

SCHEMA DICTIONARY

Name: Assigned

Description: Gang Members can be assigned multiple jobs.

Entities: Gang Member, Jobs

Attributes:

- **Foreign Key:** FK_Alias, varchar(80), Primary Key
- **Foreign Key:** FK_Type, varchar(80), Primary Key

Cardinality: M:N(Many-to-Many)

Name: Bank

Description: A Bank employs Bank Employees-and gets targeted by Gangs.

Attributes:

- **BID**, int, ID number of the bank, PKEY
- **Name:** varchar(80), name of the Bank
- **Address:** varchar(80), address of the Bank
- **Risk Level:** int, how risky it is to rob the Bank

Notes:

Name: Body Armor

Description: A type of Gang Equipment.

Attributes:

- **GEqID**: int, Primary Key, same as superclass

Notes: Disjoint subclass of Gang Equipment.

Name: Captains

Description: A type of Police Cop that can assign investigations to any number of cops within the station depending on each investigation's danger level.

Attributes:

- **PID**: int, same Primary Key as its superclass.

Notes: Captains is a disjoint subclass of Police Cops.

Name: Cashiers

Description: A Cashier is a type of Bank Employee.

Attributes:

- **InID**: int, same Primary Key as its superclass.

Notes: Disjoint subclass member of Bank Employees.

Name: Cells

Description: Cells are a type of Room.

Attributes:

- **RoID**: int, same Primary Key as its superclass.

Notes: Disjoint subclass of Rooms.

Name: Chief

Description: A Chief is a type of Police Cop.

Attributes:

- **PID**: int, same Primary Key as its superclass.

Notes: Chief is a disjoint subclass of Police Cop.

Name: Disguises

Description: A type of Gang Equipment.

Attributes:

- **GEqID**: int, Primary Key, same as superclass
- **Colors**: Multivariate, varchar(80), colors of the disguise

Notes: Disjoint subclass of Gang Equipment.

Name: Evidence

Description: Evidence is a type of Room that the Police Station houses.

Attributes:

- **RoID**: int, same Primary Key as its superclass.

Notes: Disjoint subclass of Rooms.

Name: Executives

Description: A type of Gang Member that has access to the Vault and can pay and hire Rookies.

Attributes:

- **Alias**: varchar(80), shares the same primary key as its superclass

Notes: Disjoint subclass of Gang Members.

Name: Firearms

Description: These are a type of Police Equipment that can be used by Police Cops.

Attributes:

- **PEqID**: int, shares the same primary key as its superclass.
- **Ammo**: Multivariate, varchar(80), ammo type of the firearm

Notes: Firearms is a disjoint subclass of Police Equipment

Name: Gang

Description: A Gang owns Gang Members, has a reputation and-schedule, and uses Gang Equipment to target Banks

Attributes:

- **GangID**: int, ID of the Gang, PKEY
- **Reputation**: int, reputation of the Gang
- **Schedule**: varchar(80), schedule of the Gang's activity.
- **Size**: int, size indicating how large or small the Gang is
- **HQ**: varchar(80), location of the headquarters of the Gang

Notes:

Name: Gang Equipment

Description: Gang Equipment is used by a Gang on Jobs. Gang Equipment can be Body Armor, Masks, and Gang Firearms.

Attributes:

- **GEqID**: int, number for how many sets of equipment exist, PKEY

Notes: Superclass of Gang Firearms, Masks, and Body Armor.

Name: Gang Firearms

Description: This is a type of Gang Equipment.

Attributes:

- **GEqID**: int, Primary Key, same as superclass
- **Ammo**: Multivariate, varchar(80), ammo type of the firearm

Notes: Disjoint subclass of Gang Equipment.

Name: Gang Members

Description:

Two types of Gang Members are Rookies and Executives, which are unique from each other so they are disjoint. Weak entity that belongs to a Gang.

Attributes:

- **Alias**: varchar(80), alias of the gang member, PKEY
- **Income**: int, derived attribute based on the job's success

Notes: Superclass of Rookies and Executives.

Name: Guards

Description: Guards who are hired by the bank to protect from gangs.

Attributes:

- **InID**: int, same primary key as superclass, PKEY

Name: Houses

Description: The police stations houses rooms for all purposes

Attributes:

- **Foreign Key:** FK_Location, varchar(80), Primary Key
- **Foreign Key:** FK_RoID, int, Primary Key

Cardinality: 1:N(One-to-Many)

Name: Includes

Description: The Gang includes several Gang Members

Attributes:

- **Foreign Key:** FK_GangID, int, Primary Key
- **Foreign Key:** FK_Alias, varchar(80), Primary Key

Cardinality: 1:M(One-to-Many)

Name: Innocents

Description: Civilians and Bank Employees can be Innocents.

Attributes:

- **InID:** int, identification of an innocent
- **Name:** varchar(80), name of an innocent
- **Civ_Flag:** int, Flag for the overlapping subclass Civilians of Innocents.
- **BE_Flag:** int, Primary Key, Flag for the WEAK overlapping subclass Bank Employees of Innocents.
- **Foreign Key:** FK_BID, int, Primary Key, references Bank.

