|  |  |  |
| --- | --- | --- |
| Class dictionary | | |
| Class Name | **Mapping column with Conceptual diagram** | **記述** |
| AspNetUser | User | Generated by ASP.NET MVC5. Describe all user in system |
| AspNetRole | N/A | Generated by ASP.NET MVC5. Describe existing user’s roles in system. |
| AspNetUserClaim | N/A | Generated by ASP.NET MVC5. Describe all stored claims (Special 属性s) of AspNetUsers. |
| AspNetUserLogin | N/A | Generated by ASP.NET MVC5. Describe information about 3rd party/external logins allowed for each AspNetUsers. |
| Vehicle | Vehicle | Describe all vehicles in system. |
| VehicleImage | VehicleImage | Describe all images of each vehicle. |
| VehicleModel | VehicleModel | Describe all vehicle models in system. |
| VehicleBrand | VehicleBrand | Describe all vehicle brands in system. |
| Category | Category | Describe all vehicle categories in system. |
| VehicleGroup | VehicleGroup | Describe all vehicle groups in system |
| PriceGroup | PriceGroup | Describe rental constraints (Pricing, travel distance…) of each VehicleGroup. |
| PriceGroupItem | PriceGroupItem | Describe detailedconstraints for hourly rental options ofeach PriceGroup in system. |
| Garage | Garage | Describe all garages in system |
| GarageWorkingTime | GarageWorkingTime | Describe working time constraints of each Garagein system. |
| Location | Location | Describe all locations in system. |
| Nation | Nation | Describe all nations in system. |
| BookingReceipt | BookingReceipt | Describe all booking receipts in system. |

Table 9:Class dictionary

### Class Diagram Explanation

#### AspNetUser

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| Id | String | Private | Unique identifier of AspNetUser. |
| Email | String | Private | Email of user. |
| EmailConfirmed | Bit | Private | Status indicating whether email has been confirmed. |
| PasswordHash | String | Private | Encoded password of user. |
| SecurityStamp | String | Private | Stamp used to authenticate user’s cookies and session. |
| PhoneNumber | String | Private | Phone number of user. |
| PhoneNumberConfirmed | Bit | Private | Status indicating whether phone number has been confirmed. |
| TwoFactorEnabled | Bit | Private | Status indicating whether two-factor sign-in is enabled. |
| LockoutEndDateUtc | Nullable<DateTime> | Private | Date until which this user is locked out if lockoutEnable is true. |
| LockoutEnable | Bit | Private | Status indicating whether lockout is enabled. |
| AccessFailedCount | Int | Private | Number of failed access for this account. |
| UserName | String | Private | Username |
| FullName | String | Private | Full name of user |
| IsProviderUntil | Nullable<DateTime> | Private | Date until which this user has provider role. |
| AvatarURL | String | Private | URL of user’s avatar |

Table 10: AspNetUser class - 属性s

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return ドメイン** | **Visibility** | **記述** |
| Getter | 属性 ドメイン | Public | Get value of 属性 |
| Setter | Void | Public | Set value of 属性 |

Table 11: AspNetUser class – Methods

#### AspNetRole

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| Id | String | Private | Unique identifier of AspNetRole |
| Name | String | Private | Name of role |

Table 12: AspNetRole class - 属性s

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return ドメイン** | **Visibility** | **記述** |
| Getter | 属性 ドメイン | Public | Get value of 属性 |
| Setter | Void | Public | Set value of 属性 |

Table 13: AspNetRole class - Methods

#### AspNetUserClaim

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| Id | Int | Private | Unique identifier of claim |
| UserId | String | Private | ID of AspNetUser whom this claim belongs to |
| Claimドメイン | Stirng | Private | ドメイン of claim |
| ClaimValue | String | Private | Value of claim |

Table 16: AspNetUserClaim class - 属性s

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return ドメイン** | **Visibility** | **記述** |
| Getter | 属性 ドメイン | Public | Get value of 属性 |
| Setter | Void | Public | Set value of 属性 |

Table 17: AspNetUserClaim class - Methods

#### AspNetUserLogin

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| LoginProvider | String | Private | Name of third-party login provider |
| ProviderKey | String | Private | Login key of user provided by third-party service |
| UserId | String | Private | ID of AspNetUser who can log in using this login |

