alarm. Leave
Covid-19
Increased focus on hand hygiene on all of our hotel
Increased cleaning and hygiene protocol
Regular disinfection of exposed surfaces such as door handles, card terminals and elevator buttons with anti-bacterial liquid
Offer disinfectant dispensers in public areas to our guests
Main Menu

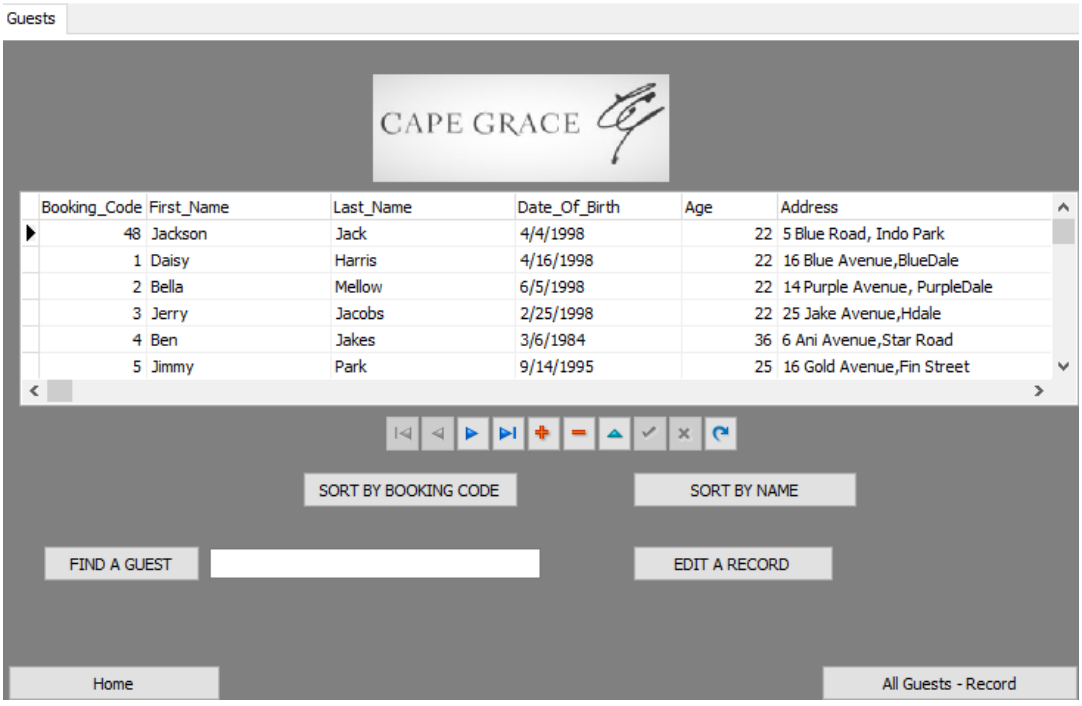

Cape Grace Hotel
Special Offers
CAPE GRACE
Press for staff assistance
Situated on the top floor, away from the hustle and bustle below, each room is designed to feel like a private retreat – perfect for those looking to escape from it all.Exhale and enjoy a personalised selection of books in a softly-lit reading area, a walk-in closet and the privacy of the top floor balcony.
Top floor rooms feature French doors that open onto step-out terrace that make the most of the Table Mountain.Special touches like fresh flowers, a reading area with personally selected books and the luxuriously marbled bathroom complete the feeling of being on top of the world, ensconced in private comfort.
Our Table Mountain Luxury Rooms boast glorious views of the iconic Table Mountain or Signal Hill.Enjoy our warm and elegant rooms with personalized details such as an reading area complete with our guests' own book selection.
Main Menu

