

# Arrays GUI Assignment

In this mini project you will use some of your arrays and GUI skills to build a tiny random number generator program.

## Tasks

Start a new project. Add a JFrame to the project. Add the following to the frame.

- an awt listbox (listNums)
- button (buttonRandomFill1)
- button (buttonRandomFill2)
- button (buttonClear)
- textbox (textMaximum)
- button (buttonSet)
- text (textValue)
- an array variable called *nums* that is set to a size of 10

## Part 01 Tasks

When buttonRandomFill1 is pressed:

Fill array nums with random numbers that range from 1-100. Clear and fill listNums with the values from the array.

When buttonRandomFill2 is pressed:

The user should have typed a value into textMaximum before pressing this button. Read the value that they typed in textMaximum. Fill the array nums with random numbers that range from 1-(value entered). Clear and fill listNums with the values from the array.

When buttonClear is pressed:

Set all values in array nums to zero. Clear and fill listNums with the values from the array.

## Part 02 Tasks

When listNums is clicked:

Find out which index position in the list was clicked. Then find out what value has been clicked.

Display this value in textValue.

When buttonSet is clicked:

The user should have typed a number into textValue before pressing this button. Read the value that they typed in textValue. Assign this value to the currently selected index position to the same index position in array nums. The user has just changed the array so you have to clear the listbox and fill the listbox with values from the array (every time you change the contents of array nums you must 'redraw' the contents of the listbox). In short, this button lets the user select a position in the list and then set its value.

\*if the user does not have a position in the list selected, then no changes should occur!

## Part 03 Tasks

Add one feature to the program. It doesn't matter what feature this is. Just something that you come up with that uses a little bit of GUI and array code.