



جامعة السلطان قابوس
Sultan Qaboos University

**Introduction to Management
Information Systems (INFS2412/110)**

Section 11

INCOURTS

Indoor Sports Court Rental Database System



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Introduction

Business Description

It can be challenging for many people to find a place to play sports that is well-equipped, convenient, and safe. In our “INCOURTS” project, which is an indoor sports court rental, we aim to meet the demands by offering outstanding facilities and a productive reservation system. It's effortless to reserve a court at your convenience with our sophisticated booking system, without the need of members to physically visit the location unless for the first visit to register and put their details.

Additionally, the members will be able to use the online booking if they have physically registered prior. We are here to turn your sports experience into a planned and entertaining activity, regardless of whether you play alone, in a group, or trying to get better.

Our organization offers a range of courts, including football fields, padel courts, volleyball courts, and spaces for other sports. Our facilities are designed to give you comfort and convenience, and they include hygienic shower areas, safe locker rooms, and well-maintained equipment.

Furthermore, we also have access to qualified coaches who can instruct players of all skill levels. Our services are appropriate for both beginner and experienced athletes since these professionals are committed to assist you to improve your abilities and reach your fitness objectives.

Problems faced & System solutions

Previously renting entities were calculating and recording their revenues and bookings slots through paper and pen. As a result, it might cause a miscalculation of employee salaries and inconvenience for the members. However, in our business we offer a professional system to reduce the risks of loss and theft of information. We guarantee a flawless booking experience with flexible scheduling choices and special offers for groups or regular users. Our facilities offer enough rooms and areas for larger gatherings so that everyone can be adequately accommodated.

Objective

Creating a single, unified structure that stores all organizational data is our goal. The system developed ensures that all data is securely stored in one place, which makes it easier to access, manage, and retrieve information as needed. The system will benefit the company as it will boost productivity.

Intended Users

Who & Why

Among our company's intended users of the system are coaches and clients (members). Members are the primary users and they are the ones who will make court reservations via the booking system, utilize the facilities, and take part in other athletic activities. Coaches have the role to supervise and train clients in order to improve their abilities and overall experience, they serve as both users and guides. On the other hand, employees are essential system users since they manage and support the court rental process, guarantee effective scheduling, and maintain excellent facilities in order to give customers a flawless experience.

Access Level

The access levels are for members 16 years of age and older, who can reserve courts independently. While members that are under the age of 16, require an adult to reserve on their behalf.

How Many

In addition, the system allows reservations for both large multipurpose courts that can hold 12–16 people and small multipurpose courts that can hold 4–6 people. Additionally, groups of four people can use the padel courts.

Purpose Of System

It is expected that users will interact with the system for a variety of reasons, such as entertainment, sports events including tournaments (such inter-school competitions), sports days, and fitness and health activities. To meet these various objectives, the system guarantees easy scheduling and access.

Motive Behind Creating The System

The Current Scenario

Currently, the gym schedules coaches, keeps track of court reservations, and registers members using a traditional, paper-based method. In order to reserve a time slot, members are required to phone the gym during business hours or visit in person. Although this method was effective when implemented with a smaller number of members, however, this process is no longer practical nor easy to implement with the increasing number of members in the gym..

Staff manually check the availability of physical logbooks or spreadsheets; that requires a lot of time and may lead to mistakes such as double bookings or loss of records. This system also proves inconvenient for members who reside far away or want to book outside of normal opening hours, as there is no way to check court availability electronically. In busy times, there are many waiting lines and conflicts over bookings, all of which annoy both staff and members.

Additionally, the absence of an efficient system makes it difficult to organize the way the courts are used or booked. Operations are hampered by this inefficiency, which restricts the potential for service improvement. Therefore an automated database solution is required as the current system can no longer cope with the increasing number of members.

Problems being faced by the entity

There are several issues that the gym experiences, all of which are a result of manual systematic operations. First, the staff must spend a large portion of their time manually handling reservations, as well as verifying availability, and resolving scheduling problems, which all too frequently causes delays and frustration for both members and staff.

Second, mistakes are more likely to occur when people are involved, in other words, human error can emerge. Confusion and member dissatisfaction are frequently caused by double booking, misplaced paperwork, and incorrect timetables. Third, it is inconvenient for members to reserve courts; they must do it by contacting or going to the gym during business hours. Members with hectic schedules or those who want to make reservations far in advance will find this particularly challenging.

Finally, centralized data management would allow the gym to monitor and analyze data better. These inefficiencies will lead to a lower operational effectiveness and decrease the time available for members to enjoy high-quality service.

Database System Solve Existing Problems

This system provides multiple advantages such as:

- Optimise processes by eliminating the non-computerised work.
- Organise all records in one place for easy and quick access, including member and coach information, court schedules and booking records.
- The increased efficiency reduces the workload of employees where they can devote their time to other tasks.
- Calculate the revenue accrued and salaries for coaches with no human error.

Proposed System Value To The Organization

The usage of the proposed system will provide the organization with an advantage that others do not have. With the system making it easier and more efficient for members to book courts without the need to call to book a court.