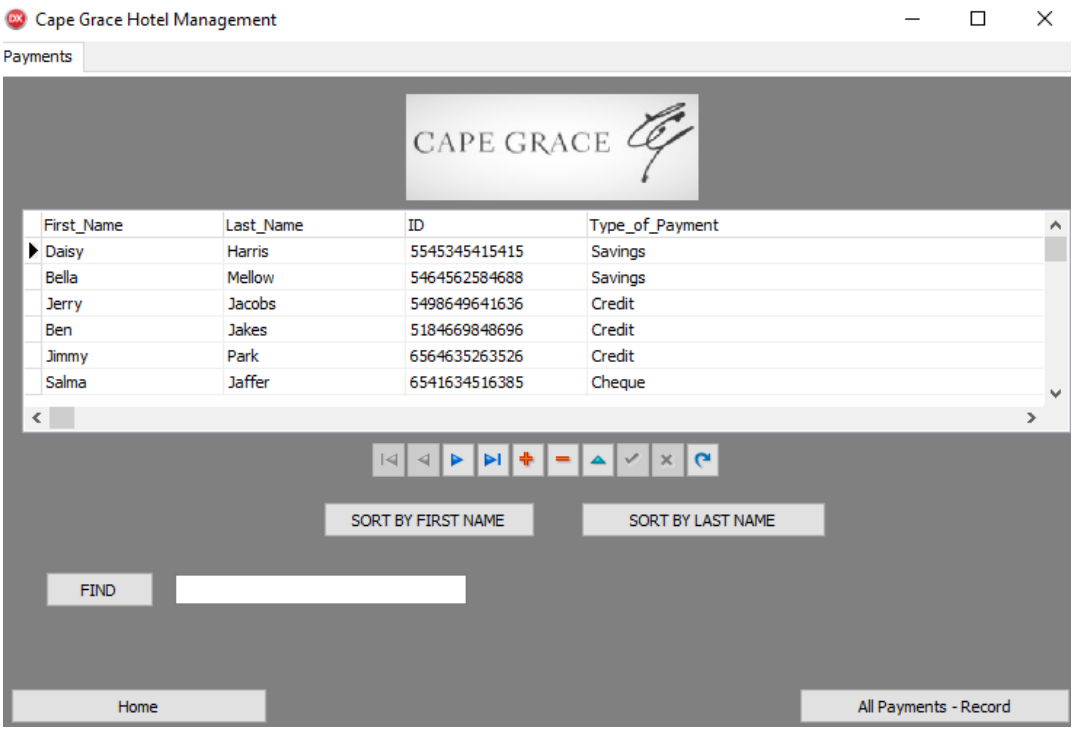

Cape Grace Hotel Management
Home
CAPE GRACE
Management
Username
Password
Enter


Cape Grace Hotel Management
Menu
CAPE GRACE
Guests
Payments
Home

Cape Grace Hotel Management
All Payments Record
CAPE GRACE
View
Home


Cape Grace Hotel Management
All Guests Record
CAPE GRACE
View
Home


Guests
CAPE GRACE
Booking_Code First_Name Last_Name Date_Of_Birth Age Address
48 Jackson Jack 4/4/1998 22 5 Blue Road, Indo Park
1 Daisy Harris 4/16/1998 22 16 Blue Avenue,BlueDale
2 Bella Mellow 6/5/1998 22 14 Purple Avenue, PurpleDale
3 Jerry Jacobs 2/25/1998 22 25 Jake Avenue,Hdale
4 Ben Jakes 3/6/1984 36 6 Ani Avenue,Star Road
5 Jimmy Park 9/14/1995 25 16 Gold Avenue,Fin Street
SORT BY BOOKING CODE
SORT BY NAME
FIND A GUEST
EDIT A RECORD
Home
All Guests - Record


Cape Grace Hotel Management
Payments
CAPE GRACE
First_Name
Last_Name
ID
Type_of_Payment
Daisy
Harris
5545345415415
Savings
Bella
Mellow
5464562584688
Savings
Jerry
Jacobs
5498649641636
Credit
Ben
Jakes
5184669848696
Credit
Jimmy
Park
6564635263526
Credit
Salma
Jaffer
6541634516385
Cheque
SORT BY FIRST NAME
SORT BY LAST NAME
FIND
Home
All Payments - Record

DATA DICTIONARY

TEXTFILES

- Extras.txt
- Guests.txt
- Payments.txt

These text files will keep a record of all the guests that has checked into the hotel, all payments the guests have made, and all the pending tasks asked by the guests.

