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Package Explorer ×

bankingapp-with-impexp-thread [indium_javabootcam
  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

BankingAppMain.java   Account.java   AccountService.java   AccountServiceHashMapImpl.java ×

```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.s
AccountServiceHashMapIr
  accounts : Map<Intege
  lock : Object
  createAccount(Account
  updateAccount(int, Acc
  deleteAccount(int) : bo
  getAccount(int) : Accou
  getAllAccounts() : Colle
  exportAccounts(String)

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BankingAppMain.java   Account.java   AccountService.java   AccountServiceHashMapImpl.java ×

```java
29
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 ×

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BankingAppMain.java   Account.java   AccountService.java   AccountServiceHashMapImpl.java ×

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

Task List ×

Find   › All › Activate...

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