

## Advantage 1: Separating Error Handling Code from "Regular" Code

```
errorCodeType readFile {
    initialize errorCode = 0;
    open the file;
    if (theFileIsOpen) {
        determine the length of the file;
        if (gotTheFileLength) {
            allocate that much memory;
            if (gotEnoughMemory) {
                read the file into memory;
                if (readFailed) {
                    errorCode = -1;
                }
            } else {
                errorCode = -2;
            }
        } else {
            errorCode = -3;
        }
        close the file;
        if (theFileDidntClose && errorCode == 0) {
            errorCode = -4;
        } else {
            errorCode = errorCode and -4;
        }
    } else {
        errorCode = -5;
    }
    return errorCode;
}
```

## Advantage 1: Separating Error Handling Code from "Regular" Code

```
readFile {
  try {
    open the file;
    determine its size;
    allocate that much memory;
    read the file into memory;
    close the file;
  } catch (fileOpenFailed) {
    doSomething;
  } catch (sizeDeterminationFailed) {
    doSomething;
  } catch (memoryAllocationFailed) {
    doSomething;
  } catch (readFailed) {
    doSomething;
  } catch (fileCloseFailed) {
    doSomething;
  }
}
```

## Advantage 2: Propagating Errors Up the Call Stack

```
method1 {
    errorCodeType error;
    error = call method2;
    if (error)
        doErrorProcessing;
    else
        proceed;
}
errorCodeType method2 {
    errorCodeType error;
    error = call method3;
    if (error)
        return error;
    else
        proceed;
}
errorCodeType method3 {
    errorCodeType error;
    error = call readfile;
    if (error)
        return error;
    else
        proceed;
}
```

## Advantage 2: Propagating Errors Up the Call Stack

```
method1 {  
    try {  
        call method2;  
    } catch (exception) {  
        doErrorProcessing;  
    }  
}  
method2 throws exception {  
    call method3;  
}  
method3 throws exception {  
    call readfile;  
}
```