This helps to keep track of what guests, payments, and extra services was asked so that if any guest faces a problem or the hotel picks up any fraudulent information, it will be able to pull up the record and find the problem.

ARRAYS

- Arrays are used to verify whether the PIN that was issued to the guest is correct or not.
- A message will pop up if the PIN is incorrect

DATABASES

- Table 1 (Guests) - As Guests check in, their information will be automatically entered into the database, where the staff management will be able to access the guest's information. When a guest checks out the guest's information will then be deleted off the database
- Table 2 (Payments) - This will show all the guests accounts and what they still owe, once they make a payment, their names and information will be taken off the database.
- The database will also be able to sort the guest's information according to how the staff management wants to see it. The staff may also search for a particular guest and their information will now be more elucidate.

SOFTWARE TOOL - IPO

INTERFACE 1 - GUESTS

INPUT

INPUT	COMPONENT	DATA TYPE	SOURCE	FORMAT
TABSHEET 3				
The user enters their booking code	TEdit	String	Keyboard Entry	Text
The user enters their PIN	TEdit	String	Keyboard Entry	Text
TABSHEET 4				
First Name	TEdit	String	Keyboard Entry	Text
Last Name	TEdit	String	Keyboard Entry	Text
Age	Spin Edit	Integer	Keyboard Entry Selection	Value
Date of Birth	Spin Edit	Integer	Keyboard Entry Selection	Value
ID	TEdit	String	Keyboard Entry	Text
Contact Number	TEdit	String	Keyboard Entry	Text
Booking Code	TEdit	String	Keyboard Entry	Text
Email	TEdit	String	Keyboard Entry	Text
Check Out Date	Spin Edit	Integer	Keyboard Entry Selection	Value
Address	TEdit	String	Keyboard Entry	Text
City	TEdit	String	Keyboard Entry	Text
Country	TEdit	String	Keyboard Entry	Text
TABSHEET 6				
The user enters their booking	TEdit	String	Keyboard Entry	Text

Code				
The user enters their PIN	TEdit	String	Keyboard Entry	Text
TABSHEET 7				
The guest may want more Towels	Checkbox	Boolean	Mouse Click	Character
The guest can choose how many towels they want	Spin Edit	Integer	Keyboard Entry Selection	Value
The guest may want more Duvets	Checkbox	Boolean	Mouse Click	Character
The guest can choose how many duvets they want	Spin edit	Integer	Keyboard Entry Selection	Value
The guest may want Cleaning - Room Service done	Checkbox	Boolean	Mouse Click	Character
The guest may want Water	Checkbox	Boolean	Mouse Click	Character
The guest may want Garbage Removal	Checkbox	Boolean	Mouse Click	Character
First Name	TEdit	String	Keyboard Entry	Text
Last Name	TEdit	String	Keyboard Entry	Text
Room Number	TEdit	String	Keyboard Entry	Number
TABSHEET 8				
First Name	TEdit	String	Keyboard Entry	Text
Last Name	TEdit	String	Keyboard Entry	Text
ID Number	TEdit	String	Keyboard Entry	Number
Type of Payment	Radio Group	Items	Mouse Click	Text
Card Number	TEdit	String	Keyboard Entry	Number
Total Paying	TEdit	String	Keyboard Entry	Number

TABSHEET 10				
Choose an emergency number	ComboBox	Boolean	Selection	Text

VALIDATION

WHAT WILL BE VALIDATED	ALGORITHM	MESSAGE
CHECK OUT TAB		

If the PIN corresponds to the booking code number	if iOutPIN <> (arrPIN[iBookOutNum]) then
	begin
	ShowMessage('Incorrect PIN');
	edtOutBookingNum.Text := '';
	edtOutPIN.Text := '';
	TabSheet6.Show
	end
	else
	ShowMessage
	('You have been successfully checked out of Cape Grace Hotel, We hope you had a wonderful stay and hope to see you soon!!');
	TabSheet1.Show;
		'You have been successfully checked out of Cape Grace Hotel, We hope you had a wonderful stay and hope to see you soon!!'