This makes it easier to navigate bookings and helps in making reports for the organization, which leads the company to set up higher goals to reach a higher value. Moreover, the system will help gain more members as it will make it more flexible with booking to increase the number of members which will lead to minimal effort but higher achievement to organization goals.

The system will also make it easier for the organization to keep track of valuable information, which would help the organization to be more productive and ensure customer satisfaction, resulting in an advanced operating system.

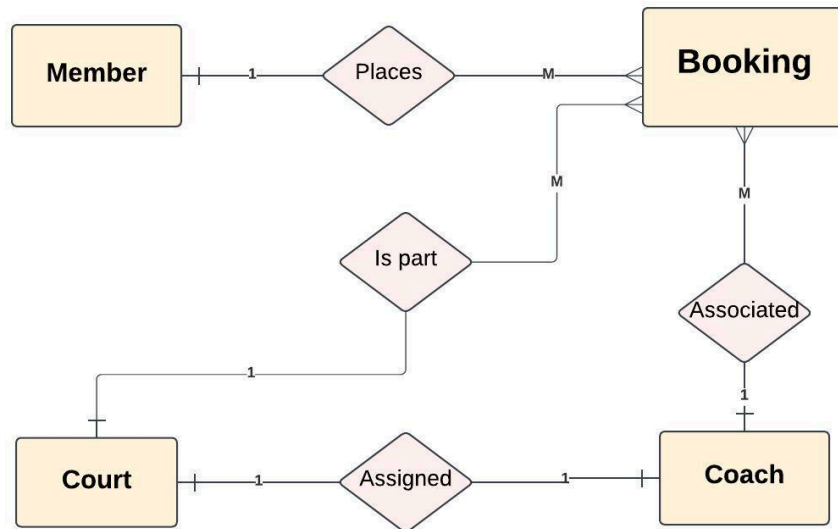
General Description Of The Proposed System

The proposed database system has been planned as an optimum system to meet the crucial aspects of a sports facility efficiently. These include booking management, court allocation, member record, coach assignments, and others in one place. This system is designed to replace the outdated paper-based system, in an attempt to increase the efficiency, comprehensiveness, and security of data storage.

The system enhances members' ability to make bookings. Furthermore, it has active member profiles and records their booking history and other specialized requirements. For easier management of resources, availability of resources, and generating of reports, the administrators can conveniently view them through the system.

In general, the system is an advanced approach that helps to coordinate and improve many processes, control the usage of resources, and enhance the purpose of the sports facility to deliver better services to its members.

Entity Relationship Diagram (ERD)

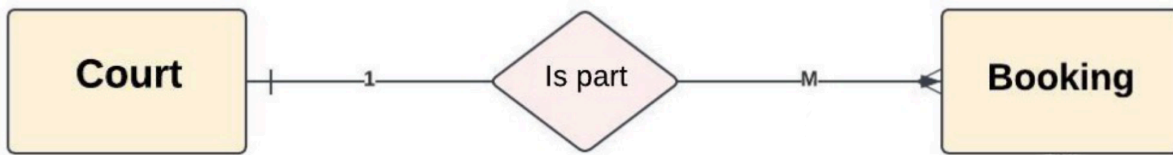


(Member to Booking)



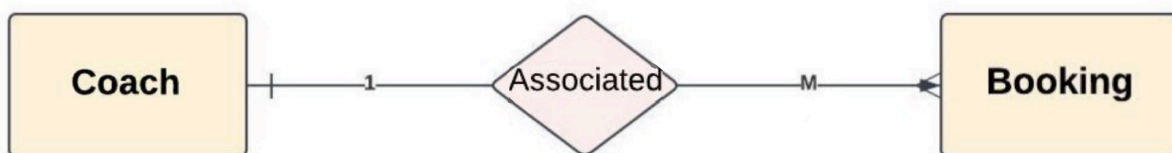
It signifies that a member can make one or many bookings which enables him/her to book for courts or organize for a coaching session. The relationship is one-to-many (1:M), since one member can put one or many bookings, but each booking is attached to only one member.

(Court to Booking)



This relationship means that every booking involves a particular court. The relationship is one-to-many (1:M), which means, one court may participate in multiple bookings at different times while a booking can involve only one court at a time.

(Coach to Booking)



It shows that a coach can be allocated to bookings for coaching. The relationship is one-to-many (1:M), because the same coach may be connected to several bookings, while a single booking can include only one coach.

(Court to Coach)



It shows that a coach may be appointed to a court for supervision or for conducting sessions. This relationship is one-to-one (1:1), which means that one Court can only have one coach at any given time and we also found out that one coach can only work at one Court at one time.

