

**FU House finder**

**Software Design Document**

– Hanoi, Sep 2022–

**Table of Contents**

[III. Database Tables 3](#_Toc114085453)

[1. Campus 3](#_Toc114085454)

[2. User 3](#_Toc114085455)

[3. House 3](#_Toc114085456)

[4. Room 3](#_Toc114085457)

[5. Rate 4](#_Toc114085458)

[6. ImageOfHouse 4](#_Toc114085459)

[7. ImageOfRoom 4](#_Toc114085460)

# III. Database Tables

## 1. Campus

*Store the information of alls campus for users*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | CampusId | int |  |  | Yes | PK |  |
| 2 | CampusName | nvarchar | 100 |  |  |  |  |

## 2. UserRole

*Store the information of alls roles of users*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | RoleId | int |  |  | Yes | PK |  |
| 2 | RoleName | nvarchar | 100 |  |  |  |  |

## 3. User

*Store the information of all users*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | UserId | nchar | 30 |  | Yes | PK | Include student id, host id and admission id;  Has specific convention to make |
| 2 | Username | nvarchar | 100 |  |  |  |  |
| 3 | Password | nvarchar | 100 |  |  |  |  |
| 4 | Email | nvarchar | 100 |  |  |  |  |
| 5 | Active | bit |  |  |  |  |  |
|  | FullName | nvarchar | 500 |  | No |  | For Landlord and Staff |
| 6 | PhoneNumber | nvarchar | 50 |  | No |  | Only for Landlord |
| 7 | FacebookURL | nvarchar | 300 |  | No |  | Only for Landlord |
| 8 | IdentityCardFrontSideImageLink | nvarchar | 500 |  | No |  | Only for Landlord |
| 9 | IdentityCardBackSideImageLink | nvarchar | 500 |  | No |  | Only for Landlord |
| 10 | RoleId | int |  |  |  | FK | To Table *Role* |
| 11 | createdDate | datetime |  |  |  |  |  |
| 12 | updatedDate | datetime |  |  |  |  |  |
| 13 | createdUser | nchar | 30 |  |  | FK | To Table *User* |
| 14 | updatedUser | nchar | 30 |  |  | FK | To Table *User* |

## 4. House

*Store the information of all houses*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | HouseId | int |  |  | Yes | PK |  |
| 2 | HouseName | nvarchar | 100 |  |  |  |  |
| 3 | Address | nvarchar | 500 |  |  |  |  |
| 4 | GoogleMapLocation | nvarchar | MAX |  |  |  |  |
| 5 | Information | nvarchar | MAX |  |  |  |  |
| 6 | VillageId | int |  |  |  | FK | To Table *Village* |
| 7 | LandlordId | nchar | 30 |  |  | FK | To Table *User* |
| 8 | createdDate | datetime |  |  |  |  |  |
| 9 | updatedDate | datetime |  |  |  |  |  |
| 10 | createdUser | nchar | 30 |  |  | FK | To Table *User* |
| 11 | updatedUser | nchar | 30 |  |  | FK | To Table *User* |

## 5. Room

*Store the information of all rooms of houses*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | RoomId | int |  |  | Yes | PK |  |
| 2 | RoomName | nvarchar | 50 |  |  |  |  |
| 3 | PricePerMonth | money |  |  |  |  |  |
| 6 | Information | nvarchar | MAX |  |  |  |  |
| 7 | AreaByMeters | float |  |  |  |  |  |
| 8 | MaxAmountOfPeople | int |  |  |  |  |  |
| 9 | CurrentAmountOfPeople | int |  |  |  |  |  |
| 10 | BuildingNumber | int |  |  |  |  |  |
| 11 | FloorNumber | int |  |  |  |  |  |
| 12 | StatusId | int |  |  |  | FK | To Table *Status* |
| 13 | RoomTypeId | int |  |  |  | FK | To Table *RoomType* |
| 14 | HouseId | int |  |  |  | FK | To Table *House* |
| 15 | CampusId | int |  |  |  | FK | To Table *Campus* |
| 16 | createdDate | datetime |  |  |  |  |  |
| 17 | updatedDate | datetime |  |  |  |  |  |
| 18 | createdUser | nchar | 30 |  |  | FK | To Table *User* |
| 19 | updatedUser | nchar | 30 |  |  | FK | To Table *User* |

