Student Details

Repository Name	DBS25P152
Registration Number	2024-CS-152

Project	
Project Title	ITEC MANAGEMENT SYSTEM
Executive Summary	The Information Technology Exhibition and Competition (ITEC) is an annual event organized by the Department of Computer Science at UET Lahore. The event comprises various activities such as competitions, exhibitions, seminars, and non-tech events. Traditionally, event management has been handled manually using spreadsheets, emails, and physical records, which has resulted in data inconsistencies, difficulties in committee assignments, financial tracking inefficiencies, scheduling conflicts, and a lack of automated reporting. To address these challenges, this project focuses on developing a desktop-based Event Management System using C# and MySQL. The system is designed to digitize and automate event planning, participant management, committee assignments, financial tracking, and duty allocations. Key functionalities include event and participant management, committee and role assignments, financial tracking, venue allocation, and automated report generation. The system aims to streamline operations, minimize human errors, and enhance the overall efficiency of event management at ITEC. The Event Management System will enable seamless tracking of participant registrations, fee payments, committee assignments, financial transactions, and event results. Automated report generation will provide insights into participant engagement, financial summaries, and event schedules, thereby improving decision-making and overall event efficiency.
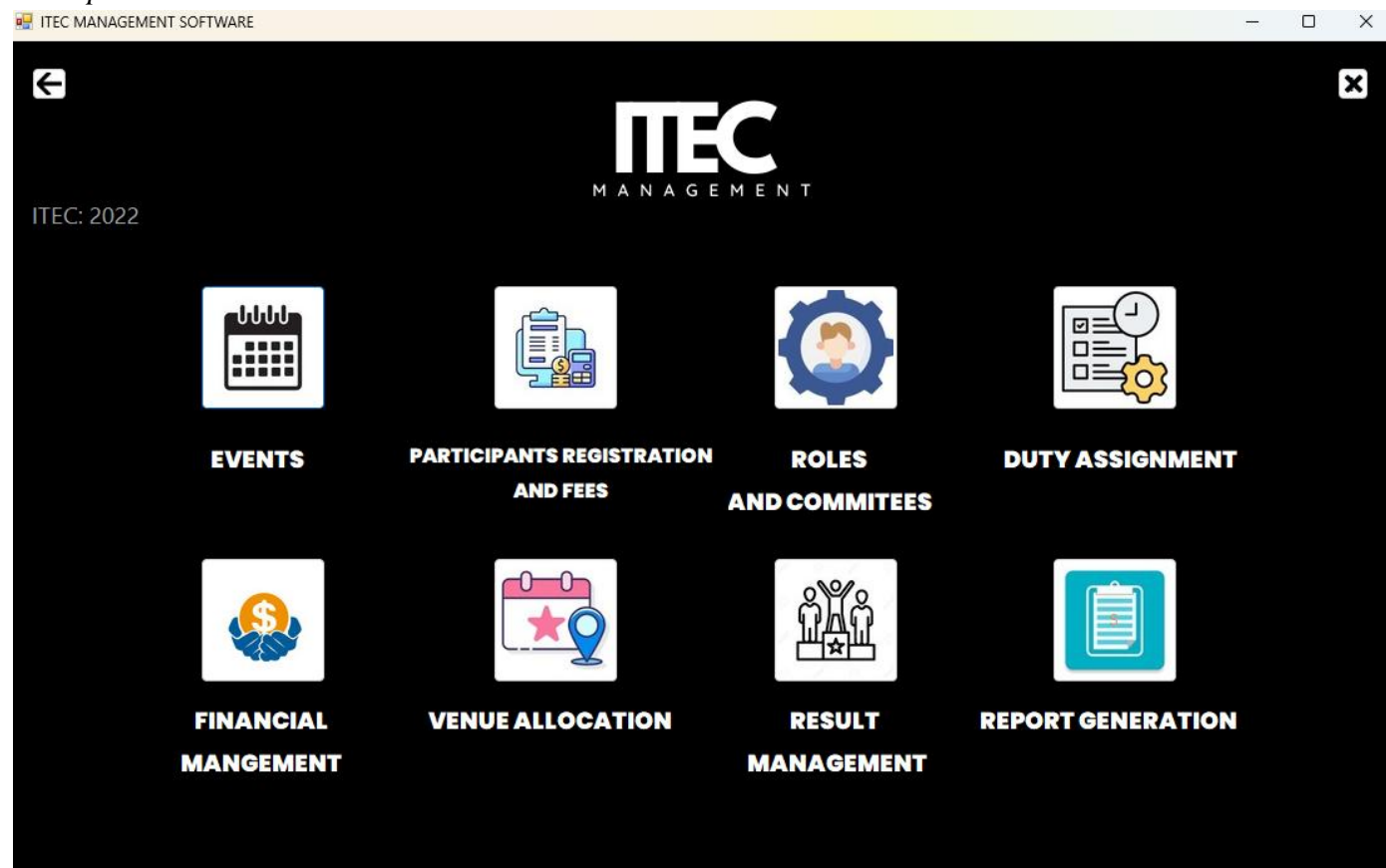
Interface Name	Events

