

# 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?v=jWQbHE0IC2I>
- 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://www.tutorialspoint.com/java/java_exceptions.htm)
- <https://docs.oracle.com/javase/tutorial/essential/exceptions/index.html>

## 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	<p>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 <b>StringList</b>). The added values must be string representations of numbers. The list should throw a custom exception with a custom message in case:</p> <ul style="list-style-type: none"><li>* the added value is null or empty</li><li>* the added value is not the string representation of a number</li><li>* the index we try to read from the list is out of bounds</li></ul> <p>Additionally the list must keep a record of all the operations and be able to return this information upon request.</p> <p>Correct the unit tests so they capture and test the error codes as well.</p> <p>Don't modify the provided interface.</p>	<p>Test driven development. Please use the attached project and write the implementation, and make sure all tests pass.</p> <p>Hint: <a href="#">Maven.txt</a></p> <p>See <a href="#">week5_p2.ZIP</a></p> <p>Solution: <a href="#">week5p2.zip</a></p>

## Kahoot