TABLES

Courts Table:

This table consists of information about our four courts available for booking. Their IDs, names and prices per hour are listed here. Each court is associated with one coach. The primary key in this table is the CourtID which uniquely identifies each court in the table since we have four main courts and they are:

- Big multi-purpose court with the ID of MP1
- Small multi-purpose court with the ID of MP2
- Small multi-purpose court with the ID of MP3
- Padel court with the ID of MP4

Design View

	Field Name	Data Type
TE	CourtID	Short Text
	CourtType	Short Text
	PricePerHour	Currency

Datasheet View

	CourtID ▼	CourtType ▼	PricePerHour ▼
+	MP1	Multi-purpose Big	£30.00
+	MP2	Multi-purpose Small	£25.00
+	MP3	Multi-purpose Small	£25.00
+	MP4	Padel	£20.00

Coaches Table:

As mentioned above, each coach is assigned to one court. In the coaches table it is shown which court is assigned to whom. Aside from that information, the coaches' IDs, names and phone numbers are available here. The CoachID is the primary key and the CourtID acts as the foreign key which links each coach to their specific court, establishing a relationship between the Coaches table and the Courts table.

Design View

	Field Name	Data Type
	CoachID	Short Text
	CoachFName	Short Text
	CoachLName	Short Text
	CNumber	Number
	CourtID	Short Text

Datasheet View

	CoachID	CoachFName	CoachLName	CNumber	CourtID
+	C01	Ali	Abdullah	99876530	MP1
+	C02	Ahmed	Mohammed	99763210	MP2
+	C03	Saeed	Mohammed	97422460	MP3
+	C04	Aisha	Ali	97654550	MP4

Members Table:

Each member is assigned an ID for it to be linked to the booking table when they want to book a court. It includes the client's important details such as their first name, last name and their phone number. The unique identifier in this table is the MemberID.

Design View

	Field Name	Data Type
	MemberID	Short Text
	MemberFName	Short Text
	MemberLName	Short Text
	MNumber	Number

Datasheet View

	MemberID	MemberFName	MemberLName	MNumber
+	MB01	Ahmed	Al Busaidi	98642580
+	MB02	Reham	Al Riyami	93568460
+	MB03	Saif	Al Kaabi	99333533
+	MB04	Saeed	Al Alawi	99774428
+	MB05	Abdullah	Al Hasani	98883433
+	MB06	Talal	Salem	94725370
+	MB07	Harith	Al Taie	74552870
+	MB08	Rahma	Yousuf	73757380
+	MB09	Rahaf	Al Hashim	90190994

Bookings Table:

The booking table is connected with the above three tables: Members, Coaches and Courts. In this table having CourtID, BookingDate, and Timing as primary keys together creates a combined primary key, ensuring that:

- CourtID identifies the specific court being booked.
- BookingDate ensures that the booking is tied to a particular day.
- Timing specifies the exact time slot for the booking.

This combination prevents duplicate bookings for the same court at the same time on the same day, ensuring unique entries and avoiding scheduling conflicts.

Design View

	Field Name	Data Type
	BookingID	AutoNumber
	CourtID	Short Text
	BookingDate	Date/Time
	Timing	Short Text
	MemberID	Short Text
	CoachID	Short Text

Datasheet View

	BookingID ▾	CourtID ▾	BookingDate ▾	Timing ▾	MemberID ▾	CoachID ▾
	B17	MP1	06/12/2024	12:00-1400	MB05	C01
	B16	MP1	12/12/2024	14:00-16:00	MB07	C01
	B18	MP1	13/12/2024	16:00-18:00	MB02	C01
	B03	MP1	28/12/2024	10:00-12:00	MB01	C01
	B04	MP1	28/12/2024	14:00-16:00	MB02	C01
	B14	MP2	20/12/2024	12:00-1400	MB08	C02
	B05	MP2	28/12/2024	16:00-18:00	MB03	C02
	B10	MP3	11/12/2024	18:00-20:00	MB05	C03
	B15	MP4	10/12/2024	12:00-1400	MB06	C04
	B06	MP4	15/12/2024	10:00-12:00	MB04	C04

QUERIES

Price Per Booking Query:

This query is used to display the bookings made by the members and it includes details such as the booking's ID, court type selected, the price of the court per hour, the booking price and the date of the booking.

In the design view, based on BOOKING and COURTS tables, we displayed the BookingID, CourtType, BookingDate, PricePerHour and an expression named "BookingPrice" was created to calculate the price of a booking by multiplying the PricePerHour field from the COURTS table by 2, as the minimum booking duration is two hours.

Design View

Field:	BookingID	CourtType	PricePerHour	BookingPrice: [COURTS].[PricePerHour]*2	BookingDate
Table:	BOOKING	COURTS	COURTS		BOOKING
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:					
or:					

Datasheet View

	BookingID	CourtType	PricePerHour	BookingPrice	BookingDate
	B16	Multi-purpose Big	£30.00	£60.00	12/12/2024
	B17	Multi-purpose Big	£30.00	£60.00	06/12/2024
	B18	Multi-purpose Big	£30.00	£60.00	13/12/2024
	B03	Multi-purpose Big	£30.00	£60.00	28/12/2024
	B04	Multi-purpose Big	£30.00	£60.00	28/12/2024
	B05	Multi-purpose Small	£25.00	£50.00	28/12/2024
	B14	Multi-purpose Small	£25.00	£50.00	20/12/2024
	B10	Multi-purpose Small	£25.00	£50.00	11/12/2024
	B06	Padel	£20.00	£40.00	15/12/2024
	B15	Padel	£20.00	£40.00	10/12/2024

Monthly Revenue Query:

This query is used to calculate the organization's monthly revenue. When the query is accessed, two pop up messages will appear and the user is required to enter the month and year desired to get the related information based on what is written in the message. This will direct the user to a sheet with fields demonstrating the number of bookings booked that month as well as the total sum of revenue earned.