## 6. Rate

*Store the information of all rates and comments of users*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | RateId | int |  |  | Yes | PK |  |
| 2 | Star | int |  |  |  |  |  |
| 3 | Comment | nvarchar | MAX |  |  |  |  |
| 4 | LandlordReply | nvarchar | MAX |  |  |  |  |
| 5 | HouseId | int |  |  |  | FK | To Table *House* |
| 6 | StudentId | nchar | 30 |  |  | FK | To Table *User* |
| 7 | createdDate | datetime |  |  |  |  |  |
| 8 | updatedDate | datetime |  |  |  |  |  |
| 9 | createdUser | nchar | 30 |  |  | FK | To Table *User* |
| 10 | updatedUser | nchar | 30 |  |  | FK | To Table *User* |

## 7. ImageOfHouse

*Store the information of all pictures of house*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | ImageId | int |  |  | Yes | PK |  |
| 2 | ImageLink | nvarchar | 500 |  |  |  |  |
| 3 | HouseId | int |  |  |  | FK | To Table *House* |
| 4 | createdDate | datetime |  |  |  |  |  |
| 5 | updatedDate | datetime |  |  |  |  |  |
| 6 | createdUser | nchar | 30 |  |  | FK | To Table *User* |
| 7 | updatedUser | nchar | 30 |  |  | FK | To Table *User* |

## 8. ImageOfRoom

*Store the information of all pictures of room*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | ID | int |  |  | Yes | PK |  |
| 2 | ImageLink | nvarchar | 500 |  |  |  |  |
| 3 | RoomId | int |  |  |  | FK | To Table *Room* |
| 4 | createdDate | datetime |  |  |  |  |  |
| 5 | updatedDate | datetime |  |  |  |  |  |
| 6 | createdUser | nchar | 30 |  |  | FK | To Table *User* |
| 7 | updatedUser | nchar | 30 |  |  | FK | To Table *User* |

## 9. District

*Store the information of all districts (for identifying house address)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | DistrictId | int |  |  | Yes | PK |  |
| 2 | DistrictName | nvarchar | 100 |  |  |  |  |

## 10. Commune

*Store the information of all communes (for identifying house address)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | CommuneId | int |  |  | Yes | PK |  |
| 2 | CommunetName | nvarchar | 100 |  |  |  |  |
| 3 | DistrictId | int |  |  |  | FK | To Table *District* |

## 11. Village

*Store the information of all villages (for identifying house address)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | VillageId | int |  |  | Yes | PK |  |
| 2 | VillageName | nvarchar | 100 |  |  |  |  |
| 3 | CommuneId | int |  |  |  | FK | To Table *Commune* |

## 12. Status

*Store the information of all status of a Room*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | StatusId | int |  |  | Yes | PK |  |
| 2 | StatusName | nvarchar | 300 |  |  |  |  |

## 13. RoomType

*Store the information of all types of a Room*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | RoomTypeId | int |  |  | Yes | PK |  |
| 2 | RoomTypeName | nvarchar | 300 |  |  |  |  |

## 14. Report

*Store the information of all Reports of Students to Houses*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | ReportId | int |  |  | Yes | PK |  |
| 2 | ReportContent | nvarchar | MAX |  |  |  |  |
| 3 | StudentId | nchar | 30 |  |  | FK | To Table *User* |
| 4 | HouseId | int |  |  |  | FK | To Table *House* |
| 5 | createdDate | datetime |  |  |  |  |  |
| 6 | updatedDate | datetime |  |  |  |  |  |
| 7 | createdUser | nchar | 30 |  |  | FK | To Table *User* |
| 8 | updatedUser | nchar | 30 |  |  | FK | To Table *User* |