Table 18: AspNetUserLogin class - 属性s

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return ドメイン** | **Visibility** | **記述** |
| Getter | 属性 ドメイン | Public | Get value of 属性 |
| Setter | Void | Public | Set value of 属性 |

Table 19: AspNetUserLogin class - Methods

#### Vehicle

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| ID | String | Private | Unique identifier of vehicle |
| LicenseNumber | String | Private | License number of vehicle |
| Name | String | Private | Name of vehicle |
| ModelID | Int | Private | Model of vehicle |
| Year | Int | Private | Year in which this vehicle was produced |
| GarageID | Int | Private | ID of Garage containing this vehicle |
| VehicleGroupID | Nullable<Int> | Private | ID of VehicleGroup containing this vehicle |
| Transmissionドメイン | Int | Private | Transmission ドメイン of vehicle |
| TransmissionDetail | String | Private | Detailed 記述 about transmisson of vehicle |
| Fuelドメイン | Nullable<Int> | Private | Fuel ドメイン of vehicle |
| Engine | String | Private | 記述 about engine of vehicle |
| Color | Int | Private | Color of vehicle |
| 記述 | String | Private | 記述 about vehicle |
| NumOfComment | Int | Private | Number of customer’s feedback this vehicle has received |
| Star | Decimal | Private | Rating of vehicle |
| IsDeleted | Bit | Private | Status indicating whether this vehicle was deleted |

Table 20: Vehicle class - 属性s

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return ドメイン** | **Visibility** | **記述** |
| Getter | 属性 ドメイン | Public | Get value of 属性 |
| Setter | Void | Public | Set value of 属性 |

Table 21: Vehicle class - Methods

#### VehicleImage

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| ID | String | Private | Unique identifier of image returned by cloudinary |
| VehicleID | Int | Private | ID of Vehicle which this image belongs to |
| URL | String | Private | URL of image |

Table 22: VehicleImage class - 属性s

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return ドメイン** | **Visibility** | **記述** |
| Getter | 属性 ドメイン | Public | Get value of 属性 |
| Setter | Void | Public | Set value of 属性 |

Table 23: VehicleImage class - Methods

#### VehicleModel

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| ID | Int | Private | Unique identifier of vehicle model |
| Name | String | Private | Name of role |
| BrandID | Int | Private | ID of Brand of this model |
| NumOfDoor | Int | Private | Number of door on this vehicle |
| NumOfSeat | Int | Private | Number of seat in this vehicle |

Table 24: VehicleModel class - 属性s

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return ドメイン** | **Visibility** | **記述** |
| Getter | 属性 ドメイン | Public | Get value of 属性 |
| Setter | Void | Public | Set value of 属性 |

Table 25: VehicleModel class - Methods

#### VehicleBrand

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| ID | Int | Private | Unique identifier of vehicle brand |
| Name | String | Private | Name of brand |

Table 26: VehicleBrand class - 属性s

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return ドメイン** | **Visibility** | **記述** |
| Getter | 属性 ドメイン | Public | Get value of 属性 |
| Setter | Void | Public | Set value of 属性 |

Table 27: VehicleBrand class - Methods

#### Categories

|  |  |  |
| --- | --- | --- |
| 属性 | ドメイン | 記述 |
| ID | Int | カテゴリの唯一の識別子 |
| Name | nvarchar(50) | カテゴリの名前 |

#### Garages

|  |  |  |
| --- | --- | --- |
| 属性 | ドメイン | 記述 |
| ID | int | ガレージの唯一の識別子 |
| OwnerID | nvarchar(128) | ガレージのユーザーの唯一の識別子 |
| Name | nvarchar(100) | ガレージの名前 |
| LocationID | int | ガレージの場所の唯一の識別子 |
| Address | nvarchar(200) | ガレージの住所 |
| Email | varchar(256) | ガレージのメール |
| Phone1 | varchar(50) | ガレージの電話番号１ |
| Phone2 | varchar(50) | ガレージの電話番号２ |
| NumOfComment | int | 顧客からコメントの量 |
| Star | decimal(2, 1) | ガレージの評価 |
| Description | nvarchar(1000) | ガレージの説明 |
| Policy | nvarchar(1000) | ガレージの規則 |
| IsActive | bit | ガレージの状態 |
| IsDeleted | bit | ガレージの削除したの |