In the design view, based on the BOOKING table and Price Per Booking query, we displayed the number of bookings booked by the members from BookingID and the sum of the prices from BookingPrice; both fields were chosen from the Price Per Booking query. We made two expressions for the month and year, in the totals we used the Where function which allows us to find the month and year from the BookingDate field in the BOOKING table.

Design View

Field:	BookingID	BookingPrice	Month([Price Per Booking]![BookingDate])	Year([Price Per Booking]![BookingDate])
Table:	Price Per Booking	Price Per Booking		
Total:	Count	Sum	Where	Where
Sort:				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Criteria:			[Which month do you want to view?]	[Which year do you want to view?]
or:				

Pop Up Messages

<div>Enter Parameter... ? X</div> <div>Which month do you want to view?</div> <div><input type="text"/></div> <div>OK Cancel</div>	<div>Enter Parameter... ? X</div> <div>Which year do you want to view?</div> <div><input type="text"/></div> <div>OK Cancel</div>
--	---

Datasheet View

CountOfBookingID	SumOfBookingPrice
10	£530.00

Coaches Query:

The coaches query is created for the purpose of creating the form. This was generated based on the COURTS table only. The fields that are displayed are the coach's own ID, coach first name, coach last name, the coach's number and the court ID that they are assigned to. There are no specific criteria or expressions.

Design View

Field:	CoachID	CoachFName	CoachLName	CNumber	CourtID
Table:	COACHES	COACHES	COACHES	COACHES	COACHES
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:					
or:					

Datasheet View

	CoachID	CoachFName	CoachLName	CNumber	CourtID
	C01	Ali	Abdullah	99876530	MP1
	C02	Ahmed	Mohammed	99763210	MP2
	C03	Saeed	Mohammed	97422460	MP3
	C04	Aisha	Ali	97654550	MP4

Coaches Salary Query:

The motive of this query is to calculate each coach's salaries which will later be used to make the related report. Two main tables were used in this query in order to get the required information, COACHES table and the BOOKING table. The information that is shown includes the fields such as the coach ID, the number of times the coach was booked, a bonus if any and the coaches' salary.

In the design view, the CoachID was from the BOOKING table and there were two of CoachID since the second one was used for the purpose of counting how many times the coaches were booked, so in the totals we used the Count function. We used the build function to created the expression for the bonus and this was calculated using the formula:

- **Bonus:** $\text{IIf}([\text{CountOfCoachID}] \geq 5, 10, 0)$

This means that if any of the coaches were booked for five or more times (at least 10 hours) then a bonus of 10 OMR will automatically be added to their salaries.

We also made an expression called “CoachSalary” which included the formula:

- **CoachSalary:** $2 * [\text{CountOfCoachID}] * 20 + [\text{Bonus}]$

As it was determined with the coaches from the start is that their wages per hour are 20 OMR and a bonus of 10 OMR will be added if the coaches were booked for five or more times (at least 10 hours), so this formula is used to automatically calculate the correct output.

Design View

Field:	CoachID	CoachID	Bonus: IIf([CountOfCoachID] >= 5, 10, 0)	CoachSalary: 2*[CountOfCoachID]*20+[Bonus]
Table:	BOOKING	BOOKING		
Total:	Group By	Count	Expression	Expression
Sort:				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:				
or:				

Datasheet View

	CoachID ▾	CountOfCoachID ▾	Bonus ▾	CoachSalary ▾
	C01	5	10	£210.00
	C02	2	0	£80.00
	C03	1	0	£40.00
	C04	2	0	£80.00

Members Query:

The goal of this is to simply create a form that is directly related to the query. The MEMBERS table is the main table used to transfer vital details about the members such as the member's ID, their first name, last name and their phone number.

In the design view, from the MEMBERS table we displayed the following fields: MemberID, MemberFName, MemberLName and MNumber.

Design View

Field:	MemberID	MemberFName	MemberLName	MNumber
Table:	MEMBERS	MEMBERS	MEMBERS	MEMBERS
Sort:				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:				
or:				

Datasheet View

	MemberID ▼	MemberFName ▼	MemberLName ▼	MNumber ▼
	MB01	Ahmed	Al Busaidi	98642580
	MB02	Reham	Al Riyami	93568460
	MB03	Saif	Al Kaabi	99333533
	MB04	Saeed	Al Alawi	99774428
	MB05	Abdullah	Al Hasani	98883433
	MB06	Talal	Salem	94725370
	MB07	Harith	Al Taie	74552870
	MB08	Rahma	Yousuf	73757380
	MB09	Rahaf	Al Hashim	90190994

Making A Booking Query:

This query will be used to create a form for members to book a court. It consists of the fields MemberID, CourtID, BookingDate, Timing and CoachID, the data required to confirm a booking. The condition in the CoachID field is to make sure that the right coach is selected based on the members' court choice.

