1. Entities and Attributes

1.1 Project

يمثل مشروع الإسكان الحكومي (مثل: سكن مصر، دار مصر).

Attributes:

- ProjectID (Primary Key)

- ProjectName

- City

- Governorate

- Description

- DeliveryDate

- ProjectStatus

- CreatedAt

1.2 Building

يمثل العمارات التابعة لكل مشروع.

Attributes:

- BuildingID (Primary Key)

- ProjectID (Foreign Key)

- BuildingNumber

- NumberOfFloors

- TotalUnits

* Notes

1.3 Unit

يمثل الوحدة السكنية داخل العمارة.

Attributes:

* UnitID (Primary Key)

* BuildingID (Foreign Key)

* UnitNumber

* FloorNumber

* AreaSQM

* UnitType

* FinishingStatus

* BasePrice

* FinalPrice

* AvailabilityStatus

1.4 PaymentPlan

يمثل نظام السداد والتقسيط الخاص بكل وحدة.

Attributes:

* PaymentPlanID (Primary Key)

* UnitID (Foreign Key)

- DownPaymentPercentage

- DownPaymentAmount

- InstallmentYears

- InstallmentAmount

- InterestRate

- TotalPrice

1.5 EligibilityRule

.يمثل شروط التقديم الخاصة بكل مشروع

Attributes:

- EligibilityID (Primary Key)

- ProjectID (Foreign Key)

- MinimumAge

- MaximumAge

- MinimumIncome

- MaximumIncome

- MaritalStatus

- Notes

1.6 RequiredDocument

.يمثل المستندات المطلوبة للتقديم على المشروع

Attributes:

- DocumentID (Primary Key)

- ProjectID (Foreign Key)

- DocumentName

- IsMandatory

1.7 Citizen

يمثل المواطن المتقدم للحصول على وحدة سكنية.

Attributes:

- CitizenID (Primary Key)

- NationalID

- FullName

- Phone

- Email

- PasswordHash

- BirthDate

- MaritalStatus

- Income

- Address

- CreatedAt

1.8 Employee

يمثل الموظف الحكومي المسؤول عن مراجعة الطلبات.

Attributes:

- EmployeeID (Primary Key)

- FullName

- JobTitle

- Department

- Email

- PasswordHash

- Role

- CreatedAt

1.9 Application

.يمثل طلب التقديم الذي يقدمه المواطن

Attributes:

- ApplicationID (Primary Key)

- CitizenID (Foreign Key)

- UnitID (Foreign Key)

- ProjectID (Foreign Key)

- ApplicationDate

- ApplicationStatus

- ReviewedBy (Foreign Key → Employee)

- ReviewDate

- Notes

1.10 ApplicationDocument

يمثل المستندات التي يرفعها المواطن أثناء التقديم.

Attributes:

- ApplicationDocumentID (Primary Key)

- ApplicationID (Foreign Key)

- DocumentID (Foreign Key)

- FilePath

- UploadDate

- VerificationStatus

1.11 ApplicationStatusHistory

يمثل سجل التغييرات التي تطرأ على حالة الطلب.

Attributes:

- StatusID (Primary Key)

- ApplicationID (Foreign Key)

- Status

- ChangedAt

- ChangedBy (Foreign Key → Employee)

1.12 Notification

يمثل الإشعارات المرسلة إلى المواطن.

Attributes:

- NotificationID (Primary Key)

- CitizenID (Foreign Key)

- ApplicationID (Foreign Key)

- Message

- IsRead

- CreatedAt

1.13 UnitAllocation

.يمثل التخصيص النهائي للوحدة السكنية

Attributes:

- AllocationID (Primary Key)

- UnitID (Foreign Key)

- CitizenID (Foreign Key)

- AllocationDate

- ContractStatus

1.14 AdminLog

.يمثل سجل العمليات التي يقوم بها الموظفون داخل النظام

Attributes:

- LogID (Primary Key)

- EmployeeID (Foreign Key)

- Action

- ActionDate

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2. Relationships

- A **Project** can contain multiple **Buildings** (One-to-Many).

- Each **Building** can include multiple **Units** (One-to-Many).

- Each **Unit** can have one or more **Payment Plans** (One-to-Many).

- A **Project** can define multiple **Eligibility Rules** (One-to-Many).

- A **Project** can require multiple **Documents** (One-to-Many).

- A **Citizen** can submit multiple **Applications** (One-to-Many).

- Each **Application** is associated with one **Citizen** and one **Unit** (Many-to-One).

- An **Employee** can review multiple **Applications** (One-to-Many).

- Each **Application** can include multiple **Submitted Documents** (One-to-Many).

- Each **Application** maintains a history of status changes (One-to-Many).

- A **Citizen** can receive multiple **Notifications** (One-to-Many).

- Each **Unit** can be allocated to one **Citizen** through a **Unit Allocation** record (One-to-One).

- An **Employee** can generate multiple **Admin Logs** (One-to-Many).