

# Getting Started...

Netbeans and Java

# Download and Install Netbeans and JDK

Download Netbeans JDK Bundle from <http://www.oracle.com/technetwork/articles/javase/jdk-netbeans-jsp-142931.html>

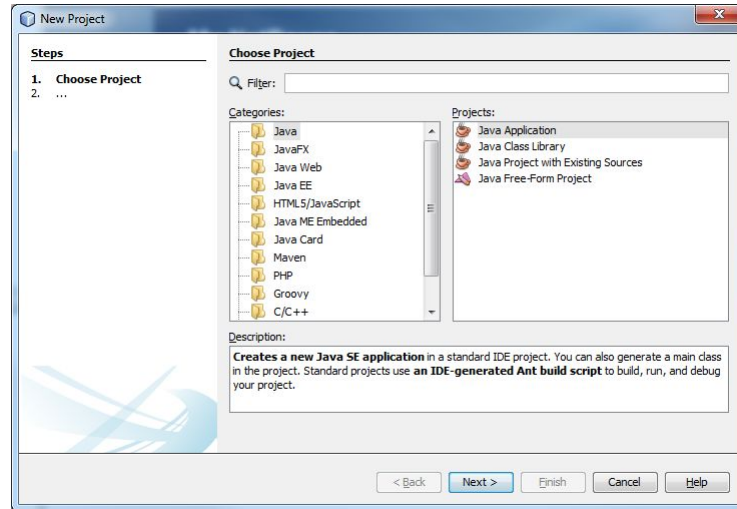
You will need to accept the license agreement

Select the platform you are using and download the installation file. (Linux / Windows / Mac)

# Create our first Java Application

Start Netbeans

On the File menu select “New Project”



# Project Name, Location, Folder

**New Java Application**

**Steps**

1. Choose Project
2. **Name and Location**

**Name and Location**

Project Name: FirstApp

Project Location: C:\My Java Stuff

Project Folder: C:\My Java Stuff\FirstApp

Use Dedicated Folder for Storing Libraries

Libraries Folder:

Different users and projects can share the same compilation libraries (see Help for details).

Create Main Class firstapp.FirstApp

< Back   Next >   **Finish**   Cancel   Help

# FirstApp

FirstApp - NetBeans IDE 8.1

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Search (Ctrl+I)

Start Page FirstApp.java

Source History

```
1  /**
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6  package firstapp;
7  /**
8   *
9   * @author jcampbell
10  */
11 public class FirstApp {
12
13     /**
14      * @param args the command line arguments
15      */
16     public static void main(String[] args) {
17         // TODO code application logic here
18
19         System.out.println("Hello, World!");
20     }
21
22 }
23
```

Projects | Files | Services

- EnrollProto
- FirstApp
  - Source Packages
    - firstapp
      - FirstApp.java
  - Test Packages
  - Libraries
  - Test Libraries

Navigator

Members <empty>

- FirstApp
  - main(String[] args)

Output - FirstApp (run)

```
run:
Hello, World!
BUILD SUCCESSFUL (total time: 0 seconds)
```

1:1/22:469 DNS

# Breaking down the code....

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package firstapp;
/*
 *
 *
 * @author jcampbell
 */

public class FirstApp {
    public static void main(String[] args) {
        System.out.println("Hello, World!");
    }

}
```

## **package firstapp;**

All of the classes for our first application are contained in a “package”

When you write larger applications you may have many classes in a package

Our first application only has one class “FirstApp”