Design View

Field:	MemberID	CourtID	BookingDate	Timing	CoachID
Table:	BOOKING	BOOKING	BOOKING	BOOKING	BOOKING
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:					IIf([CourtID]="MP1","C01",IIf([CourtID]="MP2","C02",IIf([CourtID]="MP3","C03",IIf([CourtID]="MP4","C04",Null))))
or:					

CoachID criteria

Field	Table	Criteria
CoachID	BOOKING	IIf([CourtID]="MP1","C01",IIf([CourtID]="MP2","C02",IIf([CourtID]="MP3","C03",IIf([CourtID]="MP4","C04",Null))))

Datasheet View

	MemberID ▾	CourtID ▾	BookingDate ▾	Timing ▾	CoachID ▾
	MB03	MP2	28/12/2024	16:00-18:00	C02
	MB04	MP4	15/12/2024	10:00-12:00	C04
	MB05	MP3	11/12/2024	18:00-20:00	C03
	MB08	MP2	20/12/2024	12:00-1400	C02
	MB06	MP4	10/12/2024	12:00-1400	C04
	MB07	MP1	12/12/2024	14:00-16:00	C01
	MB05	MP1	06/12/2024	12:00-1400	C01
	MB02	MP1	13/12/2024	16:00-18:00	C01
	MB01	MP1	28/12/2024	10:00-12:00	C01
	MB02	MP1	28/12/2024	14:00-16:00	C01

FORMS

Main Page Form:

This is the front page of the program. If users click on the button 'I am a Member', they will be directed to the members' menu. If they click on the 'I am an Employee' button, on the other hand, the password-protected form of the employees menu will be displayed.

Form View

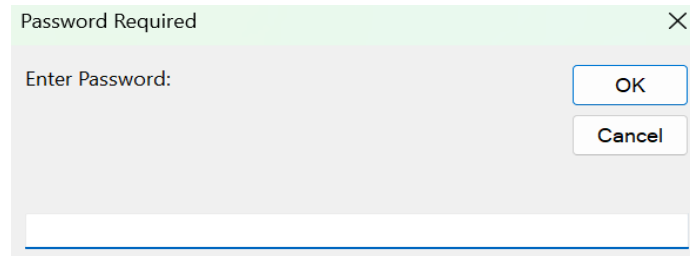


Employee Menu Form:

The employee menu has private information belonging to both the coaches and members. This is why it is password protected to ensure that only employees are able to access this information. If the incorrect password is typed then a message box saying 'Incorrect password. Access denied.' will appear. It will also take the user back to the main page. However, if the right password is entered only then will the employee menu appear.

The form is divided into two parts: Member's details and Employees' details. Furthermore, each button will take the user to its respective form, and if the user wants to exit they should press the logo positioned in the top left corner, which will close the employee menu and open the main page.

Pop up Message



A screenshot of a 'Password Required' pop-up message box. The box has a light green header with the title 'Password Required' and a close button (X). The main area is light gray and contains the text 'Enter Password:' followed by a text input field. To the right of the input field are two buttons: 'OK' and 'Cancel'.

Password/Pop up Message Code

```
INFS PROJECT nov20 - Form_Employee Menu (Code)
Form Load
Option Compare Database

Private Sub Auto_Logo0_Click()
DoCmd.OpenForm "Main Page"
End Sub

Private Sub Form_Load()
Dim strPassword As String
Dim strInput As String

strPassword = "12345"
strInput = InputBox("Enter Password:", "Password Required")

If strInput <> strPassword Then
MsgBox "Incorrect Password. Access Denied.", vbExclamation
Cancel = True
DoCmd.Close
End If
End Sub
```

Form View



A screenshot of the 'EMPLOYEE MENU' form. The form has a dark red header with a logo on the left and the title 'EMPLOYEE MENU' in white. Below the header, there are two main sections: 'MEMBER'S DETAILS' and 'EMPLOYEES' DETAILS'. The 'MEMBER'S DETAILS' section has a red background and contains two buttons: 'Member's Information' and 'Booking Information', each with an 'open' button next to it. The 'EMPLOYEES' DETAILS' section has a dark blue background and contains three buttons: 'Coaches' Information', 'Coaches' Salary', and 'Monthly Revenue Report', each with an 'open' button next to it.

BOOKING subform

The aim of this is to add it to the Members form. This allows for a better understanding of the booking details.

As outlined in the design view, it will display MemberID, BookingID, BookingDate, and Timing. This ensures a clear and organized way to view and manage bookings associated with each member registered in the system.

