

bankingapp-with-impexp-stream-stats - bankingapp-with-impexp-stream-stats/src/com/indium/bankingapp/service/AccountServiceHashMapImpl.java - Eclipse IDE

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Package Explorer ×

- bankingapp-with-impexp-stream-stats [indium_javabo...
- src
- com.indium.bankingapp
 - BankingAppMain.java
- com.indium.bankingapp.model
 - Account.java
- com.indium.bankingapp.service
 - AccountService.java
 - AccountServiceHashMapImpl.java

AccountServiceHashMapImpl.java ×

```
1 package com.indium.bankingapp.service;
2
3 import com.indium.bankingapp.model.Account;
4
5 import java.io.ObjectInputStream;
6 import java.io.ObjectOutputStream;
7 import java.io.FileInputStream;
8 import java.io.FileOutputStream;
9 import java.io.IOException;
10 import java.util.Collection;
11 import java.util.HashMap;
12 import java.util.Map;
13
14 public class AccountServiceHashMapImpl implements AccountService<Account> {
15     private Map<Integer, Account> accounts = new HashMap<>();
16     private final Object lock = new Object();
17
18     @Override
19     public boolean createAccount(Account account) {
20         synchronized (lock) {
21             if (accounts.containsKey(account.getId())) {
22                 // Account with the same ID already exists
23                 return false;
24             }
25             accounts.put(account.getId(), account);
26             return true;
27         }
28     }
29
30     @Override
31     public boolean updateAccount(int id, Account account) {
32         synchronized (lock) {
33             if (accounts.containsKey(id)) {
```

Task List ×

Find All Activate...

Outline ×

- com.indium.bankingapp.service
 - AccountServiceHashMapImpl
 - accounts : Map<Integer, Account>
 - lock : Object
 - createAccount(Account) : boolean
 - updateAccount(int, Account) : boolean
 - deleteAccount(int) : boolean
 - getAccount(int) : Account
 - getAllAccounts() : Collection<Account>
 - exportAccounts(String) : boolean
 - importAccounts(String) : boolean

bankingapp-with-impexp-stream-stats - bankingapp-with-impexp-stream-stats/src/com/indium/bankingapp/service/AccountServiceHashMapImpl.java - Eclipse IDE

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Package Explorer

bankingapp-with-impexp-stream-stats [indium_javabo
JRE System Library [JavaSE-17]
src
com.indium.bankingapp
BankingAppMain.java
com.indium.bankingapp.model
Account.java
com.indium.bankingapp.service
AccountService.java
AccountServiceHashMapImpl.java

AccountServiceHashMapImpl.java

```
30= @Override  
31= public boolean updateAccount(int id, Account account) {  
32     synchronized (lock) {  
33         if (accounts.containsKey(id)) {  
34             accounts.put(id, account);  
35             return true;  
36         }  
37         return false; // Account not found  
38     }  
39 }  
40  
41= @Override  
42= public boolean deleteAccount(int id) {  
43     synchronized (lock) {  
44         if (accounts.containsKey(id)) {  
45             accounts.remove(id);  
46             return true;  
47         }  
48         return false; // Account not found  
49     }  
50 }  
51  
52= @Override  
53= public Account getAccount(int id) {  
54     synchronized (lock) {  
55         return accounts.get(id);  
56     }  
57 }  
58  
59= @Override  
60= public Collection<Account> getAllAccounts() {  
61     synchronized (lock) {
```

Task List

Find All Activate...

Outline

com.indium.bankingapp.service
AccountServiceHashMapImpl
accounts : Map<Integer, Account>
lock : Object
createAccount(Account) : boolean
updateAccount(int, Account) : boolean
deleteAccount(int) : boolean
getAccount(int) : Account
getAllAccounts() : Collection<Account>
exportAccounts(String) : boolean
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bankingapp-with-impexp-stream-stats [indium_javabo

» JRE System Library [JavaSE-17]

» src

» com.indium.bankingapp

» » BankingAppMain.java

» » com.indium.bankingapp.model

» » » Account.java

» » com.indium.bankingapp.service

» » » AccountService.java

» » » » AccountServiceHashMapImpl.java

AccountServiceHashMapImpl.java ×

```
62     synchronized (lock) {
63         return accounts.values();
64     }
65 }
66
67 @Override
68 public boolean exportAccounts(String filePath) {
69     synchronized (lock) {
70         try (ObjectOutputStream outputStream = new ObjectOutputStream(new FileOutputStream(filePath))) {
71             outputStream.writeObject(accounts);
72             return true;
73         } catch (IOException e) {
74             e.printStackTrace();
75             return false;
76         }
77     }
78 }
79
80 @Override
81 public boolean importAccounts(String filePath) {
82     synchronized (lock) {
83         try (ObjectInputStream inputStream = new ObjectInputStream(new FileInputStream(filePath))) {
84             Map<Integer, Account> importedAccounts = (Map<Integer, Account>) inputStream.readObject();
85             accounts.clear();
86             accounts.putAll(importedAccounts);
87             return true;
88         } catch (IOException | ClassNotFoundException e) {
89             e.printStackTrace();
90             return false;
91         }
92     }
93 }
```

Task List ×

Find All Activate...

Outline ×

com.indium.bankingapp.service
» AccountServiceHashMapImpl
» accounts : Map<Integer, Account>
» lock : Object
» createAccount(Account) : boolean
» updateAccount(int, Account) : boolean
» deleteAccount(int) : boolean
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» exportAccounts(String) : boolean
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