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## Step 1 ending part:

```
20
21
           public MyuserApp() {
22
               mydb = new MyuserDB();
23
24
25
    早
           public static void main(String[] args) {
               MyuserApp client = new MyuserApp();
27
               // assuming inputs from keyboard or any GUI
               28
29
30
               boolean result = client.createRecord(myuserDTO);
31
32
               client.showCreateResult(result, myuserDTO);
               // assuming inputs from keyboard or any GUI
MyuserDTO myuserDTO2 = new MyuserDTO("000006", "David Lee", "654321",
34
35
                       "dlee@swin.edu.au", "0123456789", "Swinburne EN510g", "What is my name?", "David");
36
37
38
               result = client.createRecord(myuserDTO2);
39
               client.showCreateResult(result, myuserDTO2);
41
d.jpa.MyuserApp Menu while (option != 4) switch (option)
Java DB Database Process X ED-JPA (run) X SQL 24 execution X SQL 25 execution X SQL 26 execution X
[EL Info]: 2022-03-16 09:29:00.854--ServerSession(1223867739)--EclipseLink, version: Eclipse Persistence Services - 2.7.7.v20200504-69f2c2b80d
    Record with primary key 000001 could not be created in the database table!
90
```

## Step 2 all parts:

```
| Section | Pathon |
```

Step 3 all code parts:

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```
...L 15 🗑 SQL 19 × 🗑 SQL 20 × 🗑 SQL 21 × 📵 SQL 22 × 🗑 SQL 22 × 🗑 SQL 23 × 🧑 MyuserApp,java × 🔞 MyuserDB,java × 🔞 MyuserDD,java × 📵 MyuserDD,java × 🔞 SQL 24 [jdbc:derby://localhost:15...] ×
  Source History 🖟 👼 - 👼 - 💆 - 🞝 🚭 🚭 - 🖟 - 😂 - 🖆 - 🗎 -
                            result = client.createRecord(myuserDTO2);
    39
                            client.showCreateResult(result, mvuserDTO2):
    41
    42
                          Menu(client);
    43
    44
                     public static void Menu(MyuserApp client) {
    45
    46
                           Scanner sc = new Scanner(System.in);
                            int option = 0;
    47
                            System.out.println("Type the number to perform the desired action:");
    49
                            while (option != 4) {
    50
                                   System.out.println("1: Get a record for a certain UserID");
                                  System.out.println("2: Update a Record");
System.out.println("3: Delete a Record");
    51
    52
                                   System.out.println("4: Exit");
                                  System.out.print("\nPlease select an option (1-4): ");
option = sc.nextInt();
    54
    55
    56
                                   sc.nextLine(); //skip '\n
    57
              // fix this part for all cases 1 to 4 so that it can do the task
    59
              //take help from your copy and lab notes for that
    60
    61
                                   switch (option) {
    62
    63
    64
                                                 System.out.println("Enter the UserID:"):
                                                 Scanner newUserID = new Scanner(System.in);
    65
                                                 String newUserID1 = newUserID.nextLine();
    66
67
    69
70
                                                MyuserDTO myuser = client.getRecord(newUserID1);
    71
72
                                                 if (myuser != null) {
   73
                                                        System.out.println(myuser.getUserid().toString());
                                                        System.out.println(myuser.getName().toString());
                                                        System.out.println(myuser.getPhone().toString());
                                                        System.out.println(myuser.getPassword().toString());
                                                        System.out.println(myuser.getAddress().toString());
                                                        System.out.println(myuser.getEmail().toString());
 >> Java DB Database Process × ED-JPA (run) × SQL 24 execution × SQL 25 execution × SQL 26 execution ×
...l. 18 🗿 5Q, 19 × 🗐 5Q, 20 × 🗐 5Q, 21 × 🗐 5Q, 22 × 🗑 5Q, 22 × 🗑 5Q, 22 × 📵 5Q, 23 × 🔞 Mysser#Objava × 🕮 Mysser#Objava × 🔞 Mysser#Objava × 🗐 5Q, 24 (pictoclerby//localhost 15.] × 🗓 5Q, 25 (pictoclerby//localhost 15.] × 🗓 5Q, 25 (pictoclerby//localhost 15.] × 💮
        History | 🞯 腸 - 💹 - | 🕄 🐯 문장 🖶 📭 | 🔗 😓 등 | 연쇄 연쇄 🔸 🗆 | 선쇄 선생
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111
111
111
                                if (myuser != null) {
                                    System.out.println(myuser.getUserid().toString());
System.out.println(myuser.getUserid().toString());
System.out.println(myuser.getDhome().toString());
System.out.println(myuser.getDhome().toString());
System.out.println(myuser.getDadresor).toString());
System.out.println(myuser.getDadresor).toString());
System.out.println(myuser.getEdOn().toString());
System.out.println(myuser.getSeOn().toString());
System.out.println(myuser.getSeOn().toString());
                                 else(
                                     System.out.println("UserID is not found");
                                break;
                                 case 2:
System.out.println("Enter record details to be updated:");
Scanner newData = new Scanner(System.in);
                                 System.out.println("UserId:");
String newUserId2 = newData.nextLine();
                               String newDeriad = newData.nextLine();