If the fields are empty	if (edtOutBookingNum.Text = '') OR (edtOutPIN.Text = '') then
	begin
	ShowMessage('Please fill in required fields');
	TabSheet6.Show
	End
		'Please fill in required fields'

CHECK IN TAB		

If the pin corresponds to the booking code number	if iInPIN <> (arrPIN[iBookInNum]) then
	begin
	ShowMessage('Incorrect PIN');
	edtInBookingNum.Text := '';
	edtInPIN.Text := '';
	TabSheet3.Show
	end
	else
	TabSheet4.Show;
		'Incorrect PIN'

If the fields are empty	if (edtInBookingNum.Text = '') OR (edtInPIN.Text = '') then
	begin
	ShowMessage('Please fill in required fields');
	TabSheet3.Show
	end
	else
		'Please fill in required fields'

	TabSheet4.Show;	
TABSHEET CONFRMATINS DETAILS		
If the ID number is 13 digits	if Length(edtID.Text) <> 13 then ShowMessage('Incorrect ID'); TabSheet4.Show; edtID.SetFocus;	'Incorrect ID'
TABSHEET EXTRAS		

If all the fields are not entered	if (edtExtraName.Text = '') OR (edtExtraSurname.Text = '') OR
	(edtExtraRoom.Text = '') then
	begin
	ShowMessage('Please fill in all required fields');
	TabSheet7.Show;
		'Please fill in all required fields'

PAYMENTS TAB		
If the ID number is 13 digits	if Length(edtPayID.Text) <> 13 then ShowMessage('Incorrect ID'); TabSheet8.Show;	

If all the fields are not entered	if (edtPayName.Text = '') OR (edtPaySurname.Text = '') OR
	(edtPayID.Text = '')
	OR (rgpCard.ItemIndex = -1) OR (edtPayCard.Text = '') OR
	(edtPayTotal.Text = '') then
	begin
	ShowMessage('Please fill in all required fields');
	TabSheet8.Show
	end
	else
	ShowMessage
	('Your payment has been authorized, you will receive an
	SMS to confirm the transaction');
	TabSheet1.Show;
		'Your payment has been authorized, you will receive an SMS to confirm the transaction'
		
		'Please fill in all required fields'

PROCESSING

WHAT WILL BE PROCESSED	ALGORITHMS
TABSHEET 3	
Once the guest has successfully checked in with their booking code and PIN, the arrival date will automatically be visible as the date they	edtArrival.Text := DateToStr(Date);

checked in	
TABSHEET 4	
The information the guest entered will be stored in a text file which wil be accessed by the management	AssignFile(tGuests, 'Guests.txt'); Append(tGuests); Writeln(tGuests, sTextName); Writeln(tGuests, sTextSurname); Writeln(tGuests, sTextAge); Writeln(tGuests, sTextBirthday); Writeln(tGuests, sTextID); Writeln(tGuests, sTextEmail); Writeln(tGuests, sTextNumber); Writeln(tGuests, sTextBookingCode); Writeln(tGuests, sTextAddress); Writeln(tGuests, sTextArrival); Writeln(tGuests, sTextCity); Writeln(tGuests, sTextCountry); Writeln(tGuests, sTextArrival); Writeln(tGuests, sTextDeparture); Writeln(tGuests, '----------'); CloseFile(tGuests);
Making the room number visible	randomize; edtRoom.Text := IntToStr(Random(400)); TabSheet5.Show;

