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Week 17

May 14 2023

Week 17 Lecture Notes

Generic Method

A generic method is a method whose parameters and contents use a “generic” datatype. That type is determined on function call by the function’s arguments. Generics can be used to reuse code by allowing the use of one function for many cases/datatypes.

Ex:

```
public static <T> void func(T[] x) {  
    System.out.println(x[0]);  
}
```

```
func(charArray); //T replaced with array type
```

```
func(intArray);
```

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Generic class

Like a method, classes can also be made generic with the same <T> syntax. The type of the class is declared upon instantiation, and all methods and properties can use the T datatype.

Ex:

```
public class test<T> {  
    private T var;  
    public setVar(T x) {  
        var = x  
    }  
}
```

```
test<Integer> intTest = new test<Integer>(); //Sets var and setVar to type int
```

```
intText.setVar('c'); //Error - var is type int
```