

Web Application Entity Design

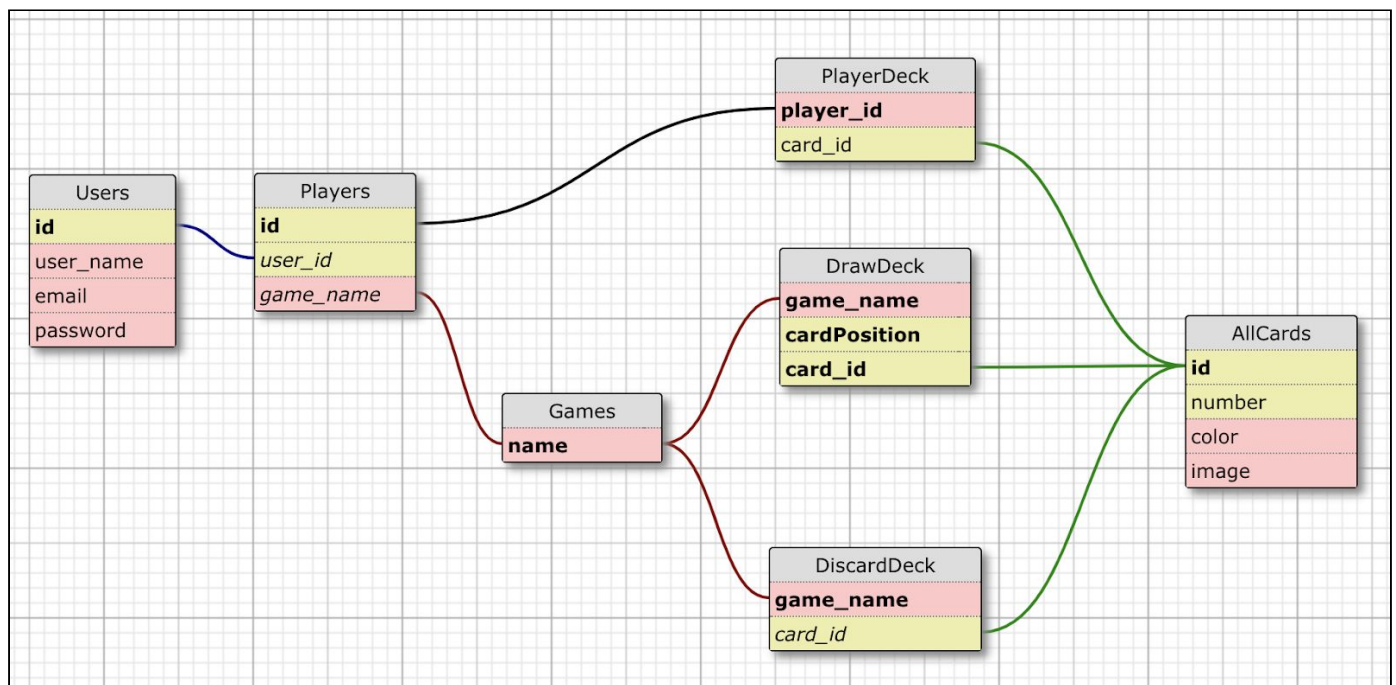
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GitHub repository

<https://github.com/sfsu-csc-667-fall-2018/Uno>

Entity diagram



Description of entities

Users

Primary Key: id

Unique Key: user_name, email, password

Table that stores basic information about each new registered user. Password will be encrypted before storing.

Players

Primary Key: id

Unique Key: user_id, game_name

Foreign key: user_id -> Users.id

Foreign key: game_name -> Games.name

When a *user* joins a game we create a *player*. Each *user* is a different *player* in every *game* he joins and for each *game* there cannot be more than one *player* linked to the same *user*.

Games

Primary Key: name

Table that contains the name of all the active games in a certain time. The name of the game is unique so there will not be two games with the same name, this makes it easier for users to find a specific game to join.

PlayerDeck

Primary Key: player_id

Foreign key: player_id -> Players.id

Foreign key: card_id -> Cards.id

Each player needs a deck that stores all the cards that the player currently has in their hand.

DrawDeck

Primary Key: game_name, card_Position, card_id

Foreign key: game_name -> Games.name

Foreign key: card_id -> Cards.id

Table that stores the cards that the players get each time the *game* rules require it. We store the index of each card in the deck so we can shuffle the deck at the beginning of the game.

DiscardDeck

Primary Key: game_name

Foreign key: game_name -> Games.name

Foreign key: card_id -> Cards.id

Table that stores cards that players put on the table.

AllCards

Primary Key: id

Unique Key: number, color, image

Table that contains all the different cards that exist in the game