Notes:

Name: Interrogation

Description: Interrogation is a type of Room that the Police Station houses.

Attributes:

- **RoID:** int, same Primary Key as its superclass.

Notes: Disjoint subclass of Rooms.

Name: Investigate

Description: Police cops investigate a gang's activity.

Attributes:

- **Foreign Key:** FK_PID, int, Primary Key, references Police Cops
- **Foreign Key:** FK_GangID, int, Primary Key, references Gang

Cardinality: M:1 (Many-to-One)

Name: Jobs

Description: Jobs are taken on by Gang Members and the money acquired by them is sent to the Vault.

Attributes:

- **Type:** varchar(80), type of job (e.g. smuggling, heist), Primary Key
- **Location:** varchar(80), location where the job takes place
- **Time:** int, time when the job occurs

Name: Lobby

Description: A Lobby is a type of Room.

Attributes:

- **RoID:** int, same Primary Key as its superclass.

Notes: Disjoint subclass of Rooms.

Name: Medical Supplies

Description: Medical supplies used by Police Cops. This is a type of Police Equipment.

Attributes:

- **PEqID:** int, shares the same primary key as its superclass.

Notes: Disjoint subclass of Police Equipment.

Name: Office

Description: An Office is a type of Room.

Attributes:

- **RoID:** int, same Primary Key as its superclass.

Notes: Disjoint subclass of Rooms.

Name: Officers

Description: A basic, standard Police Cop.

Attributes:

- **PID:** int, same Primary Key as its superclass.

Notes: Disjoint subclass member of Police Cops.

Name: Owns

Description: The Gang owns a Vault.

Attributes:

- **Foreign Key:** FK_GangID, int, Primary Key
- **Foreign Key:** FK_VID, int, Primary Key

Cardinality: 1:1(One-to-One)

Name: Police Armor

Description: Armor used by Police Cops. This is a type of Police Equipment.

Attributes:

- **PEqID:** int, shares the same primary key as its superclass.

Notes: Disjoint subclass of Police Equipment.

Name: Police Cops

Description:

A cop that can use police equipment, perform investigations, and is employed by a police station. Police Cops can be Officers, Captains, or a Chief. Weak entity owned by the Police Station.

Attributes:

- **PID**: int, ID of the Police Cop, PKEY
- **Foreign Key**: FK_Location, int, PKEY, references Police Station
- **Foreign Key**: FK_PEqID, int, PKEY, references Police Equipment

Notes: Superclass of Officers, Captains, and Chief (all of which are disjoint).

Name: Police Equipment

Description: Equipment that is stored in a Police Station and used by Police Cops. Equipment can be Firearms, Police Armor, Radio, and Medical Supplies.

Attributes:

- **PEqID**: int, ID of the equipment, PKEY

Notes: Superclass of Firearms, Police Armor, Radio, and Medical Supplies. All subclasses are different and therefore disjoint.

Name: Police Station

Description: A building of the crime city that houses Rooms, stores Police Equipment, and employs Police Cops.

Attributes:

- **Location**: varchar(80), location of the police station, PKEY

Notes:

Name: Radio

Description: Radio communications used by Police Cops. This is a type of Police Equipment.

Attributes:

- **PEqID**: int, shares the same primary key as its superclass.

Notes: Disjoint subclass member of Police Equipment.

Name: Robs

Description: Gangs rob Banks to steal their total money

Attributes:

- **Foreign Key**: FK_GangID, int, Primary Key
- **Foreign Key**: FK_BID, int, Primary Key

Cardinality: 1:M(One-to-Many)

Name: Rookies

Description: A Rookie is a type of Gang Member

Attributes:

- **Alias**: varchar(80), shares the same primary key as its superclass

Notes: Disjoint subclass of Gang Member.

Name: Rooms

Description: Rooms are housed in a Police Station. A Room can be a Lobby, Cell, Interrogation, Evidence, or Office.

Attributes:

- **RoID**: int, ID of the room, PKEY

Notes: Superclass of Lobby, Cells, Interrogation Room, Evidence, and Office.

Name: Stored by

Description: The police equipment is being stored in police stations

Attributes:

- **Foreign Key:** FK_PEqID, int, Primary Key
- **Foreign Key:** FK_Location, varchar(80), Primary Key

Cardinality: M:1(Many-to-One)

Name: Uses

Description: Gangs use gang equipment to get their job done

Attributes:

- **Foreign Key:** FK_GangID, int, Primary Key
- **Foreign Key:** FK_GEqID, int, Primary Key

Cardinality: 1:N(one-to-Many)

Name: Vault

Description: A Vault is owned by a-Gang and acquires money from jobs completed.

Attributes:

- **VID**: int, ID number for the vault the gang possesses, PKEY

Notes:

Name: Vehicles

Description: A Vehicle is a type of Gang Equipment.

Attributes:

- **GEqID**: int, Primary Key, same as superclass

Notes: Disjoint subclass of Gang Equipment.