**Database Schema**

Diagram

Description automatically generated

|  |  |  |
| --- | --- | --- |
| No | Table | Description |
| 01 | users | - All information about a registered user is stored here, including Mentees’ and Mentors’ information.  - Primary keys: username.  - Foreign keys: roleID. |
| 02 | roles | - This table stores information about all the roles that the system has.  - Primary keys: roleID.  - Foreign keys: none. |
| 03 | mentorDetails | - Some of information that only Mentors have is stored in this table. The common information is stored in ***users***.  - Primary keys: mentorUsername.  - Foreign keys: none. |
| 04 | mentorSkills | - Each mentor has some specific skills in their area and they are stored here.  - Primary keys: mentorSkillID.  - Foreign keys: mentorUsername, skillID. |
| 05 | skills | - Information about all of the skills that the system is managing is stored in this table.  - Primary keys: skillID.  - Foreign keys: none. |
| 06 | followers | - Each mentee can follow some specific mentors that they are interested in. And the information that which mentee follow which mentor is stored in this table.  - Primary keys: followID.  - Foreign keys: menteeUsername, mentorUsername. |
| 07 | comments | - Mentees can rate and give feedback (comments) to the mentors and all of that information is stored in this table.  - Primary keys: commentID.  - Foreign keys: menteeUsername, mentorUsername. |
| 08 | requests | - This table stores all information about the request mentees made to mentors.  - Primary keys: requestID.  - Foreign keys: menteeUsername, mentorUsername. |

**Database Tables**

1. **users**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Field name | Type | Size | Unique | Not Null | PK/FK | Notes |
| 1 | username | varchar | 20 | Yes | Yes | PK |  |
| 2 | userID | varchar | 10 | Yes | Yes |  | Start with ME (Mentee), MT (Mentor), AD (Admin) and followed by a sequence of 6 numbers starting from 000000. |
| 3 | email | varchar | 255 | Yes | Yes |  |  |
| 4 | password | varchar | 20 |  | Yes |  |  |
| 5 | fullname | nvarchar | 50 |  |  |  |  |
| 6 | phone | varchar | 10 |  |  |  |  |
| 7 | address | nvarchar | 255 |  |  |  |  |
| 8 | dob | date |  |  |  |  |  |
| 9 | sex | varchar | 5 |  |  |  |  |
| 10 | image | nvarchar | 255 |  |  |  |  |
| 11 | roleID | varchar | 10 |  | Yes | FK | FK to **roles** table. |
| 12 | status | bit |  |  | Yes |  | 0 is inactive and 1 (default) is active. |
| 13 | emailStatus | bit |  |  | Yes |  | 0 (default) is not confirmed and 1 is confirmed. |

1. **roles**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Field name | Type | Size | Unique | Not Null | PK/FK | Notes |
| 1 | roleID | varchar | 10 | Yes | Yes | PK |  |
| 2 | roleName | nvarchar | 20 |  | Yes |  |  |

1. **mentorDetails**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Field name | Type | Size | Unique | Not Null | PK/FK | Notes |
| 1 | mentorUsername | varchar | 20 | Yes | Yes | PK, FK | FK to **users** table. |
| 2 | price | float |  |  |  |  |  |
| 3 | facebook | nvarchar | 255 |  |  |  |  |
| 4 | github | nvarchar | 255 |  |  |  |  |
| 5 | profession | nvarchar | 100 |  |  |  | Major in what. |
| 6 | language | nvarchar | 255 |  |  |  | Programming language. |
| 7 | introduction | nvarchar | 500 |  |  |  |  |
| 8 | serviceDescription | nvarchar | 500 |  |  |  |  |
| 9 | achievementDescription | nvarchar | 500 |  |  |  |  |

1. **mentorSkills**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Field name | Type | Size | Unique | Not Null | PK/FK | Notes |
| 1 | mentorSkillID | varchar | 10 | Yes | Yes | PK |  |
| 2 | mentorUsername | varchar | 20 |  | Yes | FK | FK to **users** table. |
| 3 | skillID | varchar | 10 |  | Yes | FK | FK to **skills** table. |
| 4 | yearsExperience | int |  |  |  |  |  |
| 5 | rate | int |  |  |  |  |  |

1. **skills**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Field name | Type | Size | Unique | Not Null | PK/FK | Notes |
| 1 | skillID | varchar | 10 | Yes | Yes | PK |  |
| 2 | skillName | nvarchar | 50 |  | Yes |  |  |
| 3 | status | bit |  |  | Yes |  | 0 is inactive, 1 (default) is active. |

1. **followers**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Field name | Type | Size | Unique | Not Null | PK/FK | Notes |
| 1 | followID | varchar | 10 | Yes | Yes | PK |  |
| 2 | menteeUsername | varchar | 20 |  | Yes | FK | FK to **users** table. |
| 3 | mentorUsername | varchar | 20 |  | Yes | FK | FK to **users** table. |
| 4 | timestamp | datetime |  |  | Yes |  |  |

1. **comments**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Field name | Type | Size | Unique | Not Null | PK/FK | Notes |
| 1 | commentID | varchar | 10 | Yes | Yes | PK |  |
| 2 | menteeUsername | varchar | 20 |  | Yes | FK | FK to **users** table. |
| 3 | mentorUsername | varchar | 20 |  | Yes | FK | FK to **users** table. |
| 4 | rate | int |  |  |  |  |  |
| 5 | comments | nvarchar | 1500 |  |  |  |  |
| 6 | timestamp | datetime |  |  |  |  |  |

1. **requests**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Field name | Type | Size | Unique | Not Null | PK/FK | Notes |
| 1 | requestID | varchar | 10 | Yes | Yes | PK |  |
| 2 | menteeUsername | varchar | 20 |  | Yes | FK | FK to **users** table. |
| 3 | mentorUsername | varchar | 20 |  | Yes | FK | FK to **users** table. |
| 4 | skillsID | varchar | 40 |  | Yes |  | List of skills required for the request. |
| 5 | deadline | datetime |  |  | Yes |  |  |
| 6 | title | nvarchar | 100 |  | Yes |  |  |
| 7 | content | nvarchar | 255 |  |  |  |  |
| 8 | language | nvarchar | 50 |  |  |  |  |
| 9 | status | varchar | 1 |  |  |  | P: Pending  A: Accepted  R: Rejected  C: Closed |
| 10 | openedTime | datetime |  |  |  |  |  |
| 11 | approvedTime | datetime |  |  |  |  |  |
| 12 | canceledTime | datetime |  |  |  |  |  |