

# 1. AirVoice - Registration

**Grade settings:** Maximum grade: 100

**Disable external file upload, paste and drop external content:** Yes

**Run:** Yes **Evaluate:** Yes

**Automatic grade:** Yes **Maximum execution time:** 16 s

SmartBuy is a leading mobile shop in the town. After buying a product, the customer needs to provide a few personal details for the invoice to be generated.

You being their software consultant have been approached to develop software to retrieve the personal details of the customers, which will help them to generate the invoice faster.

## Component Specification: Customer

Type(Class )	Attributes	Methods	Responsibilities
<b>Customer</b>	String customerName long contactNumber String emailId int age	Include the getters and setters method for all the attributes.	

In the **Main** class, create an object for the Customer class.

Get the details as shown in the sample input and assign the value for its attributes using the setters.

Display the details as shown in the sample output using the getters method.

All classes and methods should be public, Attributes should be private.

### Note:

In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.

Ensure to follow the object oriented specifications provided in the question.

Ensure to provide the names for classes, attributes and methods as specified in the question.

Adhere to the code template, if provided.

### Sample Input 1:

Enter the Name:

john

Enter the ContactNumber:

9874561230

Enter the EmailId:

john@gmail.com

Enter the Age:

32

### Sample Output 1:

Name:john

ContactNumber:9874561230

EmailId:john@gmail.com

Age:32

---

## 1. ZeeZee bank

**Grade settings:** Maximum grade: 100

**Disable external file upload, paste and drop external content:** Yes

**Run:** Yes **Evaluate:** Yes

**Automatic grade:** Yes **Maximum execution time:** 16 s

ZeeZee is a leading private sector bank. In the last Annual meeting, they decided to give their customer a 24/7 banking facility. As an initiative, the bank outlined to develop a stand-alone device that would offer deposit and withdrawal of money to the customers anytime.

You being their software consultant have been approached to develop software to implement the functionality of deposit and withdrawal anytime.

### Component Specification: Account

Type(Class)	Attributes	Methods	Responsibilities
<b>Account</b>	long accountNumber	Include the getters and setters method for all the attributes.	
	double	Include a parametrized	

	balanceAmount	constructor of two arguments in the order – accountNumber,balanceAmount to initialize the values for the account object	
--	---------------	---	--

### Requirement 1: Being able to deposit money into an account anytime

As per this requirement, the customer should be able to deposit money into his account at any time and the deposited amount should reflect in his account balance.

#### Component Specification: Account

Component Name	Type(Class)	Methods	Responsibilities
Deposit amount to an account	Account	public void deposit(double depositAmt)	<p>This method takes the amount to be deposited as an argument</p> <p>This method should perform the deposit,by adding the deposited amount to the balanceAmount</p>

### Requirement 2: Being able to withdraw money from the account anytime

As per this requirement, the customer should be able to withdraw money from his account anytime he wants. The amount to be withdrawn should be less than or equal to the balance in the account. After the withdrawal, the account should reflect the balance amount

#### Component Specification: Account

Component Name	Type(Class)	Methods	Responsibilities
Withdraw amount from an account	Account	public boolean withdraw(double withdrawAmt)	<p>This method should take the amount to be withdrawn as an argument.</p> <p>This method should check the</p>

			balanceAmount and deduct the withdraw amount from the balanceAmount and return true. If there is insufficient balance then return false.
--	--	--	--

In the **Main** class, Get the details as shown in the sample input.

Create an object for the Account class and invoke the deposit method to deposit the amount and withdraw method to withdraw the amount from the account.

All classes and methods should be public, Attributes should be private.

**Note:**

Balance amount should be displayed corrected to 2 decimal places.

Order of the transactions to be performed (Display,Deposit,Withdraw).

If the balance amount is insufficient then display the message as shown in the Sample Input / Output.

In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.

Ensure to follow the object-oriented specifications provided in the question.

Ensure to provide the names for classes, attributes, and methods as specified in the question.

Adhere to the code template, if provided.

**Sample Input/Output 1:**

Enter the account number:

**1234567890**

Enter the available amount in the account:

**15000**

Enter the amount to be deposited:

**1500**

Available balance is:16500.00

Enter the amount to be withdrawn:

**500**

Available balance is:16000.00

### **Sample Input/Output 2:**

Enter the account number:

**1234567890**

Enter the available amount in the account:

**15000**

Enter the amount to be deposited:

**1500**

Available balance is:16500.00

Enter the amount to be withdrawn:

**18500**

Insufficient balance

Available balance is:16500.00

---

## **3.Call Details**

**Grade settings:** Maximum grade: 100

**Disable external file upload, paste and drop external content:** Yes

**Run:** Yes **Evaluate:** Yes

**Automatic grade:** Yes **Maximum execution time:** 16 s

AirCarrier is a leading mobile network provider. They maintain a record of all the calls made by their postpaid customers. The details are stored in a particular format [callId:calledNumber:noOfMinutes]. At the end of every month, the network provider wants to extract the information from the file and populate it to the Call object for calculating the bill.

You being their software consultant have been approached to develop software to implement the functionality of extracting the data from the given format.

#### Component Specification: Call

Type(Class )	Attributes	Methods	Responsibilities
<b>Call</b>	int callId  long calledNumber  float duration	Include the getters and setters method for all the attributes.	

#### Requirement 1: Extracting the data from the callDetails

This requirement is responsible for extracting the customer's callId, calledNumber and duration from the callDetails. After the extraction set the callId, calledNumber and duration to the call object.

#### Component Specification: Call

Component Name	Type(Class)	Methods	Responsibilities
Extraction from file	Call	public void parseData(String callDetails)	This method takes the callDetails as an argument  This method should perform the extraction process, to set the callId, calledNumber and duration of the call object.

In the **Main** class, Get the details as shown in the sample input.

Create an object for the Call and invoke the **parseData** method to set the callId, calledNumber and duration for each customer.

Invoke the corresponding getters to display the call details as shown in the Sample Output

All classes and methods should be public, Attributes should be private.

**Note:**

In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.

Ensure to follow the object-oriented specifications provided in the question.

Ensure to provide the names for classes, attributes and methods as specified in the question.

Adhere to the code template, if provided.

**Sample Input 1:**

Enter the call details:

**102:6547891230:2.15**

**Sample Output 1:**

Call id:102

Called number:6547891230

Duration:2.15

=====