# Week 05 - Error Handling

## Topics covered in this week

- Errors Exceptions (checked vs. unchecked)
- Try / catch (including Java 8+ features)

## **Reading material**

- Error Handling: https://www.youtube.com/watch?
- Bruce Eckel Thinking in Java Error Handling with Exceptions - p313

#### If the book isn't used:

- https://www.tutorialspoint.com/java/java\_exceptions.htm
- https://docs.oracle.com/javase/tutorial/essential/exceptions

## Homework

Difficulty	Problem	Notes
EASY	Create your own <b>unchecked</b> exception class using the extends keyword. Write a constructor for this class that takes a String argument and stores it inside the object with a String reference. Write a method that displays the stored String. Create a try-catch clause to exercise your new exception.	
MEDIUM	Create a custom list (containing 5 methods: get(), add(), contains(), containsAll() and size()  – interface provided) backed by an integer array that accepts strings as its values (called <u>StringList</u> ). The added values must be string representations of numbers. The list should throw a custom exception with a custom message in case:  * the added value is null or empty  * the added value is not the string representation of a number  * the index we try to read from the list is out of bounds	Test driven development. Please use the attached project and write the implementation, and make sure all tests pass.
	Additionally the list must keep a record of all the operations and be able to return this information upon request.  Correct the unit tests so they capture and test the error codes as well.	Hint: Maven.txt See week5_p2.ZIP
	Don't modify the provided interface.	

## Kahoot