

Coverage for **userdata\_insertion.py** : 84%

126 statements

106 run

20 missing

0 excluded

```
1  """Example for Mysql database connectivity with python """
2  from datetime import date
3  from datetime import datetime
4  import logging
5  import json
6  from dateutil import relativedelta
7  import mysql.connector
8
9  def connection_db():
10     """making database connection"""
11     mydb = mysql.connector.connect(user='root', password='root',
12                                   host='localhost',
13                                   database='db1')
14     return mydb
15
16 def logger_creation():
17     """Creating logger object"""
18     logger = logging.getLogger(__name__)
19     logger.setLevel(logging.INFO)
20     formatter = logging.Formatter('%(asctime)s: %(levelname)s: %(name)s: %(message)s')
21     file_handler = logging.FileHandler('logFile.log', mode='w')
22     file_handler.setFormatter(formatter)
23     logger.addHandler(file_handler)
24     return logger
25
26 def table_creation(mycursor):
27     '''Creating Request_Info and Response_Info tables'''
28     mycursor.execute("create table if not exists Request_Info(Request_Id int NOT NULL \
29                      AUTO_INCREMENT,FirstName varchar(50),MiddleName varchar(50),LastName varchar(50),\
30                      DOB date,Gender varchar(50),Nationality varchar(50),Current_City varchar(50),\
31                      State varchar(50),Pin_Code int,Qualification varchar(50),Salary int,\
32                      PAN varchar(50),Request_Date date,primary key(Request_Id))")
33
34     mycursor.execute("create table if not exists Response_Info(Response_Id int not null \
35                      AUTO_INCREMENT,Request_Id int,Response varchar(255),primary key(Response_Id),\
36                      foreign key(Request_Id) references Request_Info(Request_Id))")
37     mydb.commit()
38
39
40
41 class User:
42     """User class represents user typical structure"""
43     def __init__(self):
44         self.first_name = None
45         self.middle_name = None
46         self.last_name = None
47         self.dob = None
48         self.gender = None
49         self.nationality = None
50         self.current_city = None
51         self.state = None
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52     self.pin_code = None
53     self.qualification = None
54     self.salary = None
55     self.pan = None
56     self.reason = ""
57
58     def add_user(self, user_data):
59         """ Used for adding user data to Request_Info table """
60         self.first_name = user_data[0]
61         self.middle_name = user_data[1]
62         self.last_name = user_data[2]
63         self.dob = datetime.strptime(user_data[3], '%Y-%m-%d').date()
64         self.gender = user_data[4]
65         self.nationality = user_data[5]
66         self.current_city = user_data[6]
67         self.state = user_data[7]
68         self.pin_code = int(user_data[8])
69         self.qualification = user_data[9]
70         self.salary = int(user_data[10])
71         self.pan = user_data[11]
72
73         sql1 = "insert into Request_Info(FirstName,MiddleName,LastName,DOB,Gender,Nationality,\
74 Current_City,State,Pin_Code,Qualification,Salary,PAN,Request_Date )\
75 values(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)"
76         data = (self.first_name, self.middle_name, self.last_name, self.dob, self.gender,
77                 self.nationality, self.current_city, self.state, self.pin_code,
78                 self.qualification, self.salary, self.pan, datetime.now().date())
79         mycursor.execute(sql1, data)
80         mydb.commit()
81
82     def age_eligibility(self):
83         """Checks for age eligibility"""
84         diff = relativedelta.relativedelta(date.today(), self.dob)
85         if self.gender.lower() == "male":
86             if diff.years <= 21:
87                 self.reason = "age is less than expected"
88         elif self.gender.lower() == "female":
89             if diff.years <= 18:
90                 self.reason = "age is less than expected"
91         logger.info("age_eligibility method executed")
92
93     def nationality_eligibility(self):
94         """Used for validating nationality"""
95         if self.nationality.lower() not in ['indian', 'american']:
96             self.reason = self.reason + ", Nationality is not matched"
97         logger.info("nationality_eligibility method executed")
98
99     def state_eligibility(self):
100         """Validates state of user"""
101         state_list = ['andhra-pradesh', 'arunachal-pradesh', 'assam', 'bihar', 'chhattisgarh', \
102                      'karnataka', 'madhya-pradesh', 'odisha', 'tamil-nadu', \
103                      'telangana', 'west-bengal']
104         if self.state.lower() not in state_list:
105             self.reason = self.reason + ", State is not matched in the list"
106         logger.info("state_eligibility method method executed")
107
108     def salary_eligibility(self):

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109     '''Used for checking salary validaton'''
110     if self.salary < 10000 or self.salary > 90000:
111         self.reason = self.reason+", salary is not matching the range"
112     logger.info("salary_eligibility method executed")
113
114     def request_eligibility(self):
115         '''Checks for request received within 5 days'''
116         data=(self.pan,)
117         print(self.pan)
118         sql1="select Request_Date from Request_Info where PAN=%s"
119         mycursor.execute(sql1,data)
120         request_date = mycursor.fetchone()
121         print(request_date[0])
122         diff=relativedelta.relativedelta(date.today(),request_date[0])
123         print(diff.days)
124         if diff.days <= 5 and diff.days !=0:
125             self.reason=self.reason+", Recently request is received within 5 days "
126         logger.info("request_eligibility method is executed")
127
128     def add_response(self):
129         ''' Used for adding Json response to Response_Info table'''
130         if len(self.reason) == 0:
131             response = "Success"
132             json_obj = json.dumps({"Request_Id": mycursor.lastrowid, "Response": response})
133             sql1 = "insert into Response_Info(Request_Id,Response) values(%s,%s)"
134             data = (mycursor.lastrowid, json_obj)
135             mycursor.execute(sql1, data)
136             mydb.commit()
137             with open('response.txt', 'a',encoding='utf8') as outfile:
138                 json.dump({"Request_Id": mycursor.lastrowid, "Response": response}, outfile)
139                 outfile.write('\n')
140             logger.info("Response is added successfully")
141         else:
142             response = "Failure"
143             json_obj = json.dumps({"Request_Id": mycursor.lastrowid, "Response": response,\
144                                   "Reason": self.reason})
145             sql1 = "insert into Response_Info(Request_Id,Response) values(%s,%s)"
146             data = (mycursor.lastrowid, json_obj)
147             mycursor.execute(sql1, data)
148             mydb.commit()
149             with open('response.txt', 'a',encoding='utf8') as outfile:
150                 json.dump({"Request_Id": mycursor.lastrowid, "Response": response,\
151                           "Reason": self.reason}, outfile)
152                 outfile.write('\n')
153             logger.info("Response is added successfully")
154
155
156
157 if __name__ == "__main__":
158     mydb=connection_db()
159     mycursor = mydb.cursor()
160     logger=logger_creation()
161     table_creation(mycursor)
162     try:
163         user_data = list(map(str, input("Enter firstname, middlename, lastname, DOB, gender,\
164                                         Nationality,Current-city,state, pin-code, Qualification, salary, PAN-number: ").split()))
165
```

```
166     user = User()
167     user.add_user(user_data)
168     user.age_eligibility()
169     user.nationality_eligibility()
170     user.state_eligibility()
171     user.salary_eligibility()
172     user.request_eligibility()
173     user.add_response()
174 except Exception:
175     logger.error("Error occured in main")
```

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