**Solution Lab 15: Wrapper Classes and Exception**

**August 04, 2014**

**import** javax.swing.JOptionPane;

**public** **class** WrapperClass **implements** IWrapper{

/\*\*

\* **@param** args

\*/

**private** Integer[] stack = **new** Integer[10];

**private** **int** count = -1;

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

String num;

Object rcvd;

**boolean** carryon = **true**;

Integer n;

WrapperClass wc = **new** WrapperClass();

**do**

{

String p = JOptionPane.*showInputDialog*("Do you want to P[u]sh, P[o]p or E[x]it:");

**if**(p.toLowerCase().equals("u"))

{

num = JOptionPane.*showInputDialog*("Enter number to push:");

**try**{

n = Integer.*parseInt*(num);

wc.push(n);

}

**catch**(NumberFormatException e)

{

JOptionPane.*showMessageDialog*(**null**, "The number you have entered is not integer. Please input an integer number.");

}

}

**else** **if**(p.toLowerCase().equals("o"))

{

**try**

{

rcvd = wc.pop();

JOptionPane.*showMessageDialog*(**null**, "Popped value: "+ ((Integer)rcvd).intValue());

}

**catch**(Exception e)

{

JOptionPane.*showMessageDialog*(**null**, "Stack is empty. Nothing to Pop.");

}

}

**else** **if**(p.toLowerCase().equals("x"))

carryon = **false**;

**else**

JOptionPane.*showMessageDialog*(**null**, "Wrong Selection");

}**while**(carryon);

wc.printAll();

}

@Override

**public** **void** push(Object o) {

Integer i = (Integer)o;

stack[++count] = i.intValue();

}

@Override

**public** Object pop() **throws** ArrayIndexOutOfBoundsException{

// **TODO** Auto-generated method stub

**return** (Object)stack[count--];

}

@Override

**public** **int** getSize() {

// **TODO** Auto-generated method stub

**return** count;

}

@Override

**public** **void** reset() {

// **TODO** Auto-generated method stub

count = -1;

}

@Override

**public** **void** printAll() {

// **TODO** Auto-generated method stub

Object o;

**while**(count >= 0)

{

o = pop();

System.*out*.println("\n[" + (count+1) + "] = " + ((Integer)o).intValue());

}

}

}