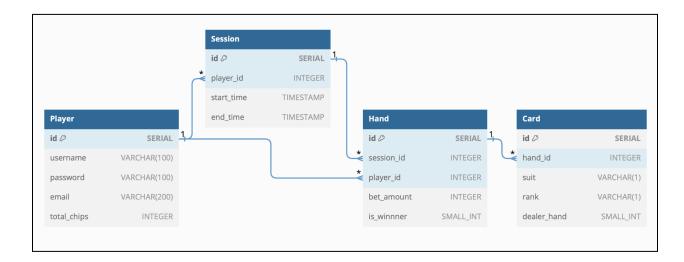
## **Entity Relationship Diagram + Descriptions**



| Player      |              |   |  |  |  |
|-------------|--------------|---|--|--|--|
| Attribute   | Data Type    | Notes   |  |  |  |
| id          | SERIAL       | Uniquely identifies a player (primary key)                              |  |  |  |
| username    | VARCHAR(100) | Used for login credentials  |  |  |  |
| password    | VARCHAR(100) | Used for login credentials  |  |  |  |
| email       | VARCHAR(200) | Used for registration   |  |  |  |
| total_chips | INTEGER      | Tracks total number of chips for a player (should be updated each hand) |  |  |  |

| Session    |           |  |  |  |  |
|------------|-----------|--|--|--|--|
| Attribute  | Data Type | Notes  |  |  |  |
| id         | SERIAL    | Uniquely identifies a session (primary key)        |  |  |  |
| player_id  | INTEGER   | Identifies the player in the session (foreign key) |  |  |  |
| start_time | TIMESTAMP | Marks when player started session                  |  |  |  |
| end_time   | TIMESTAMP | Marks when player ended session                    |  |  |  |

| Hand       |           |  |  |  |  |
|------------|-----------|--|--|--|--|
| Attribute  | Data Type | Notes  |  |  |  |
| id         | SERIAL    | Uniquely identifies a hand (primary key)   |  |  |  |
| session_id | INTEGER   | Identifies the session that hand took place (foreign key)                        |  |  |  |
| player_id  | INTEGER   | Identifies the player that was involved with the hand (foreign key)              |  |  |  |
| bet_amount | INTEGER   | The amount of chips that a player bets before the cards are dealt                |  |  |  |
| is_winner  | SMALL INT | Indicator variable: -1 if player lost to dealer, 1 if player won, 0 if they tied |  |  |  |

| Card        |            |  |  |  |  |
|-------------|------------|--|--|--|--|
| Attribute   | Data Type  | Notes  |  |  |  |
| id          | SERIAL     | Uniquely identifies a card (foreign key)                                     |  |  |  |
| hand_id     | INTEGER    | Identifies which hand the card was in (foreign key)                          |  |  |  |
| suit        | VARCHAR(1) | Identifies suit of the card (H: Hearts, C: Clubs, S: Spades, D: Diamonds)    |  |  |  |
| rank        | VARCHAR(1) | Identifies the numeric value of the card (A, 2-9, T, J, Q, K)                |  |  |  |
| dealer_hand | SMALL INT  | Indicator variable: 0 (zero) if player was dealt card, 1 (one) if dealer was |  |  |  |

| Relations |                 |          |   |  |  |  |
|-----------|-----------------|----------|---|--|--|--|
| Entity 1  | Relation Type   | Entity 2 | Explicit Interpretation                           |  |  |  |
| Player    | (one) to (many) | Session  | Each player in the db, can have multiple sessions |  |  |  |
| Player    | (one) to (many) | Hand     | Each player in the db, can have multiple hands    |  |  |  |
| Session   | (one) to (many) | Hand     | Each session in the db, can have multiple hands   |  |  |  |
| Hand      | (one) to (many) | Card     | Each hand in the db, can have multiple cards      |  |  |  |