Picture

Main pa

Add Event

Event ID {assign an id)

[   ]

Event Name

[   ]

ITEC YEAR

2022

Select Committee

Faculty ▾

Description

[   ]

Select Date

Friday , 21 March 2025 ▦▾

Select Venue

LT ▾

Event Category

Competition ▾

| Clear | Save |

| Close This Form |

MANAGEMENT

Update Details

Cate
Non-T   025
Exhib   025

Event ID

1

Event Name

g2g

ITEC YEAR

2022

Select Committee

Faculty

Faculty ⌄

Description

qawali

Select Date

22/03/2025 12:00:00 am

Friday , 21 March 2025 ▦▼

Select Venue

LT

LT ⌄

Event Category

Non-Tech

Competition ⌄

Clear   Update

Close This Form

UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
add	button	event	Itec_events
Update	button	event	Itec_events
delete	button	event	Itec_events
Data grid	grid	Event	Itec_events

In case of column, write column name and in case of multiple columns, write query in last column

Interface Name	Participants
Picture	

registration_new

ITEC
MANAGEMENT

+ Add New Participant | Add New Team

	ID	Participant Name	Email	Contact	Institute	Role	ITEC YEAR	Register	Update	Delete
▶	1	rayyan	mrayyan403@gm...	03390001297	UET	Guest Speaker	2022	Register	Update	Delete
	2	ali	abc@gmail.com	03003132800	FAST	Guest Speaker	2022	Register	Update	Delete
	3	anas	anas@gmail.com	0300313800	NUST	Judge	2022	Register	Update	Delete
	4	tasswar	abc@hello.com	3525206058	NUSt	Judge	2022	Register	Update	Delete

ITEC
MANAGEMENT

Add Participant Details

Name

Institute

Participant ID (assign an id)

Role Name

Student

Itec ID

2022

Select Team

indiviual

Email

Contact Details

Clear | Save

Close This Form

Register For An Event

Registration ID

Z

Participant Name

rayyan

Event Name

g2g

Fees

Payment Status

Pending

[Clear] [Save]

[Close This Form]

UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
add	button	Registration	participants
Update	button	Registration	participants
delete	button	Registration	Participants
Data grid	grid	Registration	Participants
register	button	Registration	Event_participants

In case of column, write column name and in case of multiple columns, write query in last column

Interface Name	Roles and Committees
Picture	

ITEC
MANAGEMENT

+ Assign New Members

ID	UnAssign Member	Member Name	Member Role	Committee Name
1	InAssign Members	rayyan	Faculty Advisor	Faculty
2	InAssign Members	ali	Faculty Advisor	Faculty

ITEC
MANAGEMENT

Assign Members To Committee

Assign To Committee

Faculty

Member ID (asssign an id)

Member Name

Role Name

Faculty Advisor

| Clear | Assign |

Close This Form

UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
add	button	committees	Committees
delete	button	committees	committees
Assign members	button	committees	Committees_members
Data grid	grid	committees	committees
In case of column, write column name and in case of multiple columns, write query in last column			

