

תכנון תכנה למערכת בנקאית

תכנון מערכת תוכנה עוסק במיפוי בין עולם הבעיה ועולם הפתרון

- | | | |
|--|---|--|
| <p>עולם הפתרון:</p> <ul style="list-style-type: none"> ■ שפת תכנות ■ עצמים ■ מחלקות ■ מתודות ■ שדות |  | <p>עולם הבעיה:</p> <ul style="list-style-type: none"> ■ בנקים ■ לקוחות ■ משיכות, הפקדות ■ חשבונות ■ יתרות |
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2

Software1 with Java

Recitation No. 6 (Objects, Method Calls, Debugger)

Chad Barzilay and Oranit Dror

1

The Customer Class

```
public class Customer {
    public Customer(String name, String id) {
        this.name = name;
        this.id = id;
    }

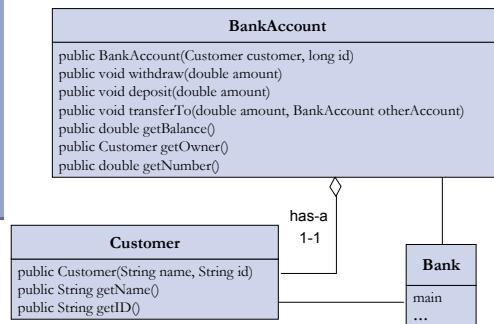
    public String getName() {
        return name;
    }

    public String getID() {
        return id;
    }

    String name;
    String id;
}
```

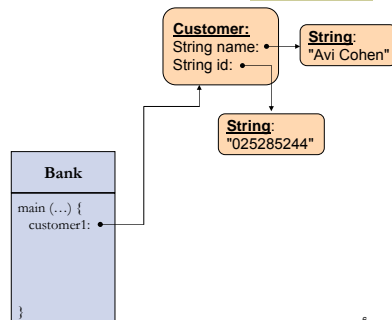
4

Class Diagram



3

Object Diagram



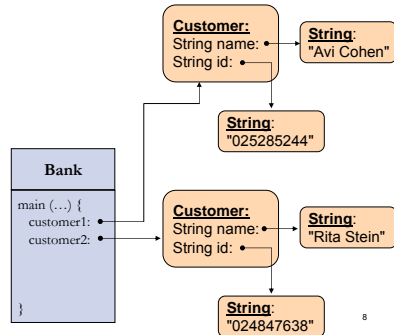
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Toy Bank Program

```
public class Bank {
    public static void main(String[] args) {
        Customer customer1 = new Customer("Avi Cohen", "025285244");
        Customer customer2 = new Customer("Rita Stein", "024847638");
        BankAccount account1 = new BankAccount(customer1, 1234);
        BankAccount account2 = new BankAccount(customer2, 5678);
        BankAccount account3 = new BankAccount(customer2, 2984);
        account1.deposit(1000);
        account2.deposit(500);
        account1.transferTo(100, account3);
        account2.withdraw(300);
        System.out.println("account1 has " + account1.getBalance());
        System.out.println("account2 has " + account2.getBalance());
    }
}
```

5

Object Diagram

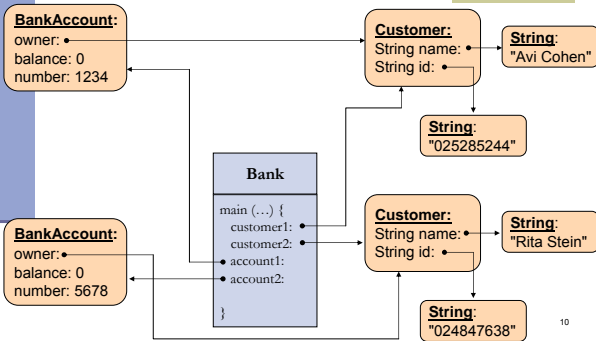


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Object Diagram

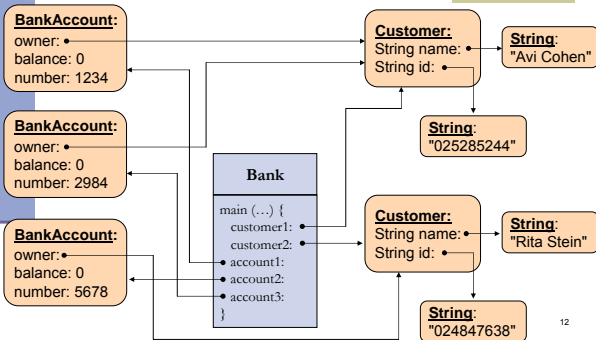


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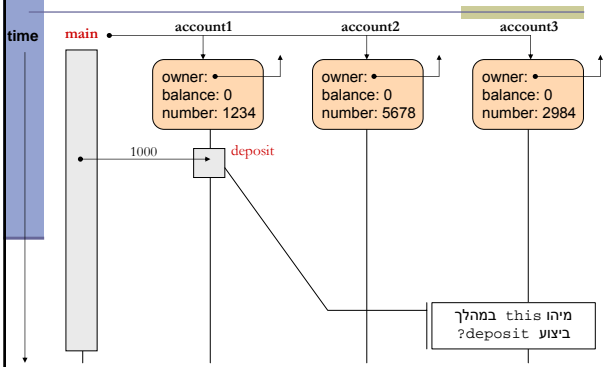


