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1  """
2  Pettrus Konnoth
3  CS50
4  Master project main
5  Cmdr.Schenk Raymond
6  Sql functions
7  """
8  import mysql.connector
9
10
11 class SqlFunctions:
12     def __init__(self):
13
14         self.current_user = None
15         self.connection_status = False
16
17     def validateUser(self, username, password):
18         # print(username, password)
19         if self.connection_status:
20             query = f"SELECT * FROM user WHERE
21 username='{username}' AND password='{password}'"
22             # print(query)
23             self.sql.execute(query)
24             rows = self.sql.fetchone()
25
26             #check if rows is not None
27
28             if rows is not None:
29                 self.current_user = rows[0]
30                 self.name = rows[1]
31                 print(rows)
32                 print(self.name)
33                 return True
34             else:
35                 return False
36         else:
37             print("Not connected to database")
38
39     def connect(self):
40         if not self.connection_status:
41             try:

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41         #change the user and password to
         your own
42         self.connection = mysql.connector.
connect(
43             host="localhost",
44             user="pkonnoth",
45             password="12345",
46             database="workoutdb"
47         )
48         self.sql = self.connection.cursor()
49         self.connection_status = True
50
51         print("connected")
52         except mysql.connector.Error as err:
53             return "Failed to connect with
Error: ", err
54         else:
55             print("Already connected")
56         #
57         def disconnect(self):
58             # print("disconnecting")
59             if self.connection_status:
60                 #delete the current user
61                 self.connection.close()
62                 self.connection_status = False
63                 print("disconnected")
64             else:
65                 print("Not connected to database")
66
67         def createUser(self, username, password, email
, age, gender):
68             if self.connection_status:
69                 #query to insert a new user
70                 query = f"INSERT INTO user(username,
password, email, age, gender) VALUES('{username}
', '{password}', '{email}', '{age}', '{gender}')"
71                 self.sql.execute(query)
72                 self.connection.commit()
73                 # print(f"User {username} created")
74             else:
75                 print("Not connected to database")

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76
77
78     def GetWorkout(self):
79
80         if self.connection_status:
81             #query to get the workout for the
current user
82             query = f"SELECT * FROM workout WHERE
user_id='{self.current_user}' "
83             self.sql.execute(query)
84
85             result = self.sql.fetchall()
86             if len(result) > 0:
87                 #to check if the result is not
empty
88                 #print(result)
89
90                 return result
91
92
93             else:
94                 #if the result is empty
95                 print("no workout found for the
user")
96
97         else:
98             #if not connected to the database
99             print("Not connected to database")
100         return []
101
102 #pass in the exercise name, sets and reps
103     def createRecord(self,ex1,ex1sets,ex1reps,ex2,
ex2sets,ex2reps,ex3,ex3sets,ex3reps,ex4,ex4sets,
ex4reps,ex5,ex5sets,ex5reps):
104         if self.connection_status:
            query = f"INSERT INTO workout(
exercise_1, exercise_1_sets, exercise_1_reps,
exercise_2, exercise_2_sets, exercise_2_reps,
exercise_3, exercise_3_sets, exercise_3_reps,
exercise_4, exercise_4_sets, exercise_4_reps,
exercise_5, exercise_5_sets, exercise_5_reps,
user_id) VALUES('{ex1}', '{ex1sets}', '{ex1reps}'

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104 ', '{ex2}', '{ex2sets}', '{ex2reps}', '{ex3}', '{
    ex3sets}', '{ex3reps}', '{ex4}', '{ex4sets}', '{
    ex4reps}', '{ex5}', '{ex5sets}', '{ex5reps}', '{
    self.current_user}')"
105         self.sql.execute(query)
106         self.connection.commit()
107         #print(f"User {username} created")
108 #pass in the id of the record to be deleted
109     def deleteRec(self, id):
110         if self.connection_status:
111             #query to delete the record
112             query = f"DELETE FROM workout WHERE id
    ='{id}' and user_id='{self.current_user}'"
113             print(query)
114             self.sql.execute(query)
115             #print(f"User {username} created")
116             self.connection.commit()
117             #print(f"User {username} created")
118 #pass in the id of the record to be updated
119     def update(self, id, ex1,ex1sets,ex1reps,ex2,
    ex2sets,ex2reps,ex3,ex3sets,ex3reps,ex4,ex4sets,
    ex4reps,ex5,ex5sets,ex5reps):
120         if self.connection_status:
121             query = f"UPDATE workout SET
    exercise_1='{ex1}', exercise_1_sets='{ex1sets}',
    exercise_1_reps='{ex1reps}', exercise_2='{ex2}',
    exercise_2_sets='{ex2sets}', exercise_2_reps='{
    ex2reps}', exercise_3='{ex3}', exercise_3_sets='{
    ex3sets}', exercise_3_reps='{ex3reps}', exercise_4
    ='{ex4}', exercise_4_sets='{ex4sets}',
    exercise_4_reps='{ex4reps}', exercise_5='{ex5}',
    exercise_5_sets='{ex5sets}', exercise_5_reps='{
    ex5reps}' WHERE id='{id}' and user_id='{self.
    current_user}'"
122             self.sql.execute(query)
123             self.connection.commit()
124             #print(f"User {username} created")
125 #pass in the id of the record to be updated
126

```