

# AN EXCEPTIONAL BAG

## *Throwing Exceptions*

### CSC211 LAB 14

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#### Lab 14 Background

This purpose of this lab is to give you experience using exceptions in Java.

- Download the starter code form the course web site.
- Create and test the project in NetBeans before modifying it. Notice what happens when you try to add to a full bag or remove from an empty bag.
- Create the BagOfStringsException class as shown later in these instructions.
- Change the signature of the add and remove methods as described below.
- Make the corresponding changes in the BagOfStrings class.
- In the BagTestDriver class, change the code so that whenever an add or remove are called, the calls are inside a try/catch block.
- Gracefully handle any exceptions in the catch-blocks.
- Run the program and notice the different results.

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#### The BagOfStringsException Class

Create the BagOfStringsException class as shown below:

```
import java.io.IOException;
public class BagOfStringsException extends RuntimeException
{
    public BagOfStringsException()
    {
        super("Illegal operation on BagOfStrings.");
    } // end default constructor

    public BagOfStringsException(String message)
    {
        super(message);
    } // end constructor
} // end BagOfStringException
```

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#### New Signatures for **add** and **remove** Methods

```
public void add(String newString) throws BagOfStringsException;
public void remove(String aString) throws BagOfStringsException;
```