As the guests enter their information and check in their information will automatically be entered into the hotels database	dmCapeGrace.tblGuests.Last;
	dmCapeGrace.tblGuests.Insert;
	dmCapeGrace.tblGuests['First_Name'] := edtName.Text;
	dmCapeGrace.tblGuests['Last_Name'] := edtSurname.Text;
	dmCapeGrace.tblGuests['Date_Of_Birth'] := sBirthday;
	dmCapeGrace.tblGuests['Age'] := spnAge.value;
	dmCapeGrace.tblGuests['Address'] := edtAddress.Text;
	dmCapeGrace.tblGuests['Contact_Number'] := edtContactNumber.Text;
	dmCapeGrace.tblGuests['Email'] := edtEmail.Text;
	dmCapeGrace.tblGuests['Arrival'] := edtArrival.Text;
	dmCapeGrace.tblGuests['Check_Out_Date'] := sDeparture;
	dmCapeGrace.tblGuests['City'] := edtCity.Text;
	dmCapeGrace.tblGuests['Country'] := edtCountry.Text;
	dmCapeGrace.tblGuests.Post;
	// adding new records to the database PAYMENTS
	dmCapeGrace.tblPayments.Last;
	dmCapeGrace.tblPayments.Insert;
	dmCapeGrace.tblPayments['ID'] := edtID.Text;
	dmCapeGrace.tblPayments['Total_Paying'] := StrToFloat(lblRoomName.Caption);
	dmCapeGrace.tblPayments['Card_Number'] := sCardNum;

	dmCapeGrace.tblPayments['Type_Of_Payment'] := 'Credit'; dmCapeGrace.tblPayments.Post;
TABSHEET 5	
The guest has to press a blue button to activate the scanner so that the key card will be scanned with the room number	Beep;
TABSHEET 6	

The user is ready to check out after they enter their booking code and PIN, but for the management to know that the guest has checked out, the information of that guest will be deleted in the database	with dmCapeGrace do
	begin
	if (dmCapeGrace.tblGuests.Locate('First_Name', edtNameCheckOut.Text, [])
	= true) AND (dmCapeGrace.tblGuests.Locate('Last_Name',
	edtSurnameCheckOut.Text, []) = true) then
	begin
	dmCapeGrace.tblGuests.Delete;
	end;
	if tblPayments['PaymentID'] = edtOutBookingNum.Text then
	tblPayments .Delete;

TABSHEET 7	

A dynamic button will appear once the guest has confirmed the order	btnAgree := TButton.Create(btnConfirmDetails);
	with btnAgree do
	begin
	Caption := 'Ágree';
	Height := 25;
	Width := 75;
	Top := 448;
	Left := 304;
	Parent := Panel7;
	OnClick := btnAgreeClick;
	End;

This information is also automatically written in a text file so that the hotel has a record of the pending tasks	AssignFile(tExtras, 'Extras.txt'); Append(tExtras); Writeln(tExtras, sTextExtraName); Writeln(tExtras, sTextExtraSurname); Writeln(tExtras, sTextExtraRoom); Writeln(tExtras, sTextExtraExtras); Writeln(tExtras, '_____'); CloseFile(tExtras);
TABSHEET 8	

This information is automatically written in a text file so that the hotel has a record of the payments the guest has made	AssignFile(tPayments, 'Payments.txt'); Append(tPayments); Writeln(tPayments, sTextPayName); Writeln(tPayments, sTextPaySurname); Writeln(tPayments, sTextID); Writeln(tPayments, sTextCardType); Writeln(tPayments, sTextCardNum); Writeln(tPayments, sTextTotal); Writeln(tPayments, '_____'); CloseFile(tPayments);

By the guest paying and confirming, their details will now need to be taken off the payments database so that it's easier for the hotel to see the guests still owing money	with dmCapeGrace do
	begin
	if tblPayments['ID']= edtPayID.Text
	then
	begin
	tblPayments.Delete;
	end;
	end;