Interface Name	Duty Assignments

Picture

Committee | | | | | | | Task Descri
Faculty | | | | | | | oc
Faculty

Assign A Duty

Committee Name

Faculty ⌄   Load

Assigned To Person

⌄

Duty ID

|

DeadLine

Friday , 21 March 2025 ▦ ▼

Clear   Save

Close This Form

Duty Status

Pending ⌄

Description

MANAGEMENT

Update Status

nmittee
ulty
ulty

Task Descrip
abc
21

Duty ID
23

Assigned To Person
ali

Committee Name
Faculty

DeadLine
21/03/2025 12:00:00 am

Duty Status
Pending

Pending ⌄

Description
21

| Clear | Update |

| Close This Form |

Track Progress

Duty ID
1

Description
abc

[Clear] [Track]
[Close This Form]

Progress Bar

Pending ☑   In Progress

UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
add	button	Duty	duty
Track	button	duty	duty
update	button	duty	duty
Data grid	grid	duty	duty

In case of column, write column name and in case of multiple columns, write query in last column

Interface Name	Financial Management
Picture	

finance_grid

See Transactions   See Sponsors   See Vendors

+ Add New Transaction   Refresh   Close Transaction

ID	ITEC Year	Event Name	Transaction Type	Amount	Transaction From	Transaction To	Description	Date Recorded
1	2022	g2g	Ticket Sales	5100.00	User	User	abc	21/03/2025
3	2022	g2g	Sponsorship	15000.00	User	User	aaa	21/03/2025
4	2022	g2g	Expense	5000.00	User	User	n	21/03/2025
2	2022	coding	Ticket Sales	10000.00	User	User	mn	21/03/2025
5	2022	coding	Sponsorship	8700.00	Sponsor	Sponsor	n	21/03/2025