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Message Sequence Chart



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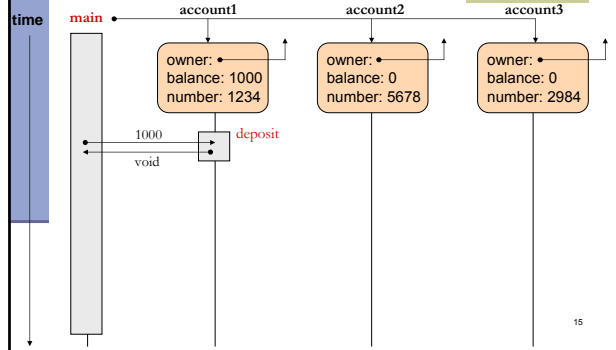
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Message Sequence Chart

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16

Message Sequence Chart



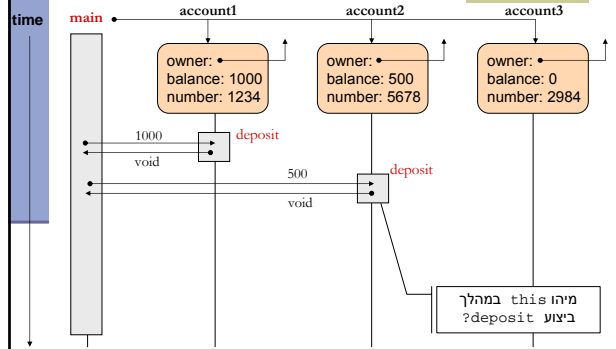
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Message Sequence Chart

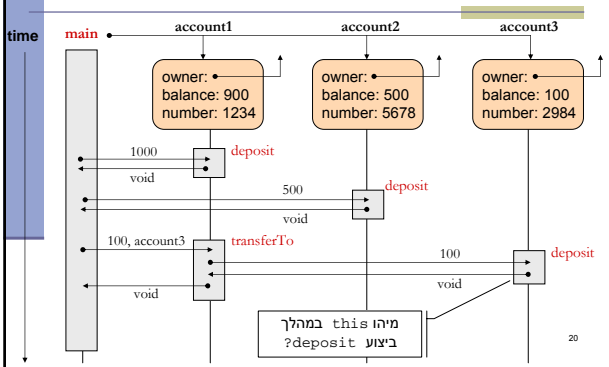
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    }
}
```

18

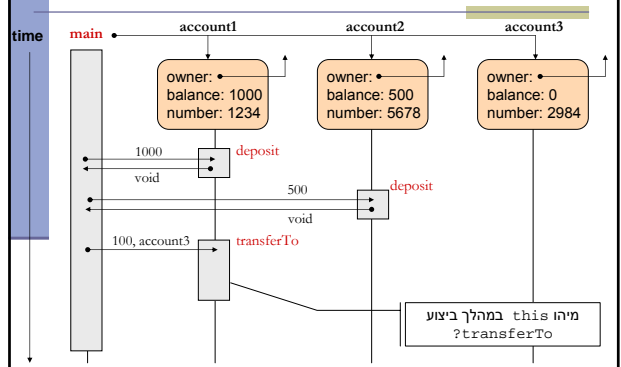
Message Sequence Chart



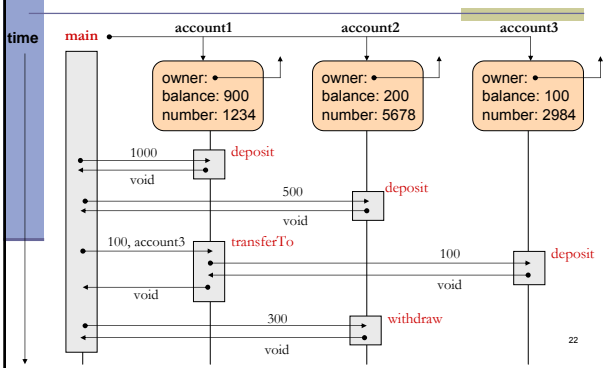
Message Sequence Chart



Message Sequence Chart



Message Sequence Chart



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Output

```
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        System.out.println("account2 has " + account2.getBalance());
    }
}
```

Output: account1 has 900.0
account2 has 200.0