

Java 8 Interface yangiliklari

Reja

- ✓ **Default method**
- ✓ **Static method**
- ✓ **Functional interface**

Default methods

- **default** kalit so'zi bilan e'lon qilinadi.
- Body qismi mavjud bo'ladi;
- Impliment qilingan class ga voris bo'lib o'tadi;
- Impliment qilgan classdan olingan object orqali murojaat qilinadi;
- Override qilish mumkin (majburiy emas)
- Ikkita aynan (nomi va argumentlari) bir xil default method ga ega bolgan interfacelarni bitta classga implement qilinganda ushbu default method override qilinishi shart

Default method

```
interface MyInterface {  
  
    void abstractMethod();  
  
    default void defaultMethod() {  
        System.out.println("Default method is called");  
    }  
}
```



Default method nima uchun kerak?

(Interface) Static method

- **static** kalit so'zi bilan e'lon qilinadi.
- Faqat Interfacega tegishli bo'ladi;
- Impliment qilingan class ga voris bo'lib o'tmaydi;
- Impliment qilgan classdan olingan object orqali murojaat qilib bo'lmaydi;
- Override qilinmaydi;

Static methods

```
interface MyInterface {  
  
    void abstractMethod();  
  
    default void defaultMethod() {  
        System.out.println("Default method is called");  
    }  
  
    static void staticMethod(){  
        System.out.println("Static method is called");  
    }  
}
```

Functional interface

- ✓ Bittadan ko'p bo'lmagan abstract methodga ega bo'maydi (Single Abstract Method SAM)
- ✓ default method ga ega bo'lishi mumkin;
- ✓ static method ga ega bo'lishi mumkin;
- ✓ (public static final) o'zgaruvchilarga ega bo'lishi mumkin;
- ✓ @FunctionalInterface annotasiyasi bilan belgilab qo'yiladi.

Functional interface

```
interface MyInterface {  
    double G = 9.8;  
  
    void abstractMethod();  
  
    default void defaultMethod() {  
        System.out.println("Default method is called");  
    }  
  
    static void staticMethod() {  
        System.out.println("Static method is called");  
    }  
}
```



Functional interface ni (amalgam oshirish) implement qilish:

Class orqali;

Anonim class orqali;

Lambda Expression orqali



Functional Interface ni class orqali (amalga oshirish) implement qilish

```
public class Main {  
    public static void main(String[] args) {  
        Addition addition = new Addition(); // Interfacedan voris olgan aniq klass  
        int a = addition.calculate(4, 5);  
    }  
}  
  
interface Operationable {  
    int calculate(int x, int y);  
}  
  
class Addition implements Operationable {  
    @Override  
    public int calculate(int x, int y) {  
        return x + y;  
    }  
}
```

Functional Interface ni anonim class orqali amalga oshirish qilish

```
public class Main {  
    public static void main(String[] args) {  
        Operationable addition = new Operationable() {  
            //Anonim class body qismi  
            @Override  
            public int calculate(int x, int y) {  
                return x + y;  
            }  
        };  
        int a=addition.calculate(4,5);  
    }  
}
```

```
interface Operationable {  
    int calculate(int x, int y);  
}
```

Functional Interface ni Lambda Expression orqali amalga oshirish qilish

```
public class Main {  
    public static void main(String[] args) {  
        Operationable addition=(a,b)->a+b;  
        int c=addition.calculate(4,5);  
    }  
}  
  
interface Operationable {  
    int calculate(int x, int y);  
}
```



E'tiboringiz uchun raxmat

