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Project #7 – Flask and Cookies

Table 1: sessions

sessionID	username	expiration
077f56258be83ede9dadce13fbdfe05678547a668a3eb1904fe8e956674b66c7	cmccormick1	2020-11-22 04:17:35

- **sessionID** → CHAR(64); a randomly generated 64-bit hexadecimal number stored as a string in the table. This field stores a unique session ID created when a user logs into the game. (PRIMARY KEY)
- **username** → VARCHAR(16); this field is a string of what the user entered as a username when logging in on the start page.
- **expiration** → DATETIME; this field is a time 30 minutes in the future of when the user logged in and created the session. It is the time when the session expires, and the user will be prompted to login again to create a new session.

Table 2: games

gameID	player1	player2	player1_marker	player2_marker
1	cmccormick1	Brad	X	O

- **gameID** → INT(11); the auto-incremented number that uniquely identifies each game. (PRIMARY KEY)
- **player1** → VARCHAR(16); the username given by the logged in user.
- **player2** → VARCHAR(16); the username entered as "opponent" when player1 created a new game.
- **player1_marker** → VARCHAR(16); this field is always a capital X since player1 always uses the marker X by default.
- **player2_marker** → VARCHAR(16); this field is always a capital O since player2 always uses the marker O by default.

Table 3: gameMoves

moveID	gameID	location	chosen_by
1	1	(1,0)	X

- **moveID** → INT(11); the auto-incremented number that uniquely identifies one move in a game. There can be at most nine moveIDs corresponding to one game. (PRIMARY KEY)
- **gameID** → INT(11); this field is a foreign key mapping this table to the games table. The gameID field is the unique identifier of a game, and in this table, it keeps track of all the moves made in each game. (FOREIGN KEY)
- **location** → VARCHAR(16); this field is a string of the coordinates on the game board where the move was made (see below for defined coordinates). The string always includes opening and closing parentheses and a comma separating each dimension's coordinate. (x, y)

Locations of possible moves

(0,0)	(0,1)	(0,2)
(1,0)	(1,1)	(1,2)
(2,0)	(2,1)	(2,2)

- **chosen_by** → VARCHAR(16); this field is always either a capital X or capital O indicating which player made the move. By using the games table, the player's username is linked to the marker and the move.