

# **Java Project - Currency converter program:**

## **Program goal:**

Program will convert currency between USD (United States Dollars) and ILS (Israeli Shekel).

## **Solution architecture:**

### **General:**

Development platform: program will be developed in Java in IntelliJ idea IDE.

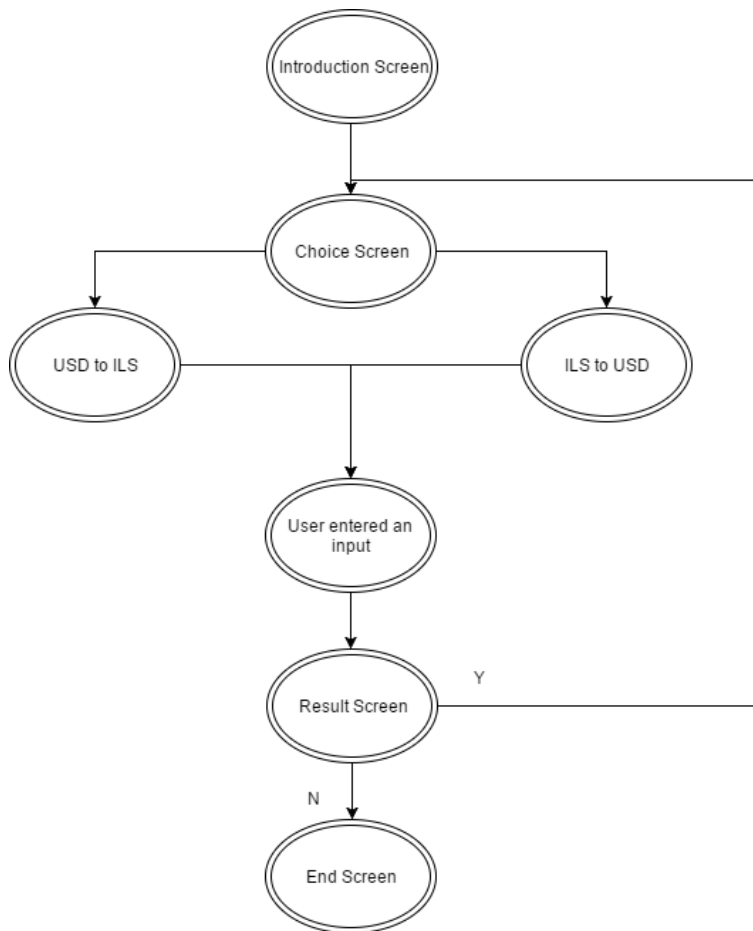
Distribution type: Private.

Networking type: None (offline).

Localization: English (US).

Conventions: Java Conventions.

## **General system diagram:**



## Guidelines:

### General:

1. Where necessary protect code blocks with error handling ways.
2. Use Java "Scanner.class" for receiving input from user.
3. If user choose an invalid choice, let user choose again and show user the following text:  
"Invalid Choice, please try again".
4. Create an **abstract** class named **Coin** with **abstract** method **getValue()** which returns a double.
5. Create 2 classes ILS and USD that **extends** **Coin** class, and implement the abstract method **getValue()**.
6. Create a **final** double variable named **value** containing 3.52 in USD class and 0.28 in ILS class.
7. Use the **getValue()** method in both USD and ILS classes to return the **value** variable.
8. Use **getValue()** from ILS and USD classes to perform the calculations in your main.
9. Each method has to be documented with comments.

### Screens:

#### First screen (Welcome Screen)–

Will have following text: "Welcome to currency converter"

"Please choose an option (1/2):"

"1. Dollars to Shekels"

"2. Shekels to Dollars"

#### Second screen (Choice Screen) –

Will have following text: "Please enter an amount to convert" (amount will be in double).

#### Third screen (Result screen) –

1. Will show user the result.
2. Result will be saved in an array.
3. Ask user if to start over Y / N.

Y – Will start cycle again (First screen without "welcome.." text).

N – Will show end screen.

#### Fourth Screen (End Screen) –

1. Will have following text: "Thanks for using our currency converter".
2. Will print all previous results from results array.

**\*\* Screen means to show in console**

**Bonus – Create the project using JavaFX / Java Swing.**