**Database Schemas**

**Users**

CREATE TABLE Users (

user\_id INT PRIMARY KEY AUTO\_INCREMENT NOT NULL,

username VARCHAR(16) NOT NULL,

first\_name VARCHAR(32) NOT NULL,

last\_name VARCHAR(32) NOT NULL,

email VARCHAR(64) NOT NULL,

account\_creation\_date TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP,

password\_salt VARCHAR(512) NOT NULL,

password\_hash VARCHAR(512) NOT NULL,

wins INT NOT NULL DEFAULT 0,

losses INT NOT NULL DEFAULT 0,

stalemates INT NOT NULL DEFAULT

);

**Games**

CREATE TABLE Games (

game\_id INT AUTO\_INCREMENT NOT NULL,

challenger\_id INT NOT NULL,

accepter\_id INT NOT NULL,

PRIMARY KEY (game\_id, challenger\_id, accepter\_id),

FOREIGN KEY (challenger\_id) REFERENCES Users(user\_id),

FOREIGN KEY (accepter\_id) REFERENCES Users(user\_id),

game\_state JSON NOT NULL,

chat\_log JSON NOT NULL,

start\_time DATETIME NOT NULL,

end\_time DATETIME NOT NULL,

is\_stalemate ENUM (‘True’, ‘False’) NOT NULL DEFAULT ‘False’;

winner\_id INT,

is\_finished ENUM (‘True’, ‘False’) NOT NULL DEFAULT ‘False’

);

**GameInformation**

CREATE TABLE GameInformation (

game\_id INT NOT NULL,

FOREIGN KEY (game\_id) REFERENCES Games(game\_id),

game\_name VARCHAR(128) NOT NULL,

game\_type ENUM ('Classical', 'Blitz', 'Bullet') NOT NULL

);

**Followers**

CREATE TABLE Followers (

follower\_id INT NOT NULL,

FOREIGN KEY (follower\_id) REFERENCES Users(user\_id),

followee\_id INT NOT NULL,

FOREIGN KEY (followee\_id) REFERENCES Users(user\_id),

PRIMARY KEY (follower\_id, followee\_id)

);

**FollowRequests**

CREATE TABLE FollowRequests (

requester\_id INT NOT NULL,

FOREIGN KEY (requester\_id) REFERENCES Users(user\_id),

addressee\_id INT NOT NULL,

FOREIGN KEY (addressee\_id) REFERENCES Users(user\_id),

is\_accepted ENUM (‘True’, ‘False’) DEFAULT ‘False’,

request\_timestamp TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP,

acceptance\_timestamp DATETIME,

PRIMARY KEY (requester\_id, addressee\_id)

);

**GameRequests**

CREATE TABLE GameRequests ( requester\_id INT NOT NULL, FOREIGN KEY (requester\_id) REFERENCES Users(user\_id), addressee\_id INT NOT NULL, FOREIGN KEY (addressee\_id) REFERENCES Users(user\_id), is\_accepted ENUM (‘True’, ‘False’) DEFAULT ‘False’, request\_timestamp TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP, acceptance\_timestamp DATETIME, PRIMARY KEY (requester\_id, addressee\_id));