

1. User:

- Represents the users registered on the platform.
- Attributes:
 - user_id: Unique identifier for each user.
 - username: The username chosen by the user.
 - password: The user's password (stored securely using hashing and salting techniques).
 - email: The user's email address.
 - balance: The user's account balance for participating in games.
- Relationships:
 - User (1:1) Player: A user can be one player in an active game.

2. Player:

- Represents a player actively participating in a game at a table.
- Attributes:
 - player_id: Unique identifier for each player.
 - user_id (FK): Foreign key referencing the User entity; links a player to a specific user.
 - game_id (FK): Foreign key referencing the Game entity; links a player to a specific game.
 - balance: The player's current balance/chip count in the game.
 - status: The player's status in the game (e.g., active, folded, all-in).
- Relationships:
 - Player (1:1) User: A player is associated with one user.
 - Player (M:1) Game: A player can participate in one game at a time.

3. Table:

- Represents a poker table where players join to play Texas Hold'em.
- Attributes:
 - table_id: Unique identifier for each table.
 - max_players: The maximum number of players allowed at the table.
 - pot: The current pot size in the ongoing game.

- dealer_id: The player_id of the player who is the dealer in the current round.
- small_blind: The amount of the small blind in the game.
- Relationships:
 - Table (1:1) Game: A table is associated with one active game at a time.

4. Game:

- Represents an individual game or round of Texas Hold'em Poker.
- Attributes:
 - game_id: Unique identifier for each game.
 - table_id (FK): Foreign key referencing the Table entity; links a game to a specific table.
 - start_time: The start time of the game.
 - end_time: The end time of the game.
 - winner_id: The player_id of the winner of the game.
- Relationships:
 - Game (1:M) Player: A game can have multiple players participating.
 - Game (1:M) Hand: A game can have multiple hands (player's hole cards and community cards).
 - Game (1:1) Table: A game occurs at a specific table.

5. Card:

- Represents the standard playing cards used in the game.
- Attributes:
 - card_id: Unique identifier for each card.
 - suit: The suit of the card (e.g., hearts, diamonds, clubs, spades).
 - rank: The rank of the card (e.g., 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K, A).
- Relationships:
 - Card (M:N) Hand: A card can be part of multiple hands, and a hand consists of multiple cards. This relationship is resolved using the CardInHand junction table.

6. Hand:

- Represents a hand of cards dealt to a player or community cards on the table.
- Attributes:
 - `hand_id`: Unique identifier for each hand.
 - `player_id` (FK): Foreign key referencing the Player entity; links a hand to a specific table.
 - `game_id` (FK): Foreign key referencing the Game entity; links a hand to a specific game.
 - `is_community_hand`: A boolean value indicating whether the hand is a community hand (i.e., the five shared cards on the table) or a player's hole cards.
- Relationships:
 - Hand (1:M) Card: A hand consists of multiple cards.
 - Hand (M:1) Player: A hand is associated with one player.
 - Hand (M:1) Table: A hand is associated with one table.
 - Hand (M:1) Game: A hand is associated with one game.

7. CardInHand:

- Represents the relationship between cards and hands, which is a many-to-many (M:N) relationship.
- Attributes:
 - `card_id` (FK): Foreign key referencing the Card entity; links a card to a specific hand.
 - `hand_id` (FK): Foreign key referencing the Hand entity; links a hand to a specific card.
- Relationships:
 - CardInHand (M:N) Card: A card can be part of multiple hands.
 - CardInHand (M:N) Hand: A hand consists of multiple cards.
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Relationship Summary:

- User (1:1) Player
- Player (M:1) Game
- Player (1:1) User
- Table (1:1) Game
- Game (1:M) Player
- Game (1:M) Hand
- Game (1:1) Table
- Hand (1:M) Card
- Hand (M:1) Player
- Hand (M:1) Table
- Hand (M:1) Game
- Card (M:N) Hand
- CardInHand (M:N) Card
- CardInHand (M:N) Hand