**Student Details**

| Repository Name | DBS25P020 |
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| Registration Number | 2024-CS-20 |

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| ***Project*** |  |
| Project Title | ITEC Event Management System |
| Executive Summary | The **ITEC Event Management System** is a desktop-based software system which is designed to digitize the entire process of Event Management  **(ITEC)**, an annual event hosted by the **Department of Computer Science at UET Lahore**. The event consists of multiple activities, including **competitions, exhibitions, seminars, and non-technical events**, all managed by faculty members and student committees. Currently, the event is managed manually which leads to inconsistencies, errors and data security issues. To maintain Consistent data and allow users to interact easly it is needed to automatize and digitize the entire process. This system can do this task.  The system will provide a **centralized platform** to handle various aspects of event planning, such as **participant registration, committee management, financial tracking, scheduling, and reporting**. It will allow **faculty and student organizers** to efficiently manage responsibilities, track participant payments, and allocate venues without conflicts. The project also includes **automated reporting** to generate essential reports for participant registrations, financial transactions, committee assignments, and event results.  One of the key features of the system is **ITEC Editions Management**, which enables administrators to manage different editions of ITEC (e.g., ITEC 2024, ITEC 2025), ensuring that all events, participants, and financial records are linked to a specific year. Additionally, the system will support **multiple event types**, including **technical competitions, exhibitions, seminars, and non-tech activities**, with a structured approach for **event scheduling and committee assignments**.  For participant management, the system will allow individuals to register as **students, professionals, guest speakers, or judges**, track **individual or team-based registrations**, and **monitor payment status** (Paid, Pending, Canceled). To manage event organization, the system will facilitate **committee formation**, enabling the assignment of **faculty advisors, student leads, and volunteers** to specific **responsibilities** such as **logistics, marketing, sponsorship, and technical support**.  Financial management is another critical aspect, where the system will track **sponsorships, ticket sales, registration fees, and expenses**. This will help in **budget planning and financial reporting**, ensuring transparency in fund utilization.  The system will provide **venue allocation management** to prevent scheduling conflicts for different event venues such as auditoriums, classrooms, and open areas. |

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| ***Interface Name*** | ITEC Editions |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | comboBox1 | comboBox | ITECeditionBL,Year | ITEC\_editions.Year | | textBox1 | textBox | ITECeditionBL,Year | ITEC\_editions.year | | textBox2 | textBox | ITECeditionBL,theme | Itec\_editions.theme | | textBox3 | textbox | ITECeditionBL,description | Itec\_editions.description | | |

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| ***Interface Name*** | Events |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | textBox1 | textBox | EventsBL, eventn | select event\_name, event\_date, venue\_id from itec\_events where itec\_id={0} and event\_name = '{1}' | | ListView1 | ListView | EventsBL,(eventn,date,venue) | select event\_name, event\_date, venue\_name from itec\_events i join venues v on i.venue\_id=v.venue\_id where itec\_id={0} | | UpdateButton | button | - | - | | DeleteButton | button | - | - | | |
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| ***Interface Name*** | Add Participants |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | name | textbox | Partcipants.cs,name | Participants.name | | email | textbox | Partcipants.cs,email | Participants.email | | contact | textbox | Partcipants.cs,contact | Participants.contact | | instituite | textbox | Partcipants.cs,institue | Participants.institute | | role | comboBox | Partcipants.cs,role | SELECT role\_name from roles where role\_id={0} | | |

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| ***Interface Name*** | Venues |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | ListView1 | ListView | Venues.cs | select venue\_name,capacity,location from venues | | venue | textbox | venuesBl.cs, venue | Venues.venue\_name | | location | textbox | venuesBl.cs, location | Venues.location | | capacity | textbox | venuesBl.cs, venue | Venues.capacity | | |

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| ***Interface Name*** | Participant Details |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | textBox1 | textBox | ParticipantsBL, eventn | select name, email, event\_name, value , fee\_amount from participants p join event\_participants ep on p.participant\_id=ep.participant\_id join lookup l on l.lookup\_id=ep.payment\_status\_id join itec\_events ie on ie.event\_id=ep.event\_id where p.itec\_id={0} and event\_name='{1}’ | | ListView1 | ListView | PartcipantsBL,(name,email,eventn,status,fees) | select name, email, event\_name, value , fee\_amount from participants p join event\_participants ep on p.participant\_id=ep.participant\_id join lookup l on l.lookup\_id=ep.payment\_status\_id join itec\_events ie on ie.event\_id=ep.event\_id where p.itec\_id={0} | | UpdateButton | button | - | - | | DeleteButton | button | - | - | | |

