All Database Columns

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| User Name | Password | First Name | Last Name | Status | Is Playing | Saved Game | Score | Opponent |

* UserName : is the primary key of the table, it has a text data type.
* Password : is a text attribute with no constrains at it.
* FirstName : is the first name of the player and it has a text data type.
* LastName : is the last name of the player and it has a text data type.
* Status : it’s the player status whither is Online or Offline and it has a Boolean data type.
* Is Playing : it’s the player indicator so it represent the current status of the player whither he plays a game or not, it has a Boolean data type.
* SavedGame : it represents the last saved game of the player and it contains of the moves of the two players, the data type is array of characters.
* Score : it represents the score of the player, and the data type of this variable is integer.
* Opponent : it’s represents the opponent of the user when he plays a game to make it easy to save the game with the contributors of it, the data type of the attribute is text.

The Database Table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| userName | firstName | lastName | status | score | isPlaying | gameId |
| PK, Text | Text | Text | Boolean | Integer | Boolean | FK,Integer |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| gameId | homePlayer | opponentPlayer | startGameDate | isFinished | savedGame |
| PK,Integer | Text | Text | Timestamp | Boolean | Char[9] |

Functions

1. To retrieve all player data :

CREATE OR REPLACE FUNCTION retrieveplayers () Returns TABLE ( firstName text , lastName text , statusOfPlayer boolean , scoreOfPlayer int) AS $$

DECLARE

BEGIN

RETURN QUERY SELECT fname,lname,status,score from players;

END;

$$ LANGUAGE plpgsql;