Dynamic Component - Button (Tab sheet 7)

OUTPUT

WHAT WILL BE DISPLAYED	FORMAT	COMPONENT
TABSHEET 7		

If the user wants any extra amenities they will have to choose and fill in their details so that the staff will know which room to deliver it to, the guest will be able to confirm their order	memExtras.Lines.Add('Request');
	memExtras.Lines.Add('Name: ' + sExtraName);
	memExtras.Lines.Add('Surname: ' + sExtraSurname);
	memExtras.Lines.Add('Room: ' + IntToStr(iExtraRoomNumber));
	memExtras.Lines.Add('_____');
	memExtras.Lines.Add('Extras');
	memExtras.Lines.Add(sExtra);
		Memo

TABSHEET 10		
The emergency number the guest selected will now be visible	case cmbEmergency.ItemIndex of 0: pnlEmergencyNumber.Caption := '10111'; 1:	Panel

	pnlEmergencyNumber.Caption := '10177'; 2: pnlEmergencyNumber.Caption := '021 434 2020'; 3: pnlEmergencyNumber.Caption := '086 155 5777'; end;	

INTERFACE 2 - MANAGEMENT

INPUT

INPUT	COMPONENT	DATA TYPE	SOURCE	FORMAT
TABSHEET 1				
Username	TEdit	String	Keyboard Entry	Text
Password	TEdit	String	Keyboard Entry	Text
TABSHEET 2				
Guest Password	Input Box	String	Keyboard Entry	Text
Payments Password	Input Box	String	Keyboard Entry	Text
Extras Password	Input Box	String	Keyboard Entry	Text
TABSHEET 3				
A guests name	TEdit	String	Keyboard Entry	Text
TABSHEET 5				
A guests name	TEdit	String	Keyboard Entry	Text

VALIDATION

WHAT WILL BE VALIDATED	ALGORITHM	MESSAGE
TABSHEET 1		

Checks whether the password and username are correct	if (edtUsername.Text <> 'CGM') OR (edtPassword.Text <> 'CG160919') then
	begin
	ShowMessage
	('Username or Password is not correct, Please Re-enter your username and password');
	Tab1.Show
	end
	else
	Tab1.TabVisible := false;
	Tab2.TabVisible := true;
	Tab2.Visible := true;
	Tab3.TabVisible := false;
	Tab4.TabVisible := false;
	Tab5.TabVisible := false;
	Tab6.TabVisible := false;
	end;
		'Username or Password is not correct, Please Re-enter your username and password'

TABSHEET 2		

Checks whether the Extras Password is correct	sExtrasPassword := InputBox('Guests', 'Please enter the Password', '');
	// validation
	if (sExtrasPassword = 'CGE') then
	begin
	Tab1.TabVisible := false;
	Tab2.TabVisible := false;
	Tab3.TabVisible := false;
	Tab4.TabVisible := false;
	Tab5.TabVisible := false;
	Tab6.TabVisible := false;
	Tab7.TabVisible := true;
	Tab7.Visible := true;
	end
	else
	ShowMessage('Incorrect Password');
		'Incorrect Password'

Checks whether the Guests password is correct	sGuestsPassword := InputBox('Guests', 'Please enter the Password', '');
	// validation
	if (sGuestsPassword = 'CGG') then
	begin
	Tab1.TabVisible := false;
	Tab2.TabVisible := false;
		'Incorrect Password'

	Tab3.TabVisible := true;
	Tab3.Visible := true;
	Tab4.TabVisible := false;
	Tab5.TabVisible := false;
	Tab6.TabVisible := false;
	Tab7.TabVisible := false;
	end
	else
	ShowMessage('Incorrect Password');
	end;	

