

CSC 667-02

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Milestone 3: Web Application Entity Design

GitHub Repository: [Term Project Team JAKE](#)

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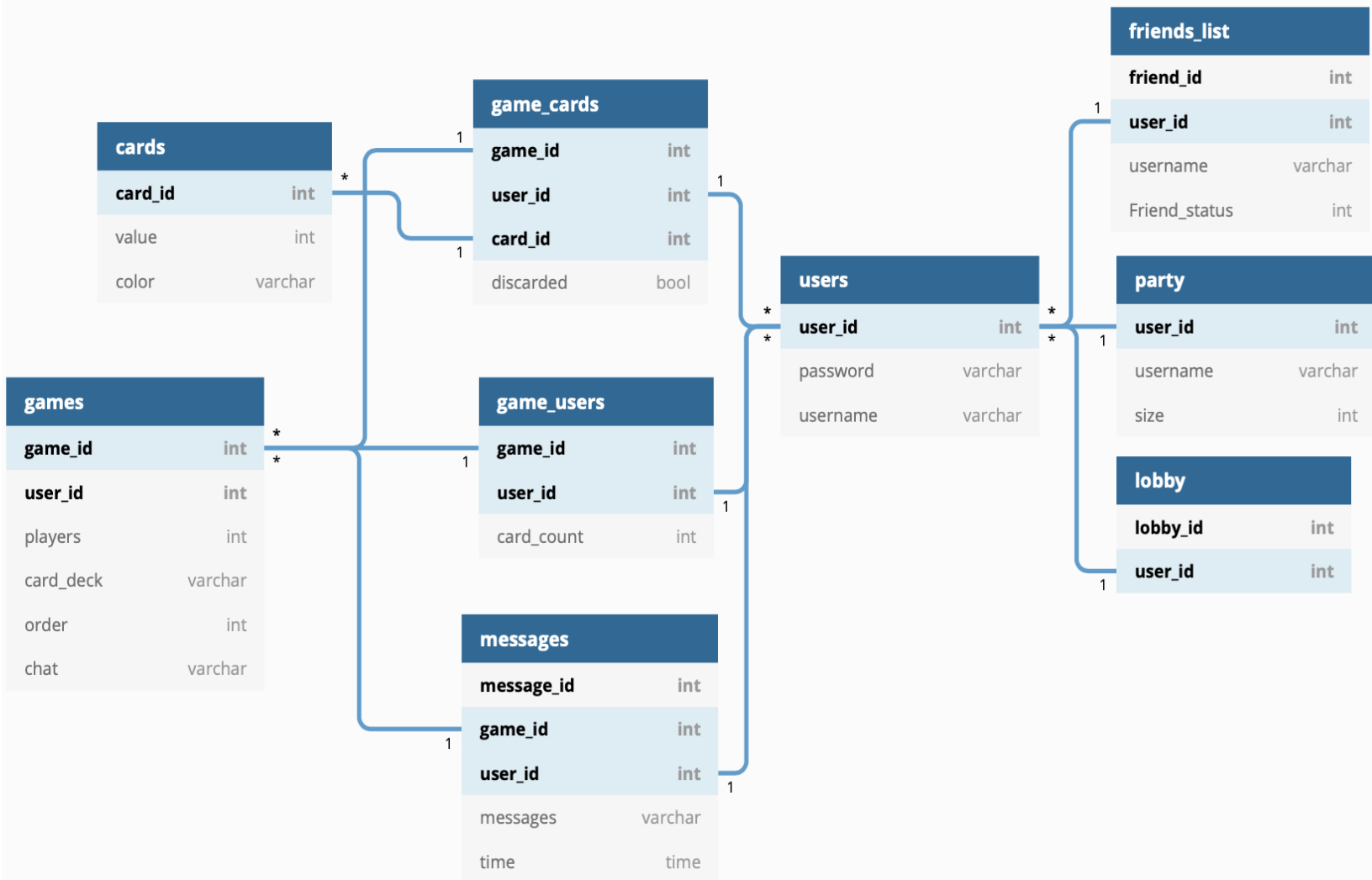
Database Description

Stored Data & Constraints

Our database needs the following entities:

- **Games**
 - game_id PRIMARY KEY, NOT NULL, UNIQUE)
 - players (int)
 - user_id (int)
 - card_deck
 - order (int)
 - chat (varchar)
- **Users**
 - user_id (PRIMARY KEY, NOT NULL, UNIQUE)
 - password (VARCHAR, NOT NULL)
 - username (VARCHAR, UNIQUE)
- **Lobby**
 - lobby_id(int)
 - user_id (int)
- **Friends_list**
 - user_id (PRIMARY KEY, NOT NULL, UNIQUE)
 - username (varchar)
 - friend_id (int)
 - friend_status (int)
- **Party**
 - usernames (varchar)
 - user_id (int)
 - size (int)
- **Game_users**
 - games_id (PRIMARY KEY, FOREIGN KEY, NOT NULL, UNIQUE)
 - users_id (PRIMARY KEY, FOREIGN KEY, NOT NULL, UNIQUE)
 - card_count (int)
- **Cards**
 - card_id PRIMARY KEY, NOT NULL, UNIQUE)
 - value (int, NOT NULL)
 - color (VARCHAR)
- **Game_cards**
 - game_id (PRIMARY KEY, FOREIGN KEY, NOT NULL, UNIQUE)
 - card_id (PRIMARY KEY, FOREIGN KEY, NOT NULL, UNIQUE)
 - user_id (PRIMARY KEY, FOREIGN KEY, NOT NULL, UNIQUE)
 - discarded (BOOL)
- **Messages**
 - message_id (PRIMARY KEY, NOT NULL, UNIQUE)
 - game_id (PRIMARY KEY, FOREIGN KEY, NOT NULL, UNIQUE)
 - user_id (PRIMARY KEY, FOREIGN KEY, NOT NULL, UNIQUE)
 - messages (VARCHAR[200])
 - time (time)

Entity Diagram



Entity Description

- **Games**
 - Contains information of the game session, such as the players who are currently in one session with a unique id to separate itself from other game sessions, the amount of players and the order in which they are going, and the randomized deck of cards.
- **Users**
 - Registered users will hold a unique username, their own unique id along with their encrypted password.
- **Lobby**
 - Pregame lobby of the current user that displays their own properties, like their own username and their friends list.
- **Friends_list**
 - Each player will have their ID used to determine their list of friends to be displayed at their lobby screen so that they can add those friends to their party.
- **Party**
 - Record of members and the size of the party in the pregame lobby before entering a game and current game session the users are in.
- **Game_users**
 - This is the specific game session the player's in, it will hold information on the current game and track how many cards each player has left.
- **Cards**
 - Each card is assigned a unique id from the other cards that will be assigned a numerical value and a color for the card.
- **Game_cards**
 - This will hold information about the individual cards and which player currently holds what in their hand, where they make the selection to discard a matching card from their hand to deposit into the discarded pile.
- **Messages**
 - A display window of messages with timestamps from each player in a current game session or lobby