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| ***Interface Name*** | Venue Allocation |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | ListView 1 | Listview | Venue, Events | select event\_name, venue\_name ,assigned\_date  from venue\_allocations v  join itec\_events i on i.event\_id=v.event\_id  join venues s on s.venue\_id=v.venue\_id  join itec\_editions ie on i.itec\_id=ie.itec\_id  where year={0} | | |

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| ***Interface Name*** | Add Participants |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | TextBoxParticipant | TextBox | ParticipantsBl(name) | Participants.name | | Email | Textbox | ParticipantsBL(email) | Participants.email | | contact | TextBox | ParticipantsBl(contact) | Participants.Contact | | institue | TextBox | ParticipantsBl(institute) | Particcipants.institute | | role | Combobox | ParticipantsBl(role) | Select role\_id from roles where role\_name='{5}' | | |

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| ***Interface Name*** | Add Duties |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | Name | ComboBox | Duties.name | select committee\_id from committees where committee\_name='{0}' | | to | ComboBox | Duties.asssignedTO | Committee\_members.name | | Desc | textbox | Duties.description | Committee\_members.description | | Deadline | MonthCalender | Duties.deadline | Committee\_members.deadline | | Status | ComboBox | Duties.status | select committee\_id from committees where committee\_name='{0}'),'{1}','{2}' ,'{3}',(select lookup\_id from lookup where value='{4}' AND category='DutyStatus' | | |

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| ***Interface Name*** | Duties |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | ListView1 | ListView | PartcipantsBL,(name,email,eventn,status,fees) | select committee\_name, assigned\_to, task\_description, deadline, value  from duties d  join committees c on d.committee\_id=c.committee\_id  join lookup l on l.lookup\_id=d.status\_id"; | | |

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| ***Interface Name*** | LeaderBoard |
| |  |  |  |  | | --- | --- | --- | --- | | **UI Component Name** | **Type of UI component** | **Class Attribute name,**  **Classname, attribute name** | **Linked to which database column/table** | | ViewLeaderboard | ListView | Results.cs | select event\_name, name ,value ,score , remarks  from event\_results r  join itec\_events e on e.event\_id=r.event\_id  join itec\_editions ie on ie.itec\_id=e.itec\_id  join participants p on r.participant\_id=p.participant\_id  join lookup l on l.lookup\_id=r.position  where year={0}  order by event\_name ASC, FIELD(Position, 'Winner', 'Runner-up', 'Finalist', 'Participant') | | |

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| ***Business Report-1*** |  |
| *Business Report Name: Participants Reports* | |
| *Sample of report:* | |
| *Query to build Report:* select name, event\_name, value, role\_name  from event\_participants ep  join participants p on p.participant\_id=ep.participant\_id  join itec\_events i on i.event\_id=ep.event\_id  join lookup l on l.lookup\_id=ep.payment\_status\_id  join roles r on r.role\_id=p.role\_id  join itec\_editions ie on i.itec\_id=ie.itec\_id  where year={0} | |

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| ***Business Report-2*** |  |
| *Business Report Name: Venue Allocations* | |
| *Sample of report:* | |
| *Query to build Report:*  select event\_name, venue\_name ,assigned\_date  from venue\_allocations v  join itec\_events i on i.event\_id=v.event\_id  join venues s on s.venue\_id=v.venue\_id  join itec\_editions ie on i.itec\_id=ie.itec\_id  where year={0} | |

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| ***Business Report-3*** |  |
| *Business Report Name: Event Schedule Reports* | |
| *Sample of report:* | |
| *Query to build Report:* select event\_name, category\_name, e.description, event\_date, venue\_name, committee\_name  from itec\_events e  join event\_categories ec on e.event\_category\_id=ec.event\_category\_id  join venues v on v.venue\_id=e.venue\_id  join committees c on e.committee\_id=c.committee\_id  join itec\_editions ie on e.itec\_id=ie.itec\_id  where year={0} | |

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| ***Business Report-4*** |  |
| *Business Report Name: Committee Assignment Reports* | |
| *Sample of report:* | |
| *Query to build Report::* select 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 | |

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| ***Business Report-5*** |  |
| *Business Report Name: Financial Reports* | |
| *Sample of report:* | |
| *Query to build Report:* select event\_name,value,amount,from\_entity\_type, to\_entity\_type, e.description, date\_recorded  from finances f  join itec\_events e on f.event\_id=e.event\_id  join lookup l on l.lookup\_id=f.type\_id  join itec\_editions ie on f.itec\_id = ie.itec\_id  where year={0} | |