Exception handling: declare and throw

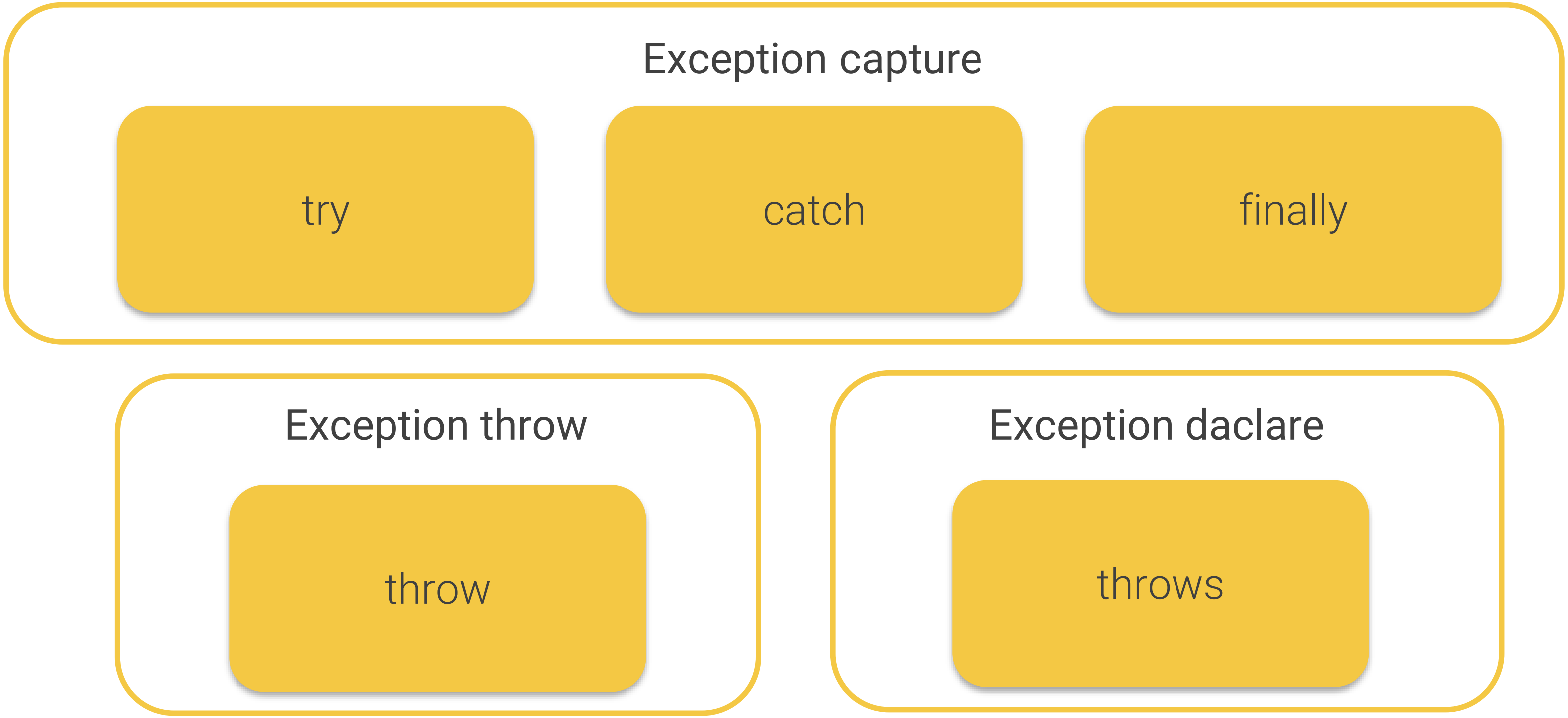
La Salle

1. Exception handling: Introduction
2. Exception throw
3. Exception declare

Exception handling: Introduction

1. Exception handling: Introduction

Exception handling keywords



Exception capture

try

catch

finally

Exception throw

throw

Exception daclare

throws

Exception throw

2. Exception throw

Used to explicitly throw an exception

```
throw new NullPointerException(“Explicity thrown exception");
```

Can throw checked exceptions

```
throw new IOException(“Explicity thrown exception");
```

Can throw unchecked exceptions

```
throw new CustomException(“Explicity thrown exception");
```

Mainly used to throw custom exceptions

2. Exception throw

throw & rethrow

```
static void demoThrow()
{
     try
     {
          throw new NullPointerException(“Explicitly thrown exception");
     }
     catch(NullPointerException e)
     {
          System.out.println("Caught inside demoThrow().");
          throw e; // rethrowing the exception
     }
}
```

