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- > bankingapp-with-collection [indium_javabootcamp-
  - JRE System Library [JavaSE-17]
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BankingAppMain.java ×

```java
1  package com.indium.bankingapp;
2
3  import com.indium.bankingapp.model.Account;
4  import com.indium.bankingapp.service.AccountService;
5  import com.indium.bankingapp.service.AccountServiceArrListImpl;
6  import com.indium.bankingapp.service.AccountServiceLnkListImpl;
7  import com.indium.bankingapp.service.AccountServiceHashSetImpl;
8  import com.indium.bankingapp.service.AccountServiceTreeSetImpl;
9  import com.indium.bankingapp.service.AccountServiceHashMapImpl;
10 import com.indium.bankingapp.service.AccountServiceTreeMapImpl;
11
12 import java.util.Collection;
13 import java.util.Scanner;
14
15 public class BankingAppMain {
16     public static void main(String[] args) {
17
18         AccountService accountService = createAccountService();
19
20         Scanner scanner = new Scanner(System.in);
21
22         while (true) {
23             System.out.println("Banking App Menu:");
24             System.out.println("1] Create Account");
25             System.out.println("2] Update Account");
26             System.out.println("3] View Account");
27             System.out.println("4] View All Accounts");
28             System.out.println("5] Delete Account");
29             System.out.println("6] Exit");
30             System.out.print("Enter your choice: ");
31             int choice = scanner.nextInt();
32             scanner.nextLine();
```

Task List ×

Find   ▸ All ▸ Activate...

Connect Mylyn

Connect to your task and ALM tools o
create a local task.

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BankingAppMain.java ×

```java
33
34                    switch (choice) {
35                        case 1:
36                            captureAccountDetails(accountService, scanner);
37                            break;
38                        case 2:
39                            updateAccountDetails(accountService, scanner);
40                            break;
41                        case 3:
42                            viewAccountDetails(accountService, scanner);
43                            break;
44                        case 4:
45                            viewAllAccounts(accountService);
46                            break;
47                        case 5:
48                            deleteAccount(accountService, scanner);
49                            break;
50                        case 6:
51                            System.out.println("Exiting the Banking App.");
52                            scanner.close();
53                            System.exit(0);
54                        default:
55                            System.out.println("Invalid choice. Please enter a valid option.");
56                    }
57                }
58            }
59
60          private static AccountService createAccountService() {
61              // Example for ArrayList implementation
62              // return new AccountServiceArrListImpl();
63
64              // Example for LinkedList implementation
65              // return new AccountServiceLnkListImpl();
```