Checks whether the Payments password is correct	sPaymentsPassword := InputBox('Payments', 'Please enter the Password', '');
	// validation
	if (sGuestsPassword = 'CGP') then
	begin
	Tab1.TabVisible := false;
	Tab2.TabVisible := false;
	Tab3.TabVisible := false;
	Tab4.TabVisible := false;
	Tab5.TabVisible := true;
	Tab5.Visible := true;
	Tab6.TabVisible := false;
	Tab7.TabVisible := false;
	end
	else
	ShowMessage('Incorrect Password');
	End;
		'Incorrect Password'

PROCESSING

WHAT WILL BE PROCESSED	ALGORITHMS
TABSHEET 3	
The staff can sort the guests according to their arrival	dmCapeGrace.tblGuests.Sort := 'Arrival ASC';
The staff can sort the guests according to their name (Ascending order)	dmCapeGrace.tblGuests.Sort := 'First_Name ASC';

The staff can find a specific guest by just typing their name in	sFind := edtFind.Text;
	if dmCapeGrace.tblGuests.Locate('First_Name', sFind, []) = true then
	begin
	ShowMessage('Found! ' + dmCapeGrace.tblGuests['First_Name'] +
	' is currently staying at Cape Grace Hotel');

	end
	else
	begin
	ShowMessage('Guest Not Found!');
	end;

The Staff can edit a specific guest's information	iBookingCodeEdit := StrToInt(InputBox('Booking Code',
	'Enter a Booking Code you want to change', '5'));
	sWhat := InputBox('Field To Change', 'Enter what field you want to change',
	'First_Name');
	
	if sWhat = 'First_Name' then
	begin
	sFirstNameEdit := InputBox('Name',
	'Enter a name you want to change', 'Jerry');
	dmCapeGrace.tblGuests.Edit;
	dmCapeGrace.tblGuests['First_Name'] := sFirstNameEdit;
	dmCapeGrace.tblGuests.Post;
	end
	
	else if sWhat = 'Last_Name' then
	begin
	sLastNameEdit := InputBox('Surname',
	'Enter a surname you want to change', '');
	dmCapeGrace.tblGuests.Edit;
	dmCapeGrace.tblGuests['Last_Name'] := sLastNameEdit;
	dmCapeGrace.tblGuests.Post;
	end
	
	else if sWhat = 'Date_Of_Birth' then
	begin
	sDateOfBirthEdit := InputBox('Birth Date',
	'Enter a Birth Date you want to change', '');
	dmCapeGrace.tblGuests.Edit;
	dmCapeGrace.tblGuests['Date_Of_Birth'] := sDateOfBirthEdit;
	dmCapeGrace.tblGuests.Post;
	end
	
	else if sWhat = 'Age' then
	begin
	iAgeEdit := StrToInt(InputBox('Age',
	'Enter an Age you want to change', ''));
	dmCapeGrace.tblGuests.Edit;
	dmCapeGrace.tblGuests['Age'] := iAgeEdit;
	dmCapeGrace.tblGuests.Post;
	end
	
