Java throw Keyword

‹ Java Keywords

Example

Throw an exception if **age** is below 18 (print "Access denied"). If age is 18 or older, print "Access granted":

```
public class Main {
  static void checkAge(int age) {
    if (age < 18) {
      throw new ArithmeticException("Access denied - You must be at least 18 yea
    }
    else {
      System.out.println("Access granted - You are old enough!");
    }
  }

  public static void main(String[] args) {
    checkAge(15); // Set age to 15 (which is below 18...)
  }
}
```

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Definition and Usage

The `throw` keyword is used to create a custom error.

The `throw` statement is used together with an **exception type**. There are many exception types available in Java: `ArithmeticException`, `ClassNotFoundException`, `ArrayIndexOutOfBoundsException`, `SecurityException`, etc.

The exception type is often used together with a custom **method**, like in the example above.

Differences between `throw` and `throws`:

throw	**throws**
Used to throw an exception for a method	Used to indicate what exception type may be thrown by a method
Cannot throw multiple exceptions	Can declare multiple exceptions
Syntax: • `throw` is followed by an object (new *type*) • used inside the method	**Syntax:** • `throws` is followed by a class • and used with the method signature

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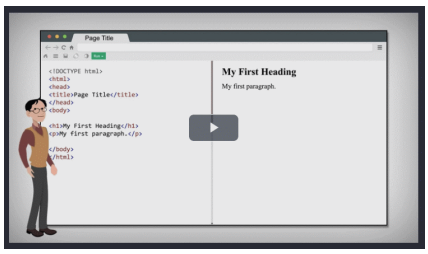

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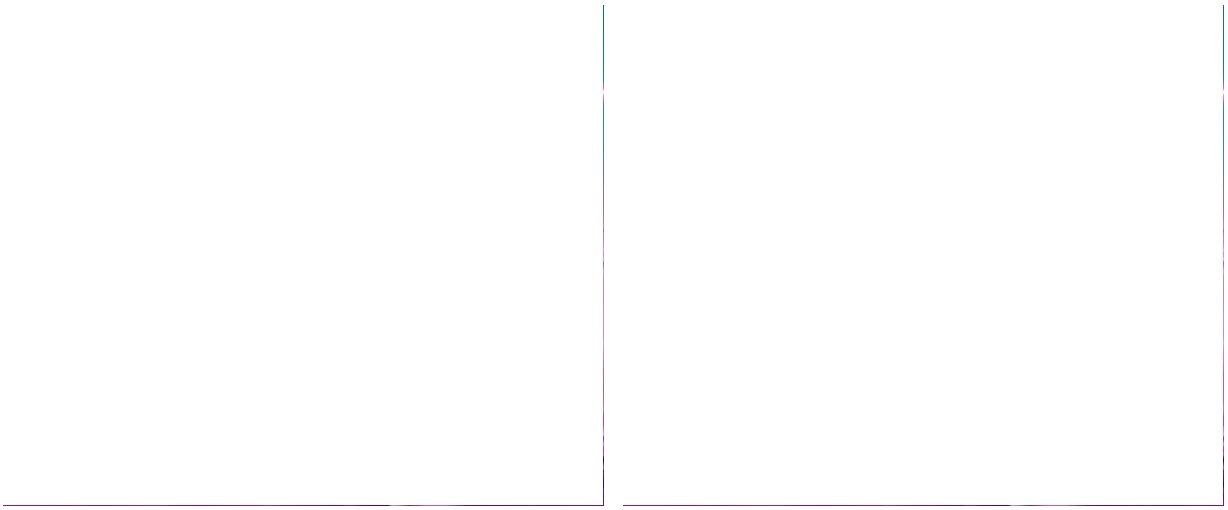

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