**Documentation**

**1- USER TABLE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **User\_ID** | **INT** | **Primary Key, Identity** |  |
| **User\_Fname** | **VARCHAR(50)** | **NOT NULL** |  |
| **User\_Mname** | **VARCHAR(50)** | **NOT NULL** |  |
| **User\_Lname** | **VARCHAR(50)** | **NOT NULL** |  |
| **User\_Email** | **VARCHAR(100)** | **UNIQUE , NOTNULL** | **Gmail: @gmail.com**  **Yahoo Mail: @yahoo.com Outlook/Hotmail: @outlook.com, @hotmail.com**  **AOL Mail: @aol.com**  **Proton Mail: @protonmail.com** |
| **User\_Pass** | **VARCHAR(100)** | **NOTT NULL , Encryption (Search)** | **MIN Length is 8**  **(Chars + Num + Symbols)** |
| **User\_Phone** | **VARCHAR(15)** | **NOT NULL** | **Length (11)**  **Start (010 , 011 , 012 , 015 )** |
| **User\_DOB** | **DATE** | **NOT NULL** | **Before 2002** |
| **User\_Age** | **INT** | **Driven** |  |
| **User\_City** | **VARCHAR (50)** | **NOT NULL** |  |
| **User\_Gov** | **VARCHAR (50)** | **NOT NULL** |  |
| **User\_Facebook** | **VARCHAR(200)** | **NOT NULL** | **Include Facebook.com** |
| **User\_LinkedIn** | **VARCHAR(200)** | **NOT NULL** | **Include  LinkedIn.com** |
| **User\_Role** | **VARCHAR(1)** | **NOT NULL** | **Values (I , S)**  **I for Instructor**  **S For Student** |

**2- INSTRUCTOR TABLE :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Ins\_User\_ID** | **INT** | **PK , FK** |  |
| **ins\_Salary** | **Money** | **NOT NULL** | **Salary > 0 (+ve)** |

**3- INSTRUCTOR\_QUALIFICATIONS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Ins\_User\_ID** | **INT** | **PK,FK** |  |
| **Ins\_Qualification** | **VARCHAR(100)** | **PK , FK** |  |

**4- INSTRUCTOR\_COURSES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Ins\_User\_ID** | **INT** | **PK , FK** |  |
| **Crs\_ID** | **INT** | **PK , FK** |  |

**5- TRACKS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Track\_ID** | **INT** | **PK** |  |
| **Track\_Name** | **VARCHAR(100)** | **NOT NULL** |  |
| **SV\_User\_ID** | **INT** | **FK** |  |

**6- BRANCHES\_TRACKS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Branch\_ID** | **INT** | **PK , FK** |  |
| **Track\_ID** | **INT** | **PK , FK** |  |

**7- TRACKS\_COURSES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Track\_ID** | **INT** | **PK , FK** |  |
| **Crs\_ID** | **INT** | **PK , FK** |  |

**8- COURSES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Crs\_ID** | **INT** | **PK** |  |
| **Crs\_Name** | **VARCHAR(100)** | **NOT NULL** |  |
| **Crs\_Duration** | **INT** | **NOT NULL** | **+ve** |
| **Topic\_ID** | **INT** | **FK** |  |

**9 - TOPICS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Topic\_ID** | **INT** | **PK** |  |
| **Topic\_Name** | **VARCHAR(100)** | **NOT NULL** |  |

**10 - QUESTIONS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Q\_ID** | **INT** | **PK** |  |
| **Q\_Type** | **INT** | **NOT NULL** | **Values (1,2)**  **1 🡪 MCQ**  **2 🡪 T/F** |
| **Q\_Text** | **VARCHAR (500)** | **NOTNULL** |  |
| **Q\_CorrectAnswer** | **VARCHAR(200)** | **NOT NULL** |  |
| **Crs\_ID** | **INT** | **FK** |  |

**11 - QUESTIONS\_AvailableAnswers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Q\_ID** | **INT** | **PK , FK** |  |
| **Q\_AvailableAnswers** | **VARCHAR(200)** | **PK** |  |

**12 – EXAMS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Exam\_ID** | **INT** | **PK** |  |
| **Crs\_ID** | **INT** | **FK** |  |

**13 - EXAM\_GEN**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Exam\_ID** | **INT** | **PK , FK** |  |
| **Q\_ID** | **INT** | **PK , FK** |  |

**14 – STUDENTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **S\_User\_ID** | **INT** | **PK,FK** |  |
| **std\_College** | **VARCHAR(100)** | **NOT NULL** |  |
| **Track\_ID** | **INT** | **FK** |  |
| **Branch\_ID** | **INT** | **FK** |  |

**15 – BRANCHES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Branch\_ID** | **INT** | **PK** |  |
| **Branch\_Loc** | **VARCHAR(100)** | **NOT NULL** |  |

**16 - STUDENT\_COURSES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **S\_User\_ID** | **INT** | **PK , FK** |  |
| **Crs\_ID** | **INT** | **PK , FK** |  |

**17 - STUDENT\_ANSWERS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **S\_User\_ID** | **INT** | **PK , FK** |  |
| **Q\_ID** | **INT** | **PK , FK** |  |
| **Exam\_ID** | **INT** | **PK , FK** |  |
| **Std\_Answer** | **VARCHAR(100)** | **NOT NULL** |  |
| **Status** | **BINARY(1)** | **Driven** | **Values (0 , 1)** |

**18- CERTIFICATES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **Cer\_Name** | **VARCHAR(100)** | **PK** |  |

**19 - STUDENT\_CERTIFICATE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **S\_User\_ID** | **INT** | **PK , FK** |  |
| **Cer\_Name** | **VARCHAR(100)** | **PK , FK** |  |
| **Cer\_Date** | **DATE** | **NOT NULL** |  |
| **Cer\_Code** | **VARCHAR(10)** | **NULL** |  |

**20 - STUDENT\_JOBS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **S\_User\_ID** | **INT** | **PK , FK** |  |
| **FJ\_ID** | **INT** | **PK , FK** |  |
| **FJ\_Description** | **VARCHAR(300)** | **NOT NULL** |  |
| **FJ\_Duration** | **INT** | **NOT NULL** |  |
| **FJ\_Date** | **DATE** | **NOT NULL** |  |
| **FJ\_Platform** | **VARCHAR(50)** | **NOT NULL** | **Values ( Upwork – Mostaql – FreeLanceer – khmsat )** |
| **FJ\_Cost** | **MONEY** | **NOT NULL** | **+VE** |
| **FJ\_PaymentMethod** | **VARCHAR(50)** | **NOT NULL** | **Values ( Debit – Credit – Easy Pay – Instapay – Pay pal – VF Cash )** |

**21- FREELANCING\_JOB**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column** | **Data Type** | **Constraints** | **Rule** |
| **FJ\_ID** | **INT** | **PK** |  |