Working with Currency Formatting

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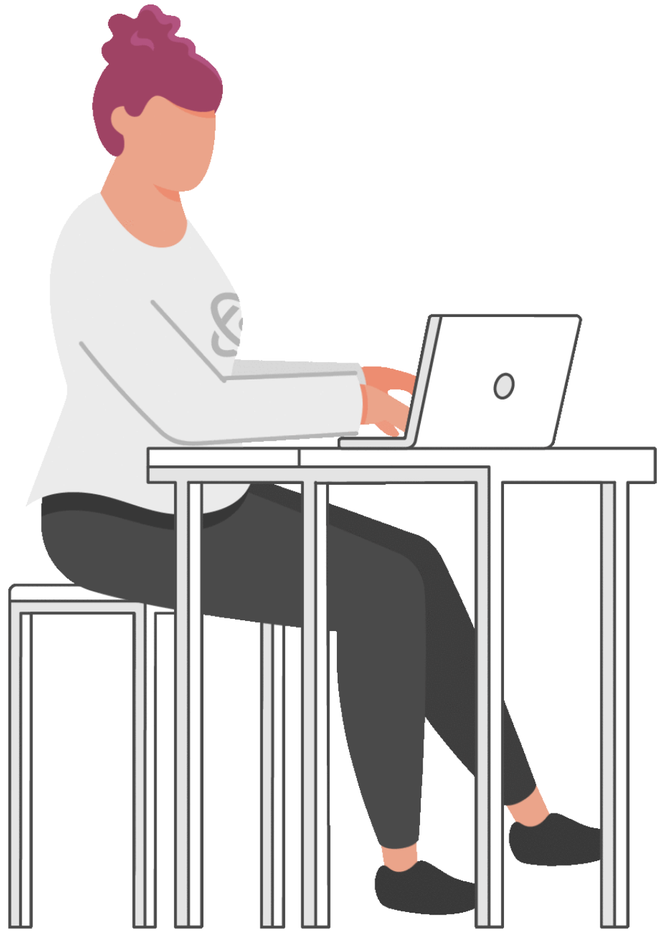
Module Overview

Why to format currency?

Java methods for currency formatting

Currency class



Requirement to support all the currencies

Display menu with locale specific currency

Why to Format Currency?

Approx. 180 types of currencies in the world

Locale specific currency preference

Currency conversion

Currency Formatting in Java

- Depends on currency code
- Currency symbols and precision
- Default formatting behaviour
- Overriding default formatting behaviour
- java.lang.BigDecimal

Expression Language Functions

Currency Formatting

```
public static java.lang.String currencyPattern(java.lang.String currencyCode)
```

```
public static java.lang.String currencyPatternWithPrecisionAndSymbol(java.lang.String currencyCode, int precision, java.lang.String symbol)
```

```
<af:outputText value="#{node.BillAmount}" id="ot14">

    <af:convertNumber type="currency" currencyCode="#{bindings.CurrencyCode.
attributeValue}" pattern="#{ fnd:currencyPattern(bindings.CurrencyCode.attributeValue
)}" />

</af:outputText>
```

Currency Formatting Using Currency Code

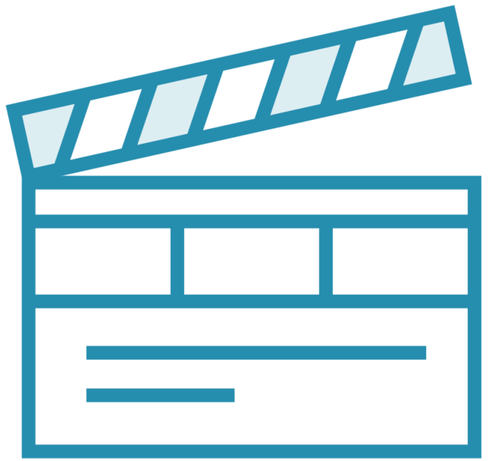
The af:convertNumber tag currency code determines BillAmount format

```
<af:outputText value="#{node.BillAmount}" id="ot14">

    <af:convertNumber type="currency" currencyCode="#{bindings.CurrencyCode.
attributeValue}" pattern="#{fnd:currencyPatternWithPrecisionAndSymbol(bindings.
CurrencyCode.attributeValue, 2, 'symbol')}"/>

</af:outputText>
```

Currency Formatting Using Currency Code, Precision and Symbol

The af:convertNumber tag currency code, precision (2) and symbol determines BillAmount format

How Currency Is Formatted at Run Time?



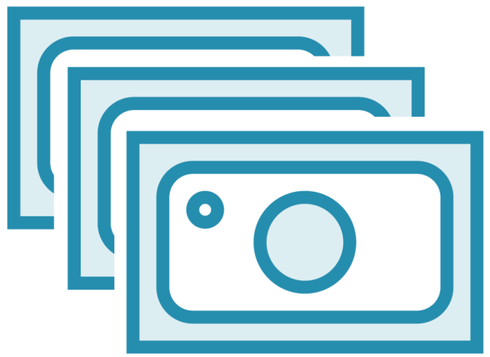
Application Core Technology

Currency format mask

Is there any Java class available that represents a Currency?

