Werewolves Schema

- **Characters**(Name, Side, Ability, Detail)
    - Primary Key -- name
- **Explanation:** This is the table that stores information about each of the Characters in the game
- **Entity Representation:** It represents the characters that are used in the game
- **Columns Explanation:**
    - Name (Str): the name of the character. (Hunter, villiger, werewolf, etc.)
    - Side (Bool): if this character is on the good side(true) or bad side (false)
    - Ability(Str): contains the name of the function that performs the ability associated with the character
    - Detail(Str): a brief explanation on the background and context of the character

- **Users**(User_name, Nickname, Password, Room_id, Character_name)
    - Primary Key -- user_name
    - Foreign Key -- room_id references GameRooms
    - Foreign Key -- character_name references Characters
- **Explanation:** This is the table that stores all the Users that have registered
- **Entity Representation:** It represents the users playing the games
- **Columns Explanation:**
    - User_name (Str): the name of the user. (Legendary47,NoobMaster69 etc.)
    - Nickname (Str): the nickname for other people to see
    - Password (Str): password to access the account
    - Room_id (Int): the unique identifier of the gameroom
    - Character_name (Str): the name of the character used by the user

- **GameTypes**(Game_name, Number_players, Characters)
    - Primary Key -- game_name
- **Explanation:** This is the table that stores all different possible game types
- **Entity Representation:** It represents the game types of the games
- **Columns Explanation:**
    - Game_name (Str): a unique identifier that indicates the type of game
    - Number_players (Int): the number of players in this type of game
    - Characters (Str): A string value that contains all the characters used for this type of game

- **GameRooms**(Room_id, Socket_number, Game_name)
    - Primary Key -- room_id
    - Foreign Key -- game_name references GameTypes
- **Explanation:** This is the table that stores all the game rooms

- **Entity Representation:** It represents the game rooms that group different players
- **Columns Explanation:**
    - Room_id (Int): the unique identifier of the gameroom
    - Socket_number(Int): the socket_number for the gameroom
    - Game_name (Str): a unique identifier that indicates the type of game

how each table relates to other entities/tables

Each user is assigned a character. The characters are used in gameTypes to determine the type of the game. Each gameroom is assigned a gameType and holds different users. The users can interact with each other in the game room and their interaction depends on their character.

Normalization:

1st Normalization Form achieved because we have only atomic values, unique, and no repeating groups

2nd Normalization Form achieved because the table has a concatenated primary key and each attribute in the table depends on that concatenated primary key.

3rd Normalization Form achieved because we don't have transitive dependency

Characters

4th Normalization Form achieved because we don't have multi-valued dependencies

Name	Side (True = good, False = bad)	Ability	Detail
Villager	true	NULL	Find all the werewolf in the village
Werewolf	false	kill_during_night	Hide among the good guys and kill all villagers of all good characters other than villagers
Hunter	true	kill_upon_death	Bring someone with him/her upon death
Witch	true	poison_or_save	Can save and poison one person, only do each once per game
Seer	true	test_during_night	Get to test one player either night, to see if he/she is on the good side or not