Design View

Form Header																
Detail																
BookingID					BookingID											
BookingDate					BookingDate											
Timing					Timing											
MemberID					MemberID											


Form View

MemberID	BookingID	BookingDate	Timing
MB05	B17	06/12/2024	12:00-1400
MB07	B16	12/12/2024	14:00-16:00
MB02	B18	13/12/2024	16:00-18:00
MB01	B03	28/12/2024	10:00-12:00
MB02	B04	28/12/2024	14:00-16:00
MB08	B14	20/12/2024	12:00-1400
MB03	B05	28/12/2024	16:00-18:00
MB05	B10	11/12/2024	18:00-20:00
MB06	B15	10/12/2024	12:00-1400
MB04	B06	15/12/2024	10:00-12:00

Register Members Form (Add New Member) + Members Information:

Member's Information will open the Members Form. The arrows at the bottom help the users navigate to the previous or next member. Data on each member can be edited, then edits are saved if the 'save record' button is clicked. A member's record can also be deleted by clicking the 'delete record' button. When employees want to register a new member, they click on the 'add new' button where a blank form will appear. After inserting the required information, employees can save the record then exit through pressing the logo. The final button, 'View Report', will open a report with a list of all the members registered with their details.

Form View



Members Form

Member ID

Member First Name

Member Last Name

Phone Number

Booking Details

	MemberID ▾	BookingID ▾	BookingDate ▾	Timing ▾
	MB01	B03	28/12/2024	10:00-12:00
*	MB01	(New)		

Add New

Save Record

Delete Record

View Report

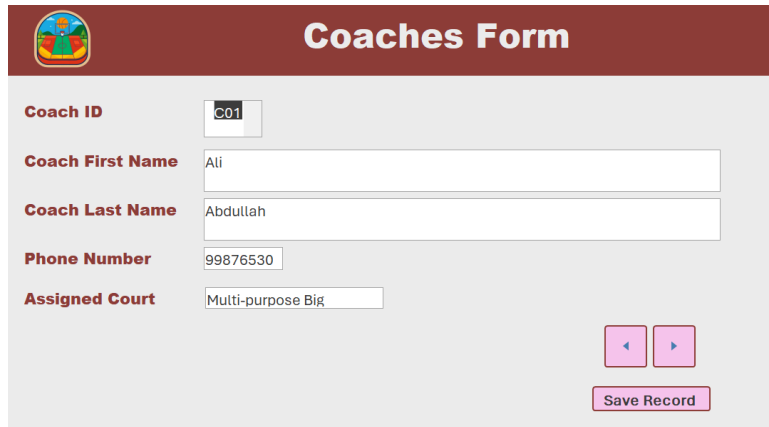
◀

▶

Coaches' Information Form:

This form has the four records of the coaches and their details, including their names, phone numbers and their assigned courts. Again, data can be altered and saved through the 'Save Record' button, and users can navigate through the records with the left and right arrows. To close the form and return to the employee menu, the logo is clicked.

Form View



The screenshot shows a web form titled "Coaches Form" with a header bar containing a logo and the title. The form fields are as follows:

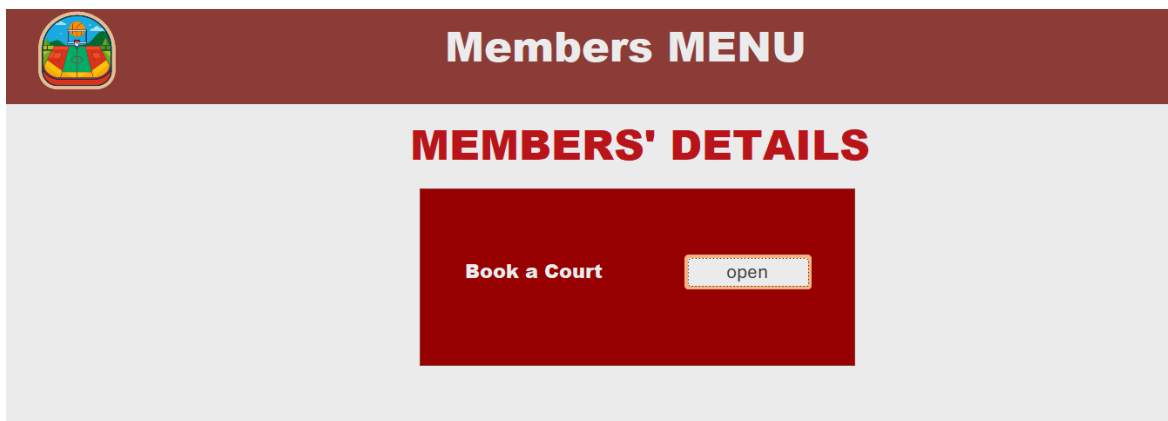
Field Label	Value
Coach ID	001
Coach First Name	Ali
Coach Last Name	Abdullah
Phone Number	99876530
Assigned Court	Multi-purpose Big

Navigation controls include left and right arrows and a "Save Record" button.

Members Menu Form:

This menu is not password protected since there is no available information to view; only members can enter the required information to book a court. The button next to Book a Court will open the Make a Booking form, and to close the form and return to the main page, they should click on the logo.