2. Exception throw

throw & rethrow

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    try
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        throw new NullPointerException(“Explicitly throw exception");
    }
    catch(NullPointerException e)
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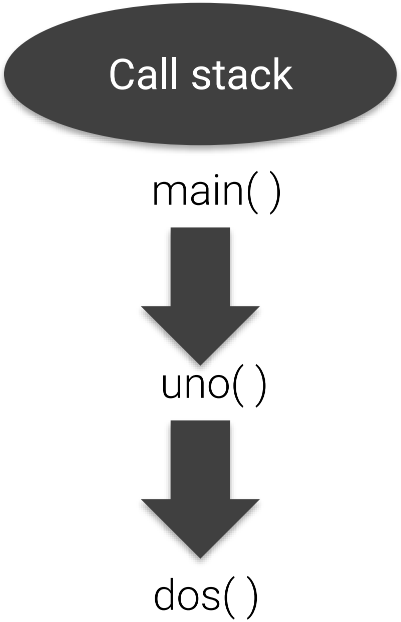
2. Exception throw

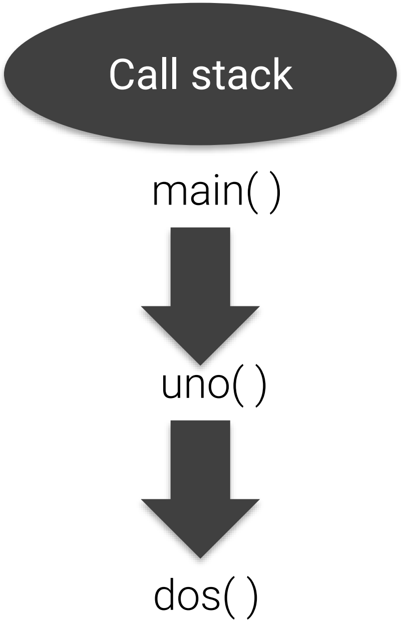
Exception propagation



```
public class Main {

    public static void main(String[] args) {
        uno();
    }

    private static void uno() {
        dos();
    }

    private static void dos() {
        throw new NullPointerException(“demo");
    }
}
```

2. Exception throw

Exception propagation



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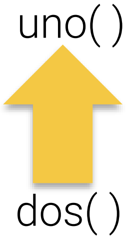
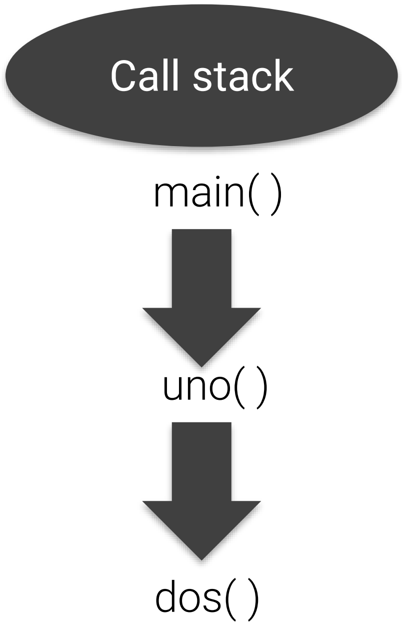


2. Exception throw

Exception propagation



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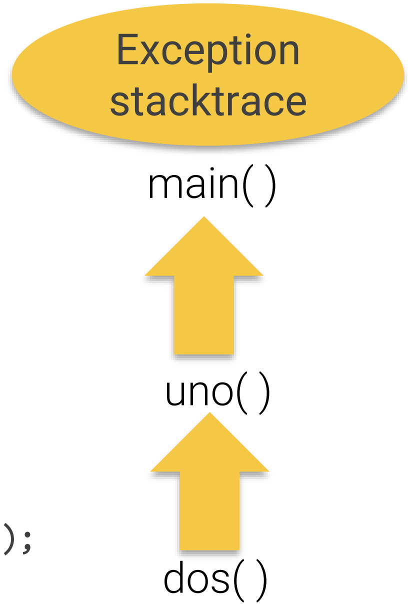

Exception declare

3. Exception declare

```
public static void main(string[] args){
       try{
           int data = readByteFromFile();

       }catch (IOException e){
           System.out.println(e.getMessage());
       }
   }

   private static int readByteFromFile() throws IOException{
       InputStream in = new FileInputStream("a.txt");
       System.out.println("File open");
       return in.read();
   }
```

can throw a FileNotFoundException

can throw a IOException

3. Exception declare

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can throw a IOException

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can throw a IOException

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3. Exception declare

THROW-THROWS DEMO

"A veces, cuesta mucho más eliminar un solo defecto que adquirir cien virtudes."

Jean De La Bruyère Filósofo francés

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