Add A Transaction

ITEC YEAR	Select Date
2022	Friday , 21 March 2025

Event Name	From Entity
g2g	User

Transaction Tyoe	To Entity
Sponsorship	User

Enter Amount

Clear   Add

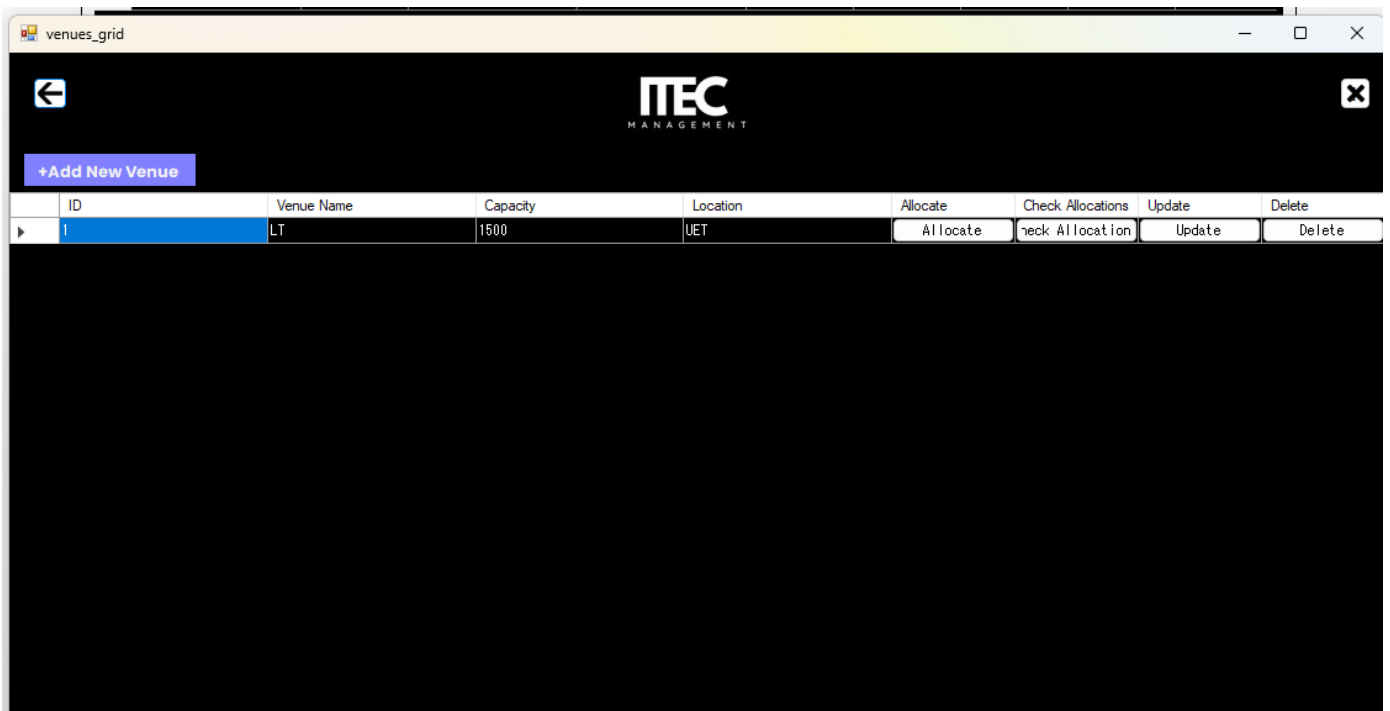Description

Close This Form

Transaction To
Iser
Iser
Iser
Iser
ponsor

UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
See transactions	button	finances	finances
See sponsors	button	finances	sponsors
See vendors	button	finances	vendors
Data grid	grid	finances	Vendors
Data grid	grid	finances	Finances
Data grid	grid	finances	sponsors

In case of column, write column name and in case of multiple columns, write query in last column

Interface Name	Venues

Picture

UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
add	button	Registration	participants
Update	button	Registration	participants
delete	button	Registration	Participants
Allocate	grid	Registration	Participants
Check allocation	button	Registration	Event_participants
Data grid	grid	registration	participants

In case of column, write column name and in case of multiple columns, write query in last column

Interface Name	Result Management
Picture	

result_grid

+ Add New Result   Generate LeaderBoard Reports

+ Add New Result

	ID	Participant Name	Event Name	Team Name	Position	Score	Remarks
▶	1	rayyan	g2g	indiviual	1	54.00	good
	4	rayyan	g2g	indiviual	3	87.00	kalk
	5	rayyan	coding	indiviual	3	547.20	xx
	7	ali	coding	indiviual	1	54.00	aa
	2	anas	g2g	indiviual	2	100.00	nice
	6	anas	coding	indiviual	2	45.00	a
	3	tasswar	g2g	indiviual	4	54.00	good
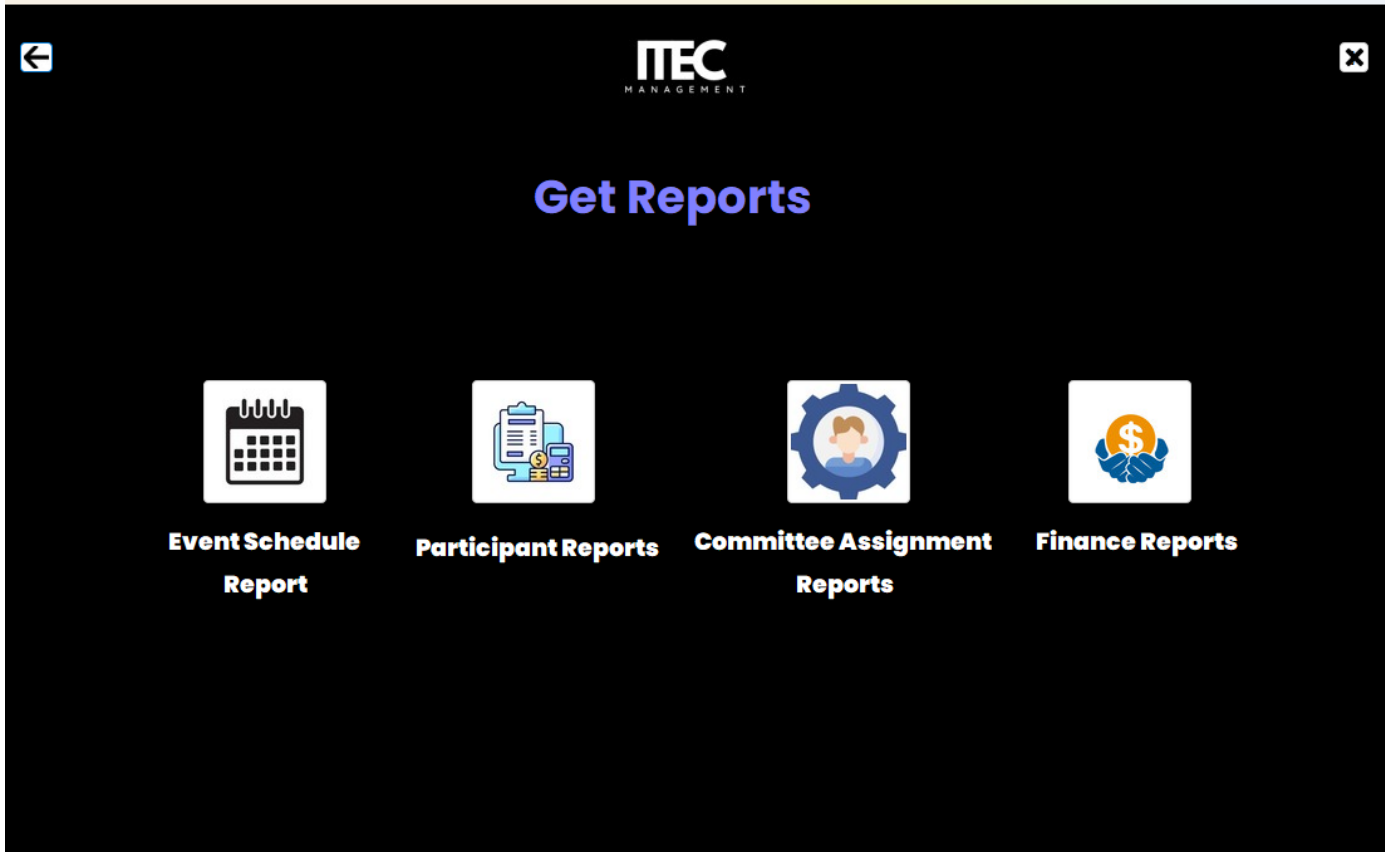
UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
add	button	Events_result	Event_result
Generate leaderboards	button	Event_result	Event_result
Data grid	grid	Event_result	Event_result

