* **ER Diagram :**

|  |  |  |
| --- | --- | --- |
| **Entity : users** | | |
| **Field Name** | **Data Type** | **Constraint** |
| User\_ID | Number | Primary Key |
| User\_Type | enum | (admin-lecturer-alumnus) |
| username | text |  |
| password | text |  |

|  |  |  |
| --- | --- | --- |
| **Entity : Category** | | |
| **Field Name** | **Data Type** | **Constraint** |
| Cat\_ID | Number | Primary Key |
| Cat\_Name | Text |  |

|  |  |  |
| --- | --- | --- |
| **Entity : Lecturer** | | |
| **Field Name** | **Data Type** | **Constraint** |
| SSN | Number | Primary Key |
| Lec\_name | Text |  |
| college | Text |  |
| department | Text |  |
| CV | Text |  |
| Email | Text |  |
| Phone | Text |  |
| rate | number |  |
| User\_ID | number | Foreign key |

|  |  |  |
| --- | --- | --- |
| **Entity : Courses** | | |
| **Field Name** | **Data Type** | **Constraint** |
| Course\_ID | Number | Primary Key |
| Title | Text |  |
| Location | Text |  |
| deadline date | Date |  |
| Start Time | Date |  |
| End Time | Date |  |
| Cat\_ID | Number | Foreign key |
| Lecturer\_ID | Number | Foreign key |
| Lecturer\_certificate | Text |  |

|  |  |  |
| --- | --- | --- |
| **Entity : Workshop** | | |
| **Field Name** | **Data Type** | **Constraint** |
| Workshop\_ID | Number | Primary Key |
| Title | Text |  |
| Location | Text |  |
| deadline date | Date |  |
| Cat\_ID | Number | Foreign key |

|  |  |  |
| --- | --- | --- |
| **Entity : WorkShop\_Lecturers** | | |
| **Field Name** | **Data Type** | **Constraint** |
| Workshop\_ID | Number | Foreign key |
| Lecturer\_ID | Number | Foreign key |
| Lecturer\_certificate | Text |  |
| Start Time | Date |  |
| End Time | Date |  |

|  |  |  |
| --- | --- | --- |
| **Entity : Alumnus** | | |
| **Field Name** | **Data Type** | **Constraint** |
| SSN | Number | Primary Key |
| Alu\_name | Text |  |
| college | Text |  |
| department | Text |  |
| ID | Text |  |
| Email | Text |  |
| Phone | Text |  |
| User\_ID | number | Foreign key |

|  |  |  |
| --- | --- | --- |
| **Entity : alumnus courses rate** | | |
| **Field Name** | **Data Type** | **Constraint** |
| SSN | Number | Foreign Key |
| Course\_ID | Text | Foreign Key |
| rate | number |  |

|  |  |  |
| --- | --- | --- |
| **Entity : alumnus courses Comments** | | |
| **Field Name** | **Data Type** | **Constraint** |
| SSN | Number | Foreign Key |
| Course\_ID | Text | Foreign Key |
| Comment | Text |  |

|  |  |  |
| --- | --- | --- |
| **Entity : alumnus course certificates** | | |
| **Field Name** | **Data Type** | **Constraint** |
| SSN | Number | Foreign Key |
| Course\_ID | Text | Foreign Key |
| certificate | Text |  |

|  |  |  |
| --- | --- | --- |
| **Entity : Lecturer course rate** | | |
| **Field Name** | **Data Type** | **Constraint** |
| SSN | Number | Foreign Key |
| Lecturer\_ID | Number | Foreign Key |
| Course\_ID | Number | Foreign Key |
| rate | number |  |