Group Project : Co-working Database Phase 1 Submission

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Group Members:

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Project Component:

- ER Diagram

- Constraints

- Normalization Check

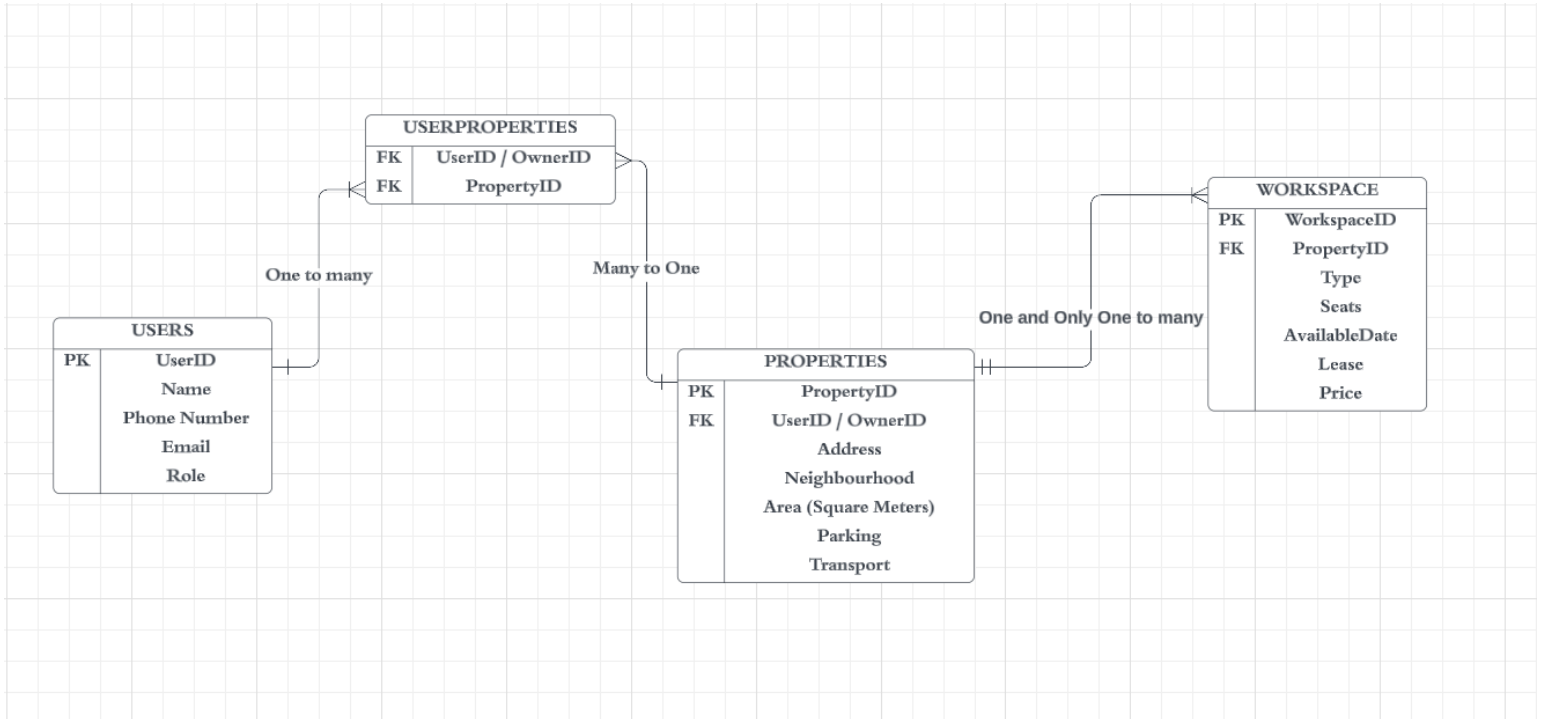- Sample Data for Entities

Submission Date

- May 28, 2024

Course:

DATA1201 Introduction to Relational Database

Institution:

Bow Valley College

ER Diagram

Constraints

USERS

- UserID (Int, Primary Key, NOT NULL)
- Name (VARCHAR (100), NOT NULL)
- Phone (VARCHAR (20), NOT NULL)
- Email (VARCHAR (100), NOT NULL, UNIQUE)
- Role (VARCHAR (10) NOT NULL, CHECK (Role IN ('owner', 'coworker')));

PROPERTIES

- PropertyID (INT, Primary Key)
- OwnerID (INT, NOT NULL, Foriegn Key USERS(UserID))
- Address (VARCHAR (400), NOT NULL)

- Neighbourhood (VARCHAR (120), NOT NULL)
- Area (NOT NULL, CHECK (Area < 0))
- Parking (Bool, NOT NULL)
- Transport (Bool, NOT NULL)

WORKSPACE
- WorkspaceID (INT, Primary Key)
- PropertyID (INT, NOT NULL, Foreign Key PROPERTIES(PropertyID))
- Type (VARCHAR (50), NOT NULL, CHECK(Type IN("Meeting Room", "Private Office", "Desk")))
- Seats (INT, NOT NULL, Check (Seats > 0)
- AvailableDate (Date, NOT NULL)
- Lease (VARCHAR (20), NOT NULL, CHECK (Lease IN ("Day", "Week", "Month"))
- Price (DEC(10,2), NOT NULL, CHECK (Price > 0))

<u>Normalization Check</u>

USERS

- Attributes: UserID(Primary Key), Name, Phone, Email, Role
- Has a Unique Primary Key (UserID) that other attributes are depending on
- No Non-key attributes are dependent on the other Non-key attributes

PROPERTIES

- Attributes: PropertyID (Primary Key), OwnerID (Foreign Key), Address, Neighborhood, Area, Parking, Transport
- Has a Unique Primary Key (PropertyID) that other attributes are depending on
- No Non-key attributes are dependent on the other Non-key attributes

USERPROPERTIES

- Attributes: UserID / OwnerID (Foreign Key), PropertyID (Foriegn Key).
- It has a composite primary key that prevents partial dependencies.
- There are no non-key attributes in the table, so there are no non-key attributes that could cause transitive dependencies.

WORKSPACES

- Attributes: WorkspaceID (Primary Key), PropertyID (Foreign Key), Type, Seats, AvailableDate, Lease, Price
- Has a Unique Primary Key (WorkspaceID) that other attributes are depending on
- No Non-key attributes are dependent on the other Non-key attributes