Table 26: Garage class - 属性s

#### GarageWorkingTime

|  |  |  |
| --- | --- | --- |
| **属性** | **ドメイン** | **記述** |
| GarageID | int | ガレージの唯一の識別子 |
| DayOfWeek | int | Day of week　which this working time constraint represents. |
| OpenTimeInMinute | Int | Opening time of this garare in this day of week. |
| CloseTimeInMinute | Int | Closing time of this garage in this day of week. |

#### Location

|  |  |  |
| --- | --- | --- |
| **属性** | **ドメイン** | **記述** |
| ID | Int | Unique identifier of location. |
| Name | nvarchar(50) | Name of location. |
| NationID | Int | ID of Nation to which this location belongs. |

Table 26: Location class - 属性s

#### Nation

|  |  |  |
| --- | --- | --- |
| **属性** | **ドメイン** | **記述** |
| ID | Int | Unique identifier of nation |
| Name | nvarchar(50) | Name of nation |

#### VehicleGroup

|  |  |  |
| --- | --- | --- |
| **属性** | **ドメイン** | **記述** |
| ID | Int | Unique identifier of vehicle group |
| OwnerID | nvarchar(128) | ID of AspNetUser whom this group belongs to |
| Name | nvarchar(50) | Name of group |
| IsActive | Bit | Status indicating whether this group is active |
| WithDriverPriceGroupID | Int | ID of default PriceGroup which is applied for driver-included rent. |

#### PriceGroup

|  |  |  |
| --- | --- | --- |
| **属性** | **ドメイン** | **記述** |
| ID | Int | Unique identifier of price group. |
| DepositPercentage | decimal(3, 2) | Percentage of total rental price which customer has to pay to provider when booking. |
| PerDayPrice | float | Pricing of daily rental. |
| MaxRentalPeriod | int | Maximum days a rental can last. |
| MaxDistancePerDay | int | Maximum km that customer can travel in 1 days without being charged extra fee with the rented vehicle. |
| ExtraChargePerKm | float | Extra feefor every 1 km outside allowed travel distance. |

#### PriceGroupItem

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| PriceGroupID | Int | Private | ID of PriceGroup to which this hourly rental option belongs. |
| MaxTime | Int | Private | Rental duration of this rental option. |
| Price | float | Private | Rental price of this rental option. |
| MaxDistance | Int | Private | Maximum km that customer can travel without being charged extra fee with the rented vehicle using this rental option. |

#### BookingReceipt

|  |  |  |  |
| --- | --- | --- | --- |
| **属性** | **ドメイン** | **Visibility** | **記述** |
| ID | Int | Private | Unique identifier of receipt. |
| CustomerID | nvarchar(128) | Private | ID of AspNetUser who is the customer of this receipt. |
| RentalPrice | float | Private | Total rental price. |
| Deposit | float | Private | Deposit paid by customer to provider when booking. |
| BookingFee | float | Private | Fee paid by customer to system when booking. |
| Distance | int | Private | Maximum distance customer can travel without being charged extra fee with the rented vehicle. |
| Star | int | Private | Rating from customer for this rental period. |
| Comment | nvarchar(200) | Private | Feedback from customer about this rental reriod. |
| BookingTime | DateTime | Private | Time when this booking is made. |
| StartTime | DateTime | Private | Time when rental period starts. |
| EndTime | DateTime | Private | Time when rental period ends. |
| GarageID | Int | Private | ID of Garage to which this booking belongs. |
| GarageName | nvarchar(100) | Private | Name of Garage at booking moment. |
| GarageAddress | nvarchar(200) | Private | Address of Garage at booking moment. |
| GaragePhone | varchar(50) | Private | Phone1 of Garage at booking moment. |
| GarageEmail | varchar(50) | Private | Email of Garage at booking moment. |
| VehicleID | Int | Private | ID of booked Vehicle. |
| LicenseNumber | varchar(50) | Private | License number of Vehicle at booking moment. |
| VehicleName | nvarchar(100) | Private | Name of Vehicle at booking moment. |
| TransmissionDetail | nvarchar(200) | Private | TransmissionDetail of Vehicle at booking moment. |
| Engine | nvarchar(200) | Private | Engine of Vehicle at booking moment. |
| Color | Int | Private | Color of Vehicle at booking moment. |
| IsCanceled | Bit | Private | Status indicating whether this booking has been canceled. |
| IsPending | Bit | Private | Status indicating whether this booking has not been paid. |

Table 26: BookingReceipt class - 属性s