Task List ×

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BankingAppMain.java ×

```java
60    private static AccountService createAccountService() {
61        // Example for ArrayList implementation
62        // return new AccountServiceArrListImpl();
63
64        // Example for LinkedList implementation
65        // return new AccountServiceLnkListImpl();
66
67        // Example for HashSet implementation
68        // return new AccountServiceHashSetImpl();
69
70        // Example for TreeSet implementation
71        // return new AccountServiceTreeSetImpl();
72
73        // Example for HashMap implementation
74        // return new AccountServiceHashMapImpl();
75
76        // Example for TreeMap implementation
77        return new AccountServiceTreeMapImpl();
78
79        // return null; // Update with desired implementation
80    }
81
82    private static boolean isValidAccountType(String accountType) {
83        return accountType.equals("savings") || accountType.equals("deposit") || accountT
84    }
85
86    private static void captureAccountDetails(AccountService accountService, Scanner scan
87        System.out.print("Enter Account Type (savings/deposit/loan): ");
88        String accountType = scanner.nextLine().toLowerCase();
89
90        if (!isValidAccountType(accountType)) {
91            System.out.println("Invalid account type. Please enter 'savings', 'deposit',
```
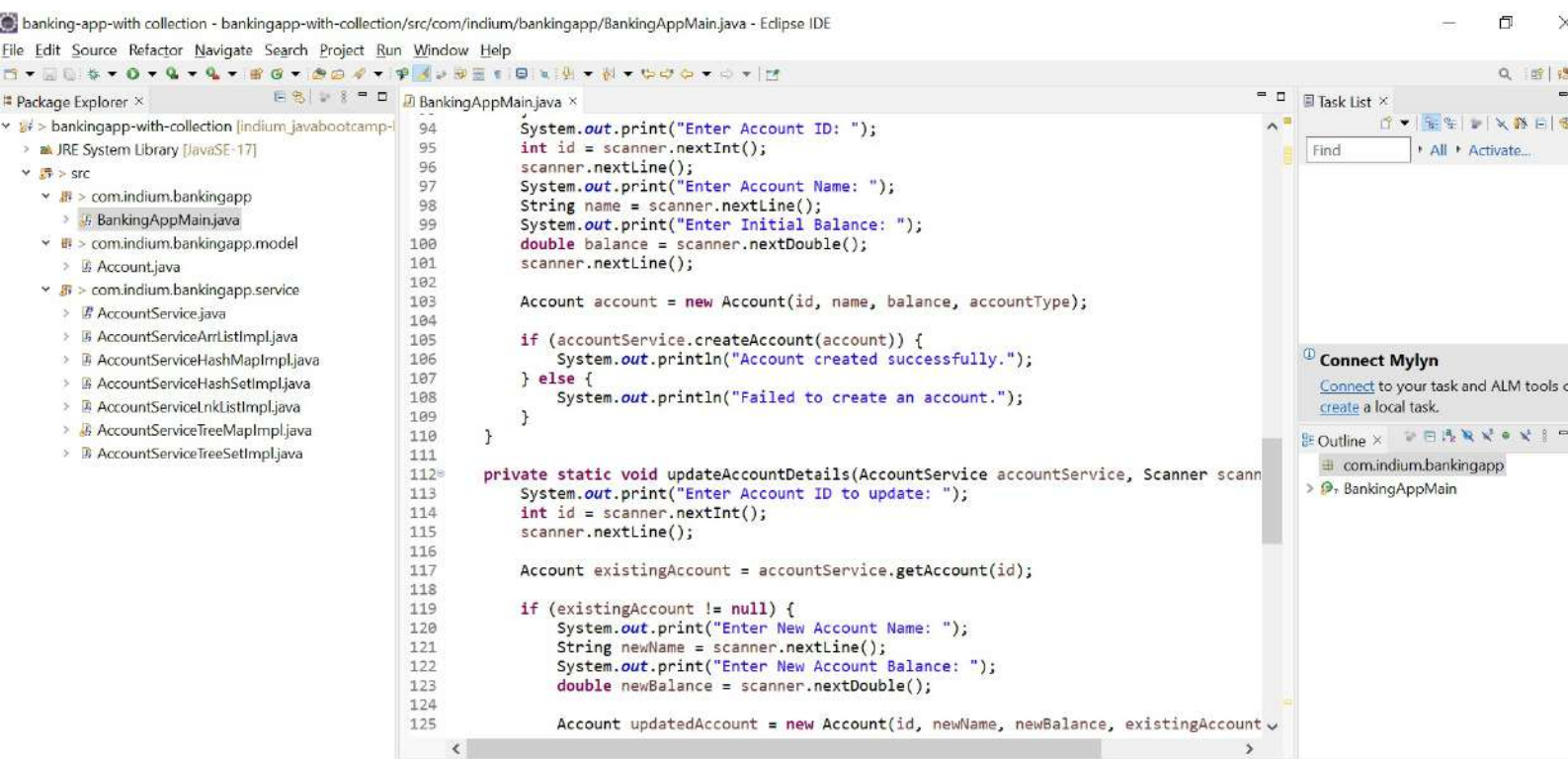
Problems Javadoc Declaration Console ×

