DATABASE PROCEDURE SUPPORTING DOCUMENTATION

Note that outputs capitalized represent literal column names of outputted tables.

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| Procedure Name | Inputs | Outputs | Notes |
| checkWinner | USERID, GAMEID | USERNAME – filled with a name if a winner if found, null otherwise | Updates winner automatically on GAMES table if a winner is found. |
| createGame | NUMBEROFPLAYERS | GAMEID | Should not have to be called explicitly. Only to force a new game creation. |
| getCreationTimes | N/A | GAMEID, CREATED – filled with times of games created that are not ready. | DATETIME formatted as  YYYY-MM-DD HH:MM:SS |
| fillGame | GAMEID | USERID, USERNAME, ISAI | Fills the game with AI users and returns the list of players for that game. NOTE: It will create one more AI than necessary and return a check constraint error. This is due to some issue with how LOOPs handle incoming variables. |
| getWinner | GAMEID | USERNAME – filled with a name if a winner has been declared, null otherwise | None |
| matchMake | USERID, NUMBEROFPLAYERS | GAMEID | Will create a game if no suitable game Is found. |
| nextTurn | GAMEID | CURRENTTURN – returns the next iterated turn for that game | None |
| getGameState | GAMEID | USERID, USERNAME, PLAYERNUMBER, ISAI, CURRENTTURN, WINNERID of users within a specific game | Last two rows will be repeated for each player row. Just a small side effect. |
| getUserGames | USERID | GAMEID, NUMPLAYER, ISREADY, CURRENTTURN, PLAYERNUMBER, WINNERID | Just note that numPlayer is the number of players and playerNumber is the number of the user within that game.  Note that a subsequent call will need to be made to get usernames of winnerIDs. |
| userJoinsGame | USERID, GAMEID | N/A | Used by matchMake, shouldn’t have to be used unless for some reason you need to force a user into a game. |
| userLeavesGame | USERID, GAMEID | N/A | Removes the user from the game, replaces them with an AI user. Username of player within the game is the same. Will also check if all users are AIs, if so it will delete the game and by extension the pieces, and all associated AI users. |
| getGamePieces | GAMEID | PLAYERNUMBER, ONROW, ONINDEX |  |
| populateBoard | GAMEID, PLAYERNUMBER | N/A | Called by matchMake, should not have to be used explicitly |
| updatePiece | GAMEID, OLDROW, OLDINDEX, NEWROW, NEWINDEX | N/A | Updates a piece in the database. |
| createUser | USERNAME (max 50 characters) | USERID | Creates a new user. |
| createAI | NONE | USERID as aid | Used by userLeavesGame, deleteUser, should not have to be called explicitly. |
| deleteUser | USERID | N/A | Replaces user with one AI, updates relation table. If called on an AI user it will pass an error. |
| getUsername | USERID | USERNAME | None |
| setUsername | USERID, NEWUSERNAME (max 50 characters) | N/A | Will return an error if that username is already taken because of unique restriction on username. |
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