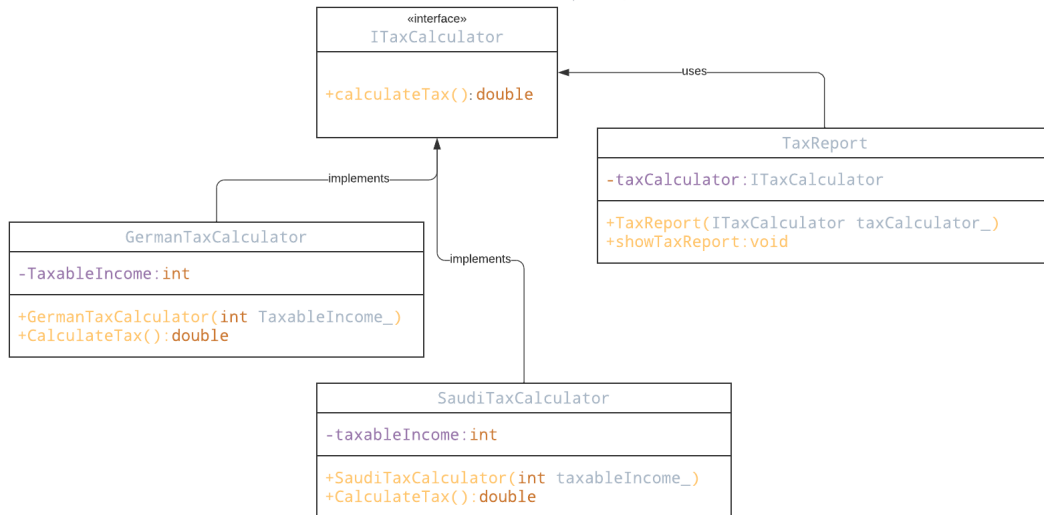


Constructor Injection

Bekalu Tadesse | March 28, 2023



```

public interface ITaxCalculator {

    // method declaration
    double CalculateTax();
}
    
```

```

public class MainTaxDE {

    public static void main(String[] args) {

        GermanTaxCalculator taxCalcDE = new GermanTaxCalculator(50_000);
        TaxReport taxRepDE = new TaxReport(taxCalcDE);
        taxRepDE.showTaxReport();

        SaudiTaxCalculator taxCalcSauD = new SaudiTaxCalculator(50_000);
        TaxReport taxRepSauD = new TaxReport(taxCalcSauD);
        taxRepSauD.showTaxReport();

    }
}
    
```

```

public class GermanTaxCalculator implements ITaxCalculator {

    private int TaxableIncome;

    // constructor
    public GermanTaxCalculator(int TaxableIncome_){
        this.TaxableIncome = TaxableIncome_;
    }

    @Override
    public double CalculateTax(){
        return TaxableIncome * 0.45;
    }
}
    
```

```

public class SaudiTaxCalculator implements ITaxCalculator {

    private int taxableIncome;

    public SaudiTaxCalculator(int taxableIncome_){
        this.taxableIncome = taxableIncome_;
    }

    @Override
    public double CalculateTax(){
        return taxableIncome * 0;
    }
}
    
```

```

public class TaxReport {
    private ITaxCalculator taxCalculator;

    // constructor injection
    public TaxReport(ITaxCalculator taxCalculator_){

        this.taxCalculator = taxCalculator_;
    }
    // method to generate taxReport
    public void showTaxReport(){
        System.out.println("Your tax due is: "+taxCalculator.CalculateTax());
    }
}
    
```