Form View



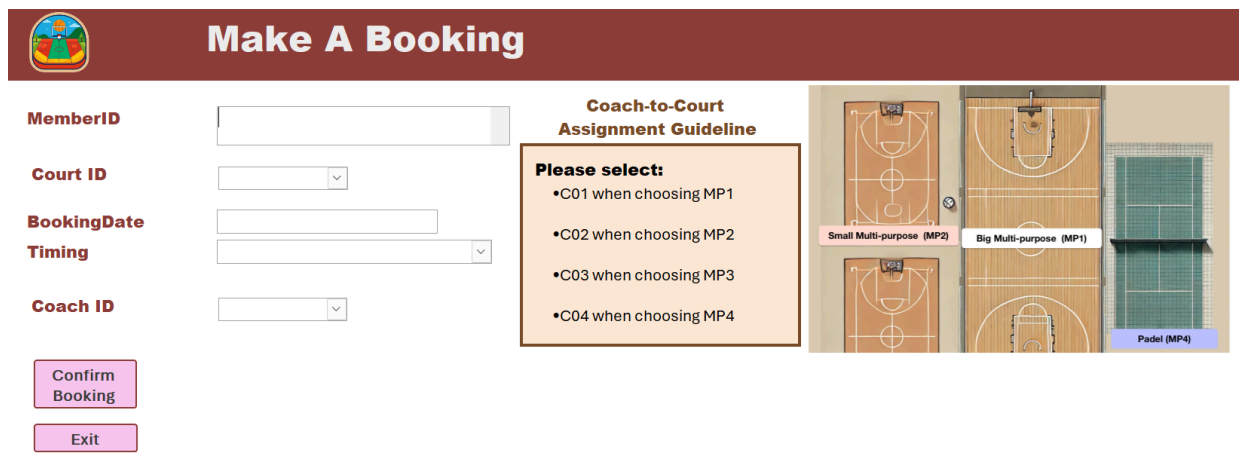
The screenshot shows a web page titled "Members MENU" with a header bar containing a logo and the title. Below the header, the text "MEMBERS' DETAILS" is displayed. A red button labeled "Book a Court" is shown next to a button labeled "open".

Make A Booking Form:

This form is based on the query Make a Booking. All fields in that query were selected, and the CourtID and CoachID fields were changed to be combo boxes for easier data entry for the members and to minimise validation errors. The instructions were written to ensure the one-to-one relationship between the COURTS and COACHES tables. Moreover, the image is placed so members know which ID refers to which court, since with only the court IDs members will not know what each one offers them.

Once members finish entering their data, they click on the ‘Confirm Booking’ button to save the record to the booking table. Once their booking is saved they can leave by clicking the Exit button.

Form View



The screenshot displays the 'Make A Booking' web form. At the top, a dark red header bar contains a small circular logo on the left and the title 'Make A Booking' in white text. Below the header, the form is organized into several sections. On the left, there are five input fields with labels: 'MemberID' (a text box), 'Court ID' (a dropdown menu), 'BookingDate' (a text box), 'Timing' (a dropdown menu), and 'Coach ID' (a dropdown menu). Below these fields are two pink buttons: 'Confirm Booking' and 'Exit'. In the center, a light orange box titled 'Coach-to-Court Assignment Guideline' contains the instruction 'Please select:' followed by a bulleted list: '•C01 when choosing MP1', '•C02 when choosing MP2', '•C03 when choosing MP3', and '•C04 when choosing MP4'. To the right of this box is a large image showing four different court layouts. The first two are basketball courts labeled 'Small Multi-purpose (MP2)' and 'Big Multi-purpose (MP1)'. The third is a smaller basketball court labeled 'C03'. The fourth is a tennis court labeled 'Padel (MP4)'.

REPORTS

Members Report:

This is the report that shows up when the button ‘View Report’ in the member’s form is clicked. It shows the full list of members registered in one document, where it’s easier to access information than with the individual records in the form. We have also added the total number of members in the report footer using the Count function. Like the forms, to close the report and return to the member’s form, users should click the logo in the top left corner.

Report View

 Members Report			
MemberID	Member First Name	Member Last Name	Phone Number
MB01	Ahmed	Al Busaidi	98642580
MB02	Reham	Al Riyami	93568460
MB03	Saif	Al Kaabi	99333533
MB04	Saeed	Al Alawi	99774428
MB05	Abdullah	Al Hasani	98883433
MB06	Talal	Salem	94725370
MB07	Harith	Al Taie	74552870
MB08	Rahma	Yousuf	73757380
MB09	Rahaf	Al Hashim	90190994
Number Of Members <input type="text" value="9"/>			


Design View

Number Of Members	=Count([MemberID])
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Coaches Salary Report:

The coaches salary report is based on the coaches salary query; we took all the fields and placed them in this report. It shows how many hours each coach worked, and the bonus depends on whether or not they have had five or more bookings. The total coach salary is shown at the bottom using the Sum function, and the logo is the exit button.

Report View

<div> Coaches Salary Report</div>			
Coach ID	Number of Bookings	Bonus	Coach Salary
C01	5	10	£210.00
C02	2	0	£80.00
C03	1	0	£40.00
C04	2	0	£80.00
Total Coach Salary		£410.00	


Design View

Total Coach Salary	=Sum([CoachSalary])
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Booking (Information) Report:

This report is based on the price per booking query. It shows a list of all the bookings made, by whom they were made, for which date and court, and the booking price. Since each time slot lasts two hours, the booking price is equal to the court's hourly rate times two. In the footer, the Count function counts the number of Booking IDs to determine the total number of bookings .

