INSURANCE MANAGEMENT SYSTEM

ENTITY

User:

```
def set_password(self, value):
def get userId(self):
def get userName(self):
def get password(self):
```

Client:

```
from entity.Policy import Policy
   def set policyId(self, value):
   def get policyId(self):
```

Claim:

```
from entity.Client import Client
   def set dateFiled(self, value):
       self.dateFiled = value
   def get dateFiled(self):
   def get policyId(self):
   def get clientId(self):
              f'Policy ID: {self.policyId} Client ID: {self.clientId}'
```

Policy:

```
from util.DBConnUtil import DBConnection

class Policy(DBConnection):
    def __init__(self):
        super().__init__()
        self.policyId = 0
        self.policyName = ' '

#Setters

def set_policyId(self,value):
        self.policyId = value

def set_policyName(self):
        self.policyName = value

#Getters

def get_policyId(self):
        return self.policyId

def get_policyName(self):
        return self.policyName

def __str__(self):
        return f'Policy ID : {self.policyId} Policy Name : {self.policyName}'
```

Payment:

```
class Payment(Client):
    def __init__(self):
        super().__init__()
        self.paymentId = 0
        self.paymentDate = ' '
        self.paymentAmount = 0.0
        self.clientId = 0

#Setters

def set_paymentId(self, value):
        self.paymentDate (self, value):
        self.paymentDate = value

def set_paymentDate = value

def set_paymentAmount(self, value):
        self.paymentAmount = value

def set_paymentAmount = value

def set_clientId(self, value):
        self.clientId = value

#Getters

def get_paymentId(self):
        return self.paymentDate (self):
        return self.paymentDate
```

DAO

UserDAO:

```
def perform_user_actions(self):
               print(self.update user())
          self.open()
          self.role = input("Enter role: ")
data = [(self.userId, self.userName, self.password, self.role)]
```

```
self.close()
def update user(self):
        self.open()
        self.close()
```

ClientDAO:

```
from entity.Client import Client
class ClientDAO(Client):
   def perform client actions(self):
           self.open()
   def add client(self):
   def update client(self):
            self.clientName = input('Enter Client Name: ')
```

```
self.close()
self.open()
self.close()
```

ClaimDAO:

```
class ClaimDAO(Claim):
    def __init__(self):
        super().__init__()

    def perform_claim_actions(self):
        while True:
        print("(Claim) 1.CREATE 2.INSERT 3.UPDATE 4.DELETE 5.SELECT 0.EXIT")
        ch = int(input("Enter choice: "))
        if ch == 1:
            self.create_claim_table()
        elif ch == 2:
            print(self.add_claim())
        elif ch == 3:
            print(self.update_claim())
        elif ch == 4:
            print(self.delete_claim())
        elif ch == 5:
            self.select_claim()
        elif ch == 0:
            break
        else:
            print("Invalid choice")
```

PolicyDAO:

```
def perform policy actions(self):
def create policy table(self):
```

```
def update policy(self):
def delete policy(self):
        self.open()
        self.close()
def getPolicy(self, policyId):
```

PaymentDAO:

```
from entity.Payment import Payment
class PaymentDAO(Payment):
   def perform payment actions(self):
   def create payment table(self):
            self.open()
   def add payment(self):
self.clientId)]
   def update payment(self):
```

```
self.close()
def delete_payment(self):
```

InsuranceServiceImpl:

```
from dao.PolicyDAO import PolicyDAO
from exception.PolicyNotFoundException import PolicyNotFoundException

class InsuranceServiceImpl(PolicyDAO):
    def __init__(self):
        super().__init__()

    #To get policy details of a particular policy
    def getPolicy(self,policyId):
        try:
            self.open()
            self.stmt.execute(f'''SELECT COUNT(*) FROM Policy WHERE policyId =

{policyId}''')
        count = self.stmt.fetchone()[0]
        if count == 0:
            return PolicyNotFoundException(policyId)
        else:
        self.stmt.execute(f'''SELECT * FROM Policy WHERE policyId =

{policyId}''')
        records = self.stmt.fetchall()
        self.close()
        return records
        except PolicyNotFoundException as e:
        return e
```

```
except Exception as e:
    return e

#To get all Policies

def getAllPolicies(self):
    try:
        self.open()
        self.stmt.execute(f'''SELECT * FROM Policy''')
        records = self.stmt.fetchall()
        self.close()
        return records
    except Exception as e:
        return e

def update_policy(self):
    p = PolicyDAO()
    p.update_policy()
    pass

def delete_policy(self):
    p = PolicyDAO()
    p.delete_policy()
    pass
```

EXCEPTION

PolicyNotFoundException:

```
class PolicyNotFoundException(Exception):
    def __init__(self,policyId):
        super().__init__(f"Policy ID : {policyId} not found in the system..")
```

UTIL

DBpropertyUtil:

```
class PropertyUtil:
    connection_properties = None

    @staticmethod
    def getConnectionString():
        if PropertyUtil.connection_properties is None:
            host = 'localhost'
            database = 'insurance_managementdb'
            user = 'root'
            password = 'Mahitharsha@1'
            PropertyUtil.connection_properties = {'host': host, 'database': database, 'user': user, 'password': password}
            return PropertyUtil.connection_properties
```

DBConnUtil:

```
#import sys
import mysql.connector as sql
from util.DBPropertyUtil import PropertyUtil
```

MAIN

Main (Executable file)

```
dbconnection = DBConnection()
            c.perform client actions()
```

```
pp.perform payment actions()
```

OUTPUTS

#Running the main file

#Selecting the options

```
Run:

| main | m
```

→ By selecting respective options from above we can perform CREATE, INSERT, UPDATE, DELETE, SELECT operations that automatically reflects in our database

#Directly exit from the loop to enter into menu

#To get Policy details based on policy ID

#To get all the available policy details

#To update policy details

#To delete policy details

#Finally

```
---MENU---
========

1.getPolicy
2.getAllPolicies
3.updatePolicy
4.deletePolicy
0.EXIT
Enter choice: 0
Thankyou for visiting Insurance Management System!
--Connection Is Closed:--
```