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🗐 BankingAppMain.java ×

```java
 94        System.out.print("Enter Account ID: ");
 95        int id = scanner.nextInt();
 96        scanner.nextLine();
 97        System.out.print("Enter Account Name: ");
 98        String name = scanner.nextLine();
 99        System.out.print("Enter Initial Balance: ");
100        double balance = scanner.nextDouble();
101        scanner.nextLine();
102
103        Account account = new Account(id, name, balance, accountType);
104
105        if (accountService.createAccount(account)) {
106            System.out.println("Account created successfully.");
107        } else {
108            System.out.println("Failed to create an account.");
109        }
110    }
111
112    private static void updateAccountDetails(AccountService accountService, Scanner scann
113        System.out.print("Enter Account ID to update: ");
114        int id = scanner.nextInt();
115        scanner.nextLine();
116
117        Account existingAccount = accountService.getAccount(id);
118
119        if (existingAccount != null) {
120            System.out.print("Enter New Account Name: ");
121            String newName = scanner.nextLine();
122            System.out.print("Enter New Account Balance: ");
123            double newBalance = scanner.nextDouble();
124
125            Account updatedAccount = new Account(id, newName, newBalance, existingAccount
```

Task List ×

Find   ▸ All ▸ Activate...

ⓘ **Connect Mylyn**

Connect to your task and ALM tools
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BankingAppMain.java ×

```java
124              Account updatedAccount = new Account(id, newName, newBalance, existingAccount
125
126              if (accountService.updateAccount(id, updatedAccount)) {
127                  System.out.println("Account updated successfully.");
128              } else {
129                  System.out.println("Failed to update the account.");
130              }
131          } else {
132              System.out.println("Account not found.");
133          }
134      }
135
136      private static void viewAccountDetails(AccountService accountService, Scanner scanner
137          System.out.print("Enter Account ID to view: ");
138          int id = scanner.nextInt();
139          scanner.nextLine();
140
141          Account account = accountService.getAccount(id);
142
143          if (account != null) {
144              System.out.println("Account Details:");
145              System.out.println("ID: " + account.getId());
146              System.out.println("Name: " + account.getName());
147              System.out.println("Balance: " + account.getBalance());
148              System.out.println("Account Type: " + account.getAccountType());
149          } else {
150              System.out.println("Account not found.");
151          }
152      }
153
154      private static void viewAllAccounts(AccountService accountService) {
155
```

Task List ×

Find   ▸ All ▸ Activate...

Connect Mylyn

Connect to your task and ALM tools or
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BankingAppMain.java ×

```java
145        System.out.println("Account Details:");
146        System.out.println("ID: " + account.getId());
147        System.out.println("Name: " + account.getName());
148        System.out.println("Balance: " + account.getBalance());
149        System.out.println("Account Type: " + account.getAccountType());
150    } else {
151        System.out.println("Account not found.");
152    }
153 }
154
155    private static void viewAllAccounts(AccountService accountService) {
156        Collection<Account> accounts = accountService.getAllAccounts();
157
158        if (!accounts.isEmpty()) {
159            System.out.println("All Accounts:");
160            for (Account account : accounts) {
161                System.out.println("ID: " + account.getId());
162                System.out.println("Name: " + account.getName());
163                System.out.println("Balance: " + account.getBalance());
164                System.out.println("Account Type: " + account.getAccountType());
165                System.out.println("-------------");
166            }
167        } else {
168            System.out.println("No accounts found.");
169        }
170    }
171
172    private static void deleteAccount(AccountService accountService, Scanner scanner) {
173        System.out.print("Enter Account ID to delete: ");
174        int id = scanner.nextInt();
175        scanner.nextLine();
176    }
177 }
```

Task List ×

Find   All Activate...

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  - main(String[]) : void
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  - isValidAccountType(String) : boolea
  - captureAccountDetails(AccountSer
  - updateAccountDetails(AccountSer
  - viewAccountDetails(AccountService
  - viewAllAccounts(AccountService) :
  - deleteAccount(AccountService, Sca