In case of column, write column name and in case of multiple columns, write query in last column

Interface Name	Report generation

Picture

UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
Event schedule report	button	reports	Many
Participants report	button	reports	Many
Committees reports	button	reports	Many
Finance reports	button	reports	Many

In case of column, write column name and in case of multiple columns, write query in last column

Business Report-1	

Business Report Name:event schedule report

Sample of report:

Events Report

Event id	Event name	Description	Event Date	venue name	Committe name	Categoory Name
1	g2g	qawali	3/22/2025 12:00:00 AM	LT	Faculty	Non-Tech
2	coding	competetion	3/29/2025 12:00:00 AM	LT	Faculty	Exhibition

Query to build Report:

```
string query = $"select event_id,event_name,description,event_date,venue_name,c.committee_name as com_name,category_name from itec_events i join committees c on c.committee_id = i.committee_id join venues v on v.venue_id = i.venue_id join event_categories ec on ec.event_category_id= i.event_category_id join committees cm on cm.committee_id=i.committee_id where i.itec_id='{id}' order by event_id asc";
```

Business Report-2	
Business Report Name:participant reports	
Sample of report:	

ITEC
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Participants Report

registration id	name	fee amount	pay status	event name	email	contact	institute	role	event date
1	rayyan	5400.00	Paid	g2g	mrayyan403@gmail.com	03390001297	UET	Student	3/22/2025 12:00:00 AM
2	rayyan	454.00	Paid	g2g	mrayyan403@gmail.com	03390001297	UET	Student	3/22/2025 12:00:00 AM
3	rayyan	5400.00	Pending	g2g	mrayyan403@gmail.com	03390001297	UET	Student	3/22/2025 12:00:00 AM
4	ali	545.00	Paid	coding	abc@gmail.com	03003132800	FAST	Student	3/29/2025 12:00:00 AM
5	rayyan	777.00	Pending	g2g	mrayyan403@gmail.com	03390001297	UET	Student	3/22/2025 12:00:00 AM
6	rayyan	1000.00	Pending	g2g	mrayyan403@gmail.com	03390001297	UET	Student	3/22/2025 12:00:00 AM
7	ali	787.00	Pending	coding	abc@gmail.com	03003132800	FAST	Student	3/29/2025 12:00:00 AM
8	rayyan	454.00	Pending	g2g	mrayyan403@gmail.com	03390001297	UET	Student	3/22/2025 12:00:00 AM
10	rayyan	78.00	Pending	g2g	mrayyan403@gmail.com	03390001297	UET	Student	3/22/2025 12:00:00 AM
11	anas	4000.00	Pending	coding	anas@gmail.com	0300313800	NUST	Sponsor	3/29/2025 12:00:00 AM
12	tasswar	4545.00	Pending	g2g	abc@hello.com	3525206058	NUSt	Sponsor	3/22/2025 12:00:00 AM