System.out.println("Name:");

System.out.println("Password");

System.out.println("Password");

System.out.println("Fassword");

System.out.println("Fassi:");

System.out.println("Fassi:");

System.out.println("Address");

System.out.println("Address");

System.out.println("SECONI");

System.out.println("SECONI");

System.out.println("SECONI");

System.out.println("SECONI");

String newSecOne = newData.nextLine();

System.out.println("SECONI");

String newSecOne = newData.nextLine();

        Output X
        SQL 25 execution X
        SQL 26 execution X

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        Java D8 Database Process X
        ED-JPA (run) X
        SQL 24 execution X
        SQL 25 execution X
        SQL 26 execution X
```

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Step 3 outputs:

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```
ed.jpa.MyuserApp > (1) Menu >
Java DB Database Process X ED-JPA (run) X SQL 24 execution X SQL 25 execution X SQL 26 execution X
     Type the number to perform the desired action:
     1: Get a record for a certain UserID
     2: Update a Record
     3: Delete a Record
     4: Exit
      Please select an option (1-4): 1
      Enter the UserID:
      0000069
      UserID is not found
      1: Get a record for a certain UserID
      2: Update a Record
      3: Delete a Record
      4: Exit
      Please select an option (1-4): 1
      Enter the UserID:
      00000€
      000006
      David Lee
      0123456789
      654321
      Swinburne EN510g
      dlee@swin.edu.au
      What is my name?
      David
      1: Get a record for a certain UserID
      2: Update a Record
      3: Delete a Record
      4: Exit
      Please select an option (1-4): 2
      Enter record details to be updated:
      UserId:
      00004
      Name:
      blah
      Password:
      Email:
      Phone:
      d
```

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```
Output ×
Java DB Database Process × ED-JPA (run) × SQL 24 execution × SQL 25 execution × SQL 26 execution ×
       Please select an option (1-4): 2
Enter record details to be updated:
.
8
       UserId:
        00004
       Name:
       Password:
       Email:
        Phone:
       Address:
        SECON:
       a
Failed to update
1: Get a record for a certain UserID
2: Update a Record
3: Delete a Record
        4: Exit
       Please select an option (1-4): 2
Enter record details to be updated:
       UserId:
       Name:
       Password:
        Email:
        Address:
        SECQN:
        SECAns:
```

```
Output ×
Java DB Database Process × ED-JPA (run) × SQL 24 execution × SQL 25 execution × SQL 26 execution ×
UserId:
Name:
%
      Password:
      Email:
      Phone:
      Address:
      SECQN:
      SECAns:
      Updated Successfully
      1: Get a record for a certain UserID
2: Update a Record
      3: Delete a Record
      Please select an option (1-4): 3
      Enter the UserID:
      000000006
      Failed to delete
1: Get a record for a certain UserID
      2: Update a Record
3: Delete a Record
      4: Exit
      Please select an option (1-4): 3
      Enter the UserID:
      Deleted Successfully
       1: Get a record for a certain UserID
      2: Update a Record
      3: Delete a Record
      4: Exit
      Please select an option (1-4): 4
BUILD SUCCESSFUL (total time: 1 minute 43 seconds)
```

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4.1) Here myuser is the DAO object and thus is the one directly accessing the database when the object is created. So it is responsible for the ORM work

- 4.2) Yes because here it is working as the DAO while there it was working as the DTO
- 4.3) Previously it was a single, stand-alone java file that was a DTO, but now its just an object located inside the myuserDB and acting as the DAO.