```
public class FirstApp {
```

- A class is a template for manufacturing objects.
- Our application only has one purpose
  - Display “Hello, World!”
  - It is implemented in the FirstApp Class / main Method
- Applications can have many classes
  - If our application was a car we might create classes for:
    - Doors
    - Engine
    - Tires
  - Our Package may be called car
    - Perhaps we also have a class called car as well
  - ...We'll get to more on this later



# public static void main(String[] args)

- This is a method. Because it is called main it is also our programs entry point
  - Entry Point is when a program begins execution...where it starts.
- Within a class you may have many methods.
  - Our Engine class for a car may have methods to increase fuel, decrease fuel, Set Gear
-

# System.out.println("Hello, World!");

- This is a java statement that tells the computer to display “Hello, World!”
- System is a **class** (a final class).
- out is a **member** of the system class. It’s type is PrintStream
  - PrintStream is a class.
- println is a **method** of the PrintStream class that prints its’ argument to the console.

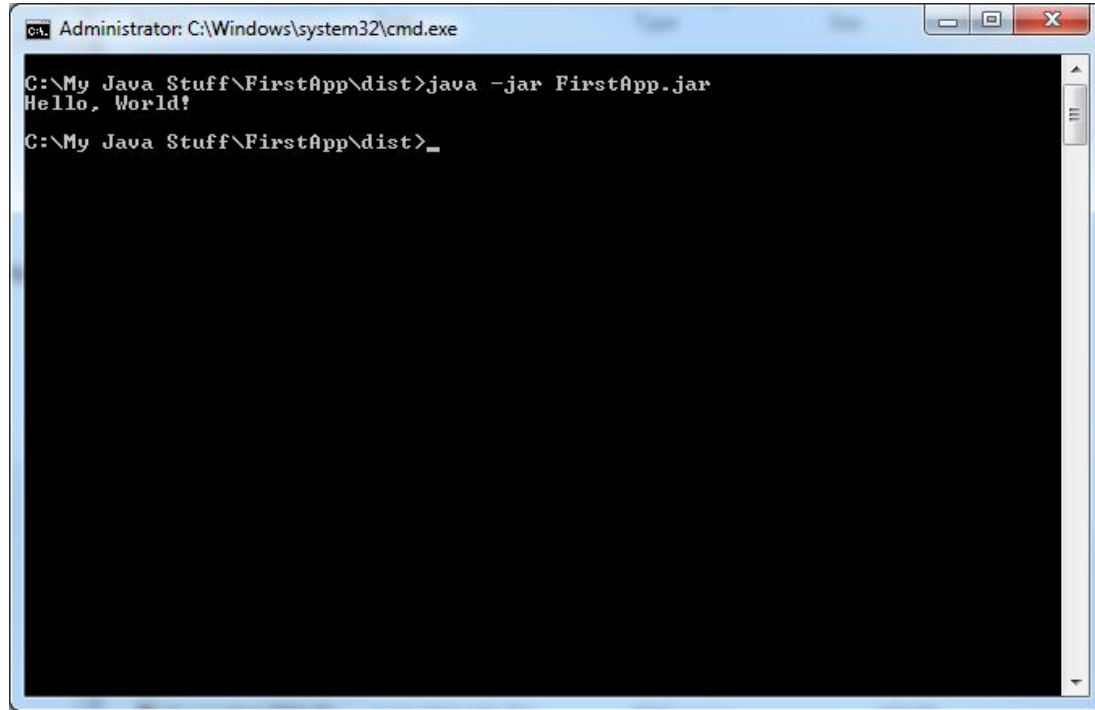
# Execute the code (in the debugger)

Click the green arrow to start execution.

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6
7  package firstapp;
8
9  import java.util.Scanner;
10
11  /**
12   *
13   * @author scampbell
14   * @param args the command line arguments
15   */
16  public class FirstApp {
17
18      /**
19       *
20       * @param args the command line arguments
21       */
22      public static void main(String[] args) {
23          // TODO code application logic here
24          System.out.println("Hello, World!");
25      }
26  }
```

run:  
Hello, World!  
BUILD SUCCESSFUL (total time: 0 seconds)

...or at the command line



```
Administrator: C:\Windows\system32\cmd.exe
C:\My Java Stuff\FirstApp\dist>java -jar FirstApp.jar
Hello, World!
C:\My Java Stuff\FirstApp\dist>_
```

# Congratulations

You have just implemented your first Java program!

It is a simple program, but it is your program!