Report View

 Booking Report				
Booking ID	Member ID	CourtType	BookingPrice	BookingDate
B03	MB01	Multi-purpose Big	£60.00	28/12/2024
B04	MB02	Multi-purpose Big	£60.00	28/12/2024
B05	MB03	Multi-purpose Small	£50.00	28/12/2024
B06	MB04	Padel	£40.00	15/12/2024
B10	MB05	Multi-purpose Small	£50.00	11/12/2024
B14	MB08	Multi-purpose Small	£50.00	20/12/2024
B15	MB06	Padel	£40.00	10/12/2024
B16	MB07	Multi-purpose Big	£60.00	12/12/2024
B17	MB05	Multi-purpose Big	£60.00	06/12/2024
B18	MB02	Multi-purpose Big	£60.00	13/12/2024
Total Bookings		10		

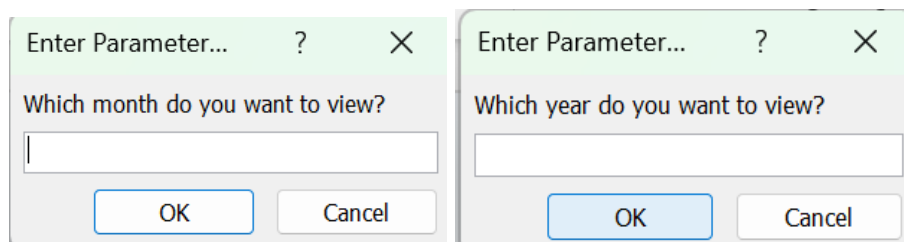
Design View

Total Bookings		=Count([BookingID])
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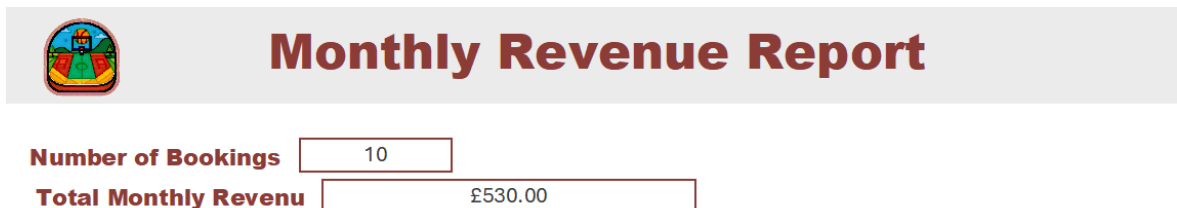
Monthly Revenues Report:


This report consists of two findings: the number of bookings that month and the total monthly revenue. The number of bookings is a Count function, counting the number of Booking IDs, and monthly revenue is a Sum function, calculating the sum of booking prices of that month. Two pop up messages appear, one asking for the month required and the second is for which year the users want to view. To exit to the employee menu, employees should click on the logo icon.

Pop Up Messages

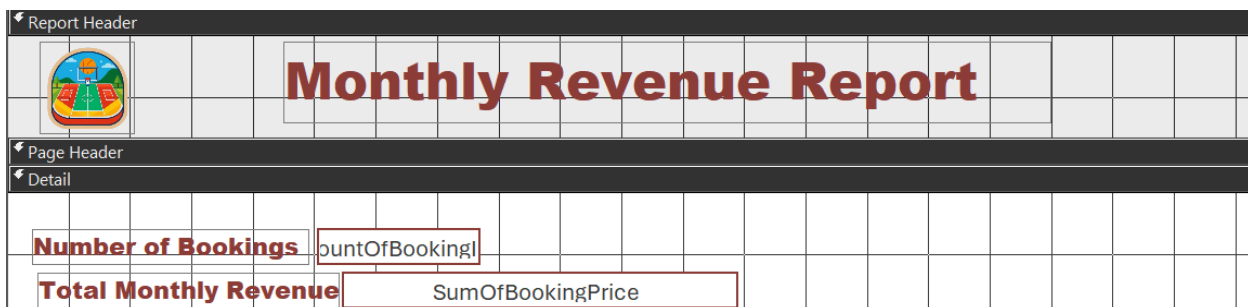



Report View



	Monthly Revenue Report
Number of Bookings	10
Total Monthly Revenue	£530.00

Design View



Report Header											
 Monthly Revenue Report											
Page Header											
Detail											
Number of Bookings CountOfBookingID											
Total Monthly Revenue SumOfBookingPrice											

Conclusion

To conclude, with our system we aim to provide easier, more efficient access for people who are interested in sports and other activities. A higher level experience with a variety of facilities that accommodate a large number of people, and a better opportunity with professionals and equipment. Our goal is to create a well-crafted system to effectively manage organizational data, not only protecting members' information but also making it easier and more efficient for the organization to store information, while advancing its system structure to expand the organization's success.