

Static Variables and Methods

Example

```
class Person
{
    public static int numberOfPeople;

    public String name;

    public Person(String name) {
        this.name = name;
        numberOfPeople++;
    }

    public static void printPopulation() {
        System.out.println(numberOfPeople);
    }

    . . .
}
```

Exceptions

Example

```
public static void main(String[] args)
{
    InputStream istream;

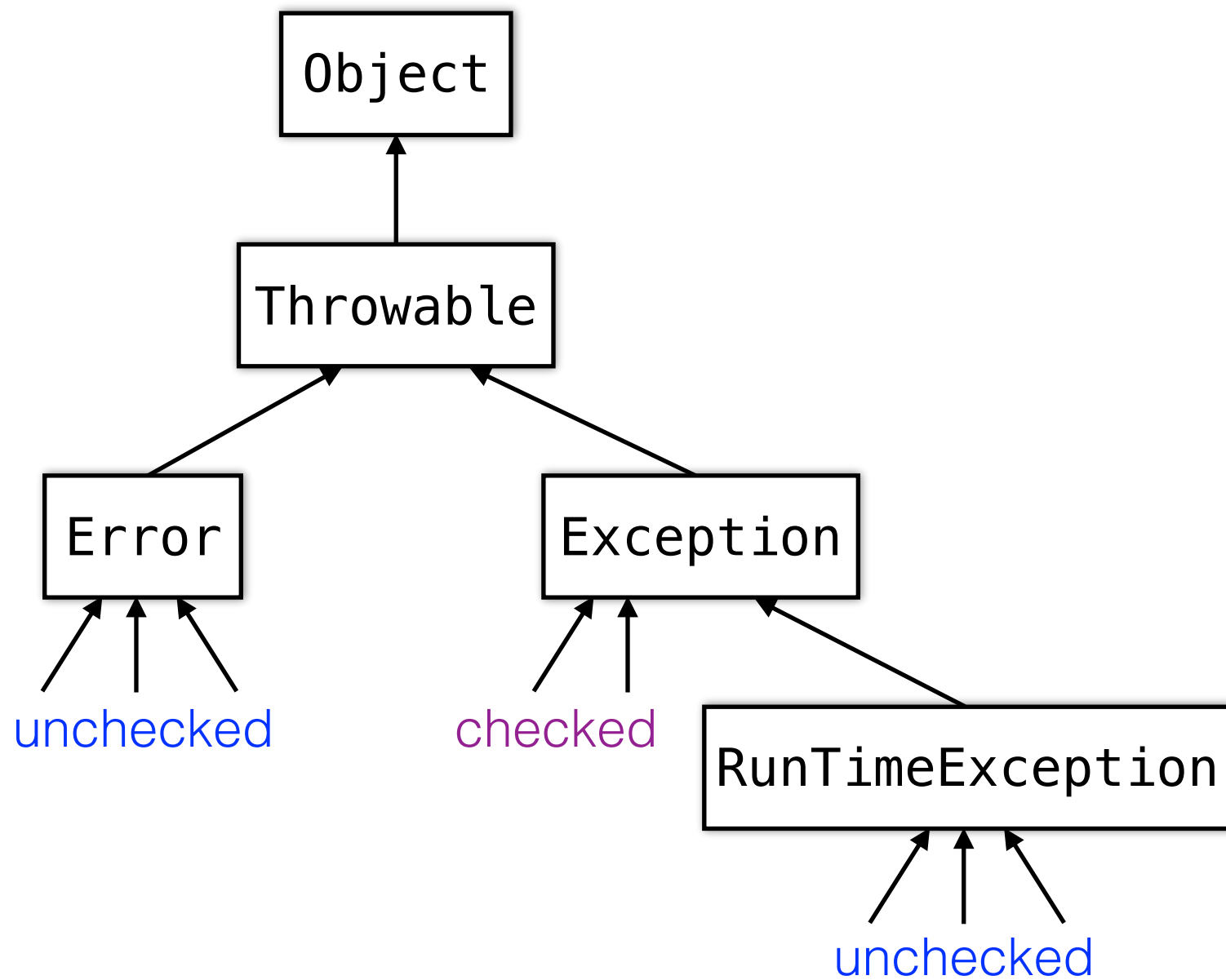
    File        inputFile;

    try {
        inputFile = new File(args[0]);
        istream = new InputStream(inputFile);
    }
    catch (FileNotFoundException ex) {
        System.out.println("file " + args[0] + " not found");
    }
}
```

try/catch Blocks

```
try
{
    // statements that might cause exceptions
}
catch ( exception-1 id-1 )
{
    // statements to handle this exception
}
catch ( exception-2 id-2 )
{
    // statements to handle this exception
}
:
finally
{
    // statements to execute every time this try
    // block executes
}
```

The Exception Hierarchy



Defining exceptions

```
class MyException extends Exception
{
    public MyException()
    {
        super();
    }

    public MyException(String s)
    {
        super(s);
    }
}
```

Throwing Exceptions

```
public class EmptyStackException extends Exception
{
    ...
}
```

```
public class Stack {
    ...
    public Object pop() throws EmptyStackException
    {
        if (Empty())
            throw new EmptyStackException();
        ...
    }
}
```