Yes
Currency Class

Currency Class



Represents a currency

No public constructor

Only one Currency instance for a currency

getInstance()

Currency Class Methods

getSymbol()

getCurrencyCode()

getDisplayName()

getAvailableCurrencies()

getInstance()

getDefaultFractionDigits()

Currency Formatting Using Currency Class

```
import java.util.Currency;
import java.util.Locale;


public class CurrencyDemo {
    public static void main(String args[]) {
        Locale curLocale = Locale.getDefault();
        Currency curCurrency = Currency.getInstance(curLocale);
        System.out.println(curCurrency.getDisplayName());
        System.out.println(curCurrency.getSymbol());
    }
}
```

```
Indian Rupee
₹
```

Currency Formatting Using Currency Class

```
import java.util.Currency;
import java.util.Locale;


public class CurrencyDemo {
    public static void main(String args[]) {
        Locale curLocale = new Locale(“en”,”US”);
        Currency curCurrency = Currency.getInstance(curLocale);
        System.out.println(curCurrency.getDisplayName());
        System.out.println(curCurrency.getSymbol());
    }
}
```

US Dollar

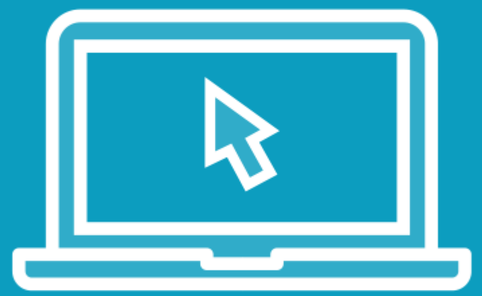
US$

Currency Formatting Using Currency Class

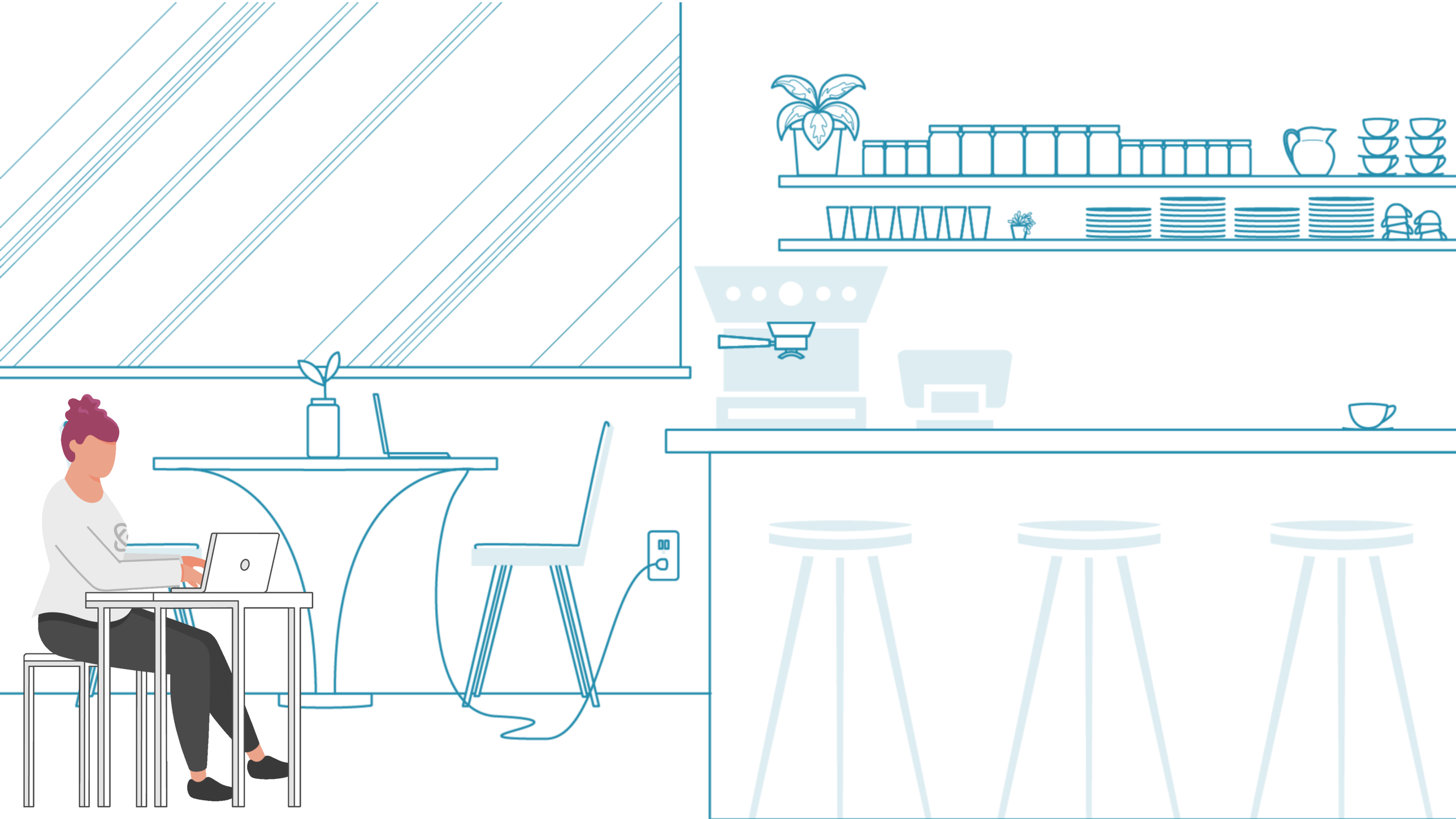
```
import java.util.*;
import java.text.NumberFormat;
public class CurrencyDemo {
    public static void main(String args[]) {
        Double amount = 54628.7;
        Locale curLocale = new Locale(“en”,”US”);
        Currency curCurrency = Currency.getInstance(curLocale);
        NumberFormat currencyFormatter = NumberFormat.getCurrencyInstance(curLocale);
        System.out.println(currencyFormatter.format(amount));
    }
}
```

$54,628.70

Demo



Using Currency class along with Locale and NumberFormat classes to format currency based on regional preferences



Module Summary

- Motivation behind currency formatting
- Currency formatting using expression language functions
- Currency Class
- Currency formatting using Currency Class

Up Next:

Working with Formatting Dates and Time Zones