Query to build Report:

```
string query = $"select registration_id,name,fee_amount,l.value as pay_status,event_name,email,contact,institute,l1.value as role,event_date from event_participants e join participants p on p.participant_id=e.participant_id join lookup l on l.lookup_id=e.payment_status_id join itec_events ev on ev.event_id=e.event_id join itec_editions i on i.itec_id=ev.itec_id join lookup l1 on l1.lookup_id=p.role_id where ev.itec_id = {id} order by registration_id asc";
```

Business Report-3
Business Report Name:committee assignment report
Sample of report:

Duty ID	committee name	assigned to	task description	deadline	Status
Duty ID					
1	Faculty	rayyan	abc	3/21/2025 12:00:00 AM	Pending
23	Faculty	ali	21	3/21/2025 12:00:00 AM	Pending

Query to build Report:
```
string query = $"select duty_id,committee_name,assigned_to,task_description,deadline,value from duties d join committees c on c.committee_id = d.committee_id join lookup l on l.lookup_id = d.status_id join itec_editions i on i.itec_id=c.itec_id where i.itec_id = {id}";
```

Business Report-4
Business Report Name : finance reports
Sample of report:

Finance Report

Total Income

total income	event name	description	event date
20100.00	g2g	qawali	3/22/2025 12:00:00 AM
18700.00	coding	competetion	3/29/2025 12:00:00 AM

Total Expense

event name	description	event date	total income
g2g	qawali	3/22/2025 12:00:00 AM	5000.00

Query to build Report:
```
string query = $"select sum(amount) as total_income
,event_name,e.description,event_date from finances f join lookup l on l.lookup_id = f.type_id
join itec_events e on e.event_id=f.event_id where value = 'Ticket Sales' or value =
'Sponsorship'  and e.itec_id = {id} group by f.event_id";
```

Query 2:
```
string query = $"select sum(amount) as total_income
,event_name,e.description,event_date from finances f join lookup l on l.lookup_id = f.type_id
join itec_events e on e.event_id=f.event_id where value = 'Expense'  and e.itec_id = {id}
group by f.event_id";
```

Business Report-5
Business Report Name:leaderboard
Sample of report:

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MANAGEMENT

| | 1 | of 1 | | | | | | | 100% | ▾ | | Find | Next |

LeaderBoard

result id	event name	Particpant name	team name	position	score	remarks	event date
1	g2g	rayyan	indiviual	1	54.00	good	3/22/2025 12:00:00 AM
2	g2g	anas	indiviual	2	100.00	nice	3/22/2025 12:00:00 AM
4	g2g	rayyan	indiviual	3	87.00	kalk	3/22/2025 12:00:00 AM
3	g2g	tasswar	indiviual	4	54.00	good	3/22/2025 12:00:00 AM
7	coding	ali	indiviual	1	54.00	aa	3/29/2025 12:00:00 AM
6	coding	anas	indiviual	2	45.00	a	3/29/2025 12:00:00 AM
5	coding	rayyan	indiviual	3	547.20	xx	3/29/2025 12:00:00 AM

Query to build Report:

```
string query = $"select result_id,e.event_name,p.name,t.team_name,position,score,remarks,event_date from event_results r join itec_events e on e.event_id=r.event_id join itec_editions i on i.itec_id = e.itec_id join participants p on p.participant_id = r.participant_id join teams t on r.team_id =t.team_id where position <=10  and i.itec_id = {id} order by r.event_id,position asc";
```