Entities Table:

1. Users
2. Applications
3. Credit Check
4. Notifications

### **1. Users Table:**

| Column Name | Data Type | Description |
| --- | --- | --- |
| user\_id | INT (Primary Key, Auto Increment) | Unique identifier for each user |
| first\_name | VARCHAR | User's first name |
| last\_name | VARCHAR | User's last name |
| email | VARCHAR (Unique) | User's email address |
| password | VARCHAR | Hashed password for user |
| date\_of\_birth | DATE | User's date of birth |
| address | VARCHAR | User's residential address |
| phone\_number | VARCHAR | User's contact number |
| registration\_date | TIMESTAMP | Date and time of user registration |

### **2. Applications Table:**

| Column Name | Data Type | Description |
| --- | --- | --- |
| application\_id | INT (Primary Key, Auto Increment) | Unique identifier for each application |
| user\_id | INT (Foreign Key) | Reference to the Users table |
| annual\_income | DECIMAL | User's declared annual income |
| employment\_status | VARCHAR | User's employment status (e.g., Employed, Self-Employed, Unemployed) |
| application\_status | ENUM ('Pending', 'Approved', 'Rejected', 'Under Review') | Status of the credit card application |
| applied\_date | TIMESTAMP | Date and time of application |

### **3. Credit Check Table:**

| Column Name | Data Type | Description |
| --- | --- | --- |
| check\_id | INT (Primary Key, Auto Increment) | Unique identifier for each credit check |
| user\_id | INT (Foreign Key) | Reference to the Users table |
| credit\_score | INT | User's credit score fetched from the external service |
| credit\_history | TEXT | Detailed credit history or any remarks |

### **4. Notifications Table:**

| Column Name | Data Type | Description |
| --- | --- | --- |
| notification\_id | INT (Primary Key, Auto Increment) | Unique identifier for each notification |
| user\_id | INT (Foreign Key) | Reference to the Users table |
| content | TEXT | Notification content/message |
| notification\_date | TIMESTAMP | Date and time of notification |
| status | ENUM ('Read', 'Unread') | Status of the notification |

**Relationships:**

* **Users to Applications**: One-to-Many. One user can have multiple applications, but each application is linked to one user.
* **Users to Credit Check**: One-to-One. Each user has one credit check record.
* **Users to Notifications**: One-to-Many. One user can receive multiple notifications.