

The University of the West Indies, St. Augustine COMP 2603 Object Oriented Programming 1 Lab #1

Part 1: Getting Started with BlueJ

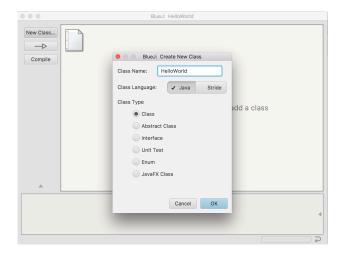
Welcome to your first Java programming lab! Follow the steps below to create your first program.

1) Download and install the BlueJ Editor on your machine.

Download Links

BlueJ: http://www.bluej.org/ JDK 11 or above: https://www.oracle.com/java/technologies/javase-jdk11-downloads.html

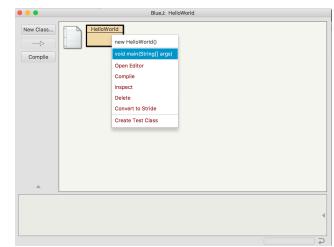
- 2) Open the BlueJ Editor and create a new Project called Lab1.
- 3) Create a new Java class by clicking the *New Class* button.
- 4) Specify *HelloWorld* as the name of the class and save the file in your Lab1 folder. Your new Java class will be displayed in the editor.



5) Delete the existing code and **type** the following code (do not copy & paste):

```
// My First Java Program
public class HelloWorld{
    public static void main(String[ ] args){
        System.out.println("Hello World");
    }
}
```

- 6) Compile the program and observe that there are no errors displayed in the debugging output pane.
- Execute the program and observe the output printed on the screen. To execute, right-click on the class in the main window pane and select the option 'void main(String[] args)'



Part 2: Getting Started with Java

- 1) Print out the following message: My name is Englebert.
- 2) String variables are declared and initialised as follows:

```
String lastname; // declaration
lastname = "Humperdinck"; // initialisation
Modify your code to print the following using a String variable.
My name is Englebert Humperdinck.
This may be done in several ways, try them out:
System.out.println("My name is Englebert" + lastname);
System.out.println("My name is Englebert Humperdinck");
System.out.println("My name is Englebert" + "Humperdinck");
```

- 3) Modify Step 2 so that your first name and last name are printed instead.
- 4) The following code captures input from the user via the keyboard Scanner keyboard = new Scanner(System.in);
 You need to include the following import statement at the top of your program import java.util.Scanner;
- 5) Write code to simulate the following:
 - >> Hi, what's your name? >> My name is Englebert >> Nice to meet you Englebert!

Part 3: Exercises

Try the following exercises using your HelloWorld program. You may write separate methods for these exercises and invoke them as follows:

```
public static void exercise1(){
  // code goes here
}
public static void main(String[] args){
  exercise1(); // invokes the exercise1() method
}
```

- 1) Write code to calculate the area of a square.
- 2) Write code to print all of the even numbers from 1 to n, where n is specified by the user.
- 3) Write code to simulate a chat with the user where the user exits the chat by typing exit.
- 4) Write code to randomly generate two numbers and print a question with the form:
 - a. What is 231 + 255?, answer=486