Database Design Model (**Online Exam System**)

User/Candidate Tables:

1. Candidate’s Registration Table

|  |  |  |
| --- | --- | --- |
| Column Names | Constraints | Data Type |
| 1. Full Name | **Not Nullable Type** | **String** |
| 1. Email | PrimaryKey | Alpha Numeric **String**(with Regex pattern) |
| 1. DOB | **Not Nullable Type** | **Date** |
| 1. Contact | **Not Nullable Type(10 digit constraint)** | ***Double*** |
| 1. City | **Not Nullable Type** | **String** |
| 1. State | **Not Nullable Type** | **String** |
| 1. Highest Qualification | **Not Nullable Type** | **String** |
| 1. Year of Completion | **Not Nullable Type – Set a default value** | **Date** |
| 1. Password | **Not Nullable(Storing passwords)(Special Type)** | Alpha Numeric **String**(with special Characters) |

1. Candidate’s Enrollment(No Need for this table)

|  |  |  |
| --- | --- | --- |
| Column Names | Constraints | Data Type |
| 1. Full Name | **Not Nullable Type** | **String** |
| 1. Email | **Not Nullable Type**  Foreign Key | Alpha Numeric **String**(with Regex pattern) |
| 1. Contact | **Not Nullable Type(10 digit constraint)** | **Int** |
| 1. Technologies Enrolled |  | **String** |

1. Candidate’s Report

ID, Technology, Level, Score

|  |  |  |
| --- | --- | --- |
| Column Names | Constraints | Data Type |
| 1. Candidates Id   (Superkey with Technology) | Foreign Key | Alpha Numeric i.e. (**CID**000123)-**String** |
| 1. Technology | **Not Nullable Type** | **String** |
| 1. Levels Cleared | **Not Nullable or ‘0’ as Default** | **Int** |
| 1. Level 1 Result | **Nullable or ‘null’ as Default** | **Int** |
| 1. Level 2 Result | **Nullable or ‘null’ as Default** | **Int** |
| 1. Level 3 Result | **Nullable or ‘null’ as Default** | **Int** |

1. Candidate’s Username and Password

|  |  |  |
| --- | --- | --- |
| Column Names | Constraints | Data Type |
| 1. Candidates Id(Will be generated after registration) | Foreign Key | Alpha Numeric i.e. (**CID**000123)-**String** |
| 1. Full Name | **Not Nullable Type** | **String** |
| 1. Email | **Not Nullable Type** | Alpha Numeric **String**(with Regex pattern) |
| 1. Contact | **Not Nullable Type(10 digit constraint)** | **Int** |
| 1. Username(Email ID) | **Not Nullable(non repetitive)** | **String** |
| 1. Password | **Not Nullable** | Alpha Numeric **String**(with special Characters) |

Admin Tables (Admin Details will already be stored in the Database i.e. there won’t be any Module for New Registration)

1. Admin Details

|  |  |  |
| --- | --- | --- |
| Column Names | Constraints | Data Type |
| 1. Full Name | **Not Nullable Type** | **String** |
| 1. Email | Primary Key | Alpha Numeric i.e. (ADM000123)-**String** |
| 1. Password | **Not Nullable(Storing passwords)(Special Type)** | Alpha Numeric **String**(with special Characters) |
| 1. Contact | **Not Nullable Type(10 digit constraint)** | **double** |

Question Table

(Separate tables for Questions using SP)