	else if sWhat = 'Address' then
	begin

```
  sAddressEdit := InputBox('Address',
    'Enter a address you want to change', '');
  dmCapeGrace.tblGuests.Edit;
  dmCapeGrace.tblGuests['Address'] := sAddressEdit;
  dmCapeGrace.tblGuests.Post;
 end

 else if sWhat = 'Contact_Number' then
 begin
  sContactNumberEdit := InputBox('Contact Number',
    'Enter a contact number you want to change', '');
  dmCapeGrace.tblGuests.Edit;
  dmCapeGrace.tblGuests['Contact_Number'] := sContactNumberEdit;
  dmCapeGrace.tblGuests.Post;
 end

 else if sWhat = 'Email' then
 begin
  sEmailEdit := InputBox('Email', 'Enter a email you you want to change', '');
  dmCapeGrace.tblGuests.Edit;
  dmCapeGrace.tblGuests['Email'] := sEmailEdit;
  dmCapeGrace.tblGuests.Post;
 end

 else if sWhat = 'Arrival' then
 begin
  sArrivalEdit := InputBox('Arrival',
    'Enter a arrival date you want to change', '');
  dmCapeGrace.tblGuests.Edit;
  dmCapeGrace.tblGuests['Arrival'] := sArrivalEdit;
  dmCapeGrace.tblGuests.Post;
 end

 else if sWhat = 'Check_Out_Date' then
 begin
  sCheckOutEdit := InputBox('Check Out Date',
    'Enter a Check Out date you want to change', '');
  dmCapeGrace.tblGuests.Edit;
  dmCapeGrace.tblGuests['Check_Out_Date'] := sCheckOutEdit;
  dmCapeGrace.tblGuests.Post;
 end

 else if sWhat = 'City' then
 begin
  sCityEdit := InputBox('City', 'Enter a city you want to change', '');
  dmCapeGrace.tblGuests.Edit;
  dmCapeGrace.tblGuests['City'] := sCityEdit;
  dmCapeGrace.tblGuests.Post;
```

	end
	
	else if sWhat = 'Country' then
	begin
	sCountryEdit := InputBox('Country',
	'Enter a country you want to change', '');
	dmCapeGrace.tblGuests.Edit;
	dmCapeGrace.tblGuests['Country'] := sCountryEdit;
	dmCapeGrace.tblGuests.Post;

TABSHEET 4	

The staff will be able to access the text file holding all the guests information that has ever stayed at the hotel	AssignFile(tGuests, 'Guests.txt');
	try
	Reset(tGuests);
	except
	ShowMessage('File not found');
	Exit
	end;
	while NOT Eof(tGuests) do
	begin
	Readln(tGuests, sLine);
	redGuests.Lines.Add(sLine);
	end;
	CloseFile(tGuests);

TABSHEET 5	
The staff can sort the guests according to their Payment ID	dmCapeGrace.tblPayments.Sort := 'PaymentID ASC';
The staff can sort the guests according to the type of Payment	dmCapeGrace.tblPayments.Sort := 'Type_of_payment ASC';

The staff can find a specific guest by just typing their name in	sFindPayments := edtFindPayments.Text;
	if dmCapeGrace.tblPayments.Locate('ID', sFindPayments, []) = true then
	begin
	ShowMessage('Found! ' + dmCapeGrace.tblPayments['ID'] +
	' account is still owing');
	end
	else
	begin
	ShowMessage('Guest Not Found!');
	end;

OUTPUT

WHAT WILL BE DISPLAYED	FORMAT	COMPONENT
	TABSHEET 4	

The staff will be able to access the text file holding all the guests information that has ever stayed at the hotel	AssignFile(tGuests, 'Guests.txt');
	try
	Reset(tGuests);
	except
	ShowMessage('File not found');
	Exit
	end;
	while NOT Eof(tGuests) do
	begin
	Readln(tGuests, sLine);
	redGuests.Lines.Add(sLine);
	end;
	CloseFile(tGuests);
		RichEdit

	TABSHEET 6	

The staff will be able to access the text file holding all the payments of the guests	AssignFile(tPayments, 'Payments.txt');
	try
	Reset(tPayments);
	except
	ShowMessage('File not found');
	Exit
	end;
	while NOT Eof(tPayments) do
	begin
	Readln(tPayments, sPayLine);
	redPayments.Lines.Add(sPayLine);
	end;
	CloseFile(tPayments);
		RichEdit

	TABSHEET 7	

The staff will be able to access the text file holding all the Extras the guests had ordered	AssignFile(tExtras, 'Extras.txt');
	try
	Reset(tExtras);
	except
	ShowMessage('File not found');
	Exit
	end;
	while NOT Eof(tExtras) do
	begin
	Readln(tExtras, sExtraLine);
	redPayments.Lines.Add(sExtraLine);
		RichEdit

	end; CloseFile(tExtras);	