

Python vs Java: Runnable Classes

```
def __init__(self, var):
    public void ...
        Type var
            this.var
```

```
#!/usr/bin/env python3.3
```

```
# Copyright 2012 by Douglas Sweetser, sweetser@alum.mit.edu
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#
import argparse

'''Class Size
Used for pixel sizes used in layouts.
Author: sweetser@alum.mit.edu'''
class Size:
    def __init__(self, s=0):
        self.s = s

    def simple_print(self):
        result = str(self.s)
        print(result)
        return result
```

```
def pretty_print(self):
    result = "The size is: " + str(self.s) + "."
    print(result)
    return result
```

```
if __name__ == '__main__':
    args_parser = argparse.ArgumentParser(description='two bits of data')
    args_parser.add_argument('-s', '-sprint', action='default=False', help="Simple print")
    args_parser.add_argument('-p', '-pprint', action='default=False', help="Pretty print, more verbose")
    args_stuff = args_parser.parse_known_args()
    args = args_stuff[0]
    argv = args_stuff[1]

    if (not args pprint):
        args.sprint = True
```

```
while argv:
    s = argv.pop(0)
    foo_size = Size(s)
    if args.sprint:
        foo_size.simple_print()
```

```
void main(String[] args)
JCommander
for( int i = 0; ...
    Separate Args class
```

```
public static void main(String[] args) {
    SizeArgs params = new SizeArgs();
    JCommander cmd = new JCommander(params, args);

    if(params.help) {
        System.out.println("usage: Size.java [-h] [-s] [-p]\n\nPrints a
size.\n\noptional arguments:\n-h, --help      show this help message and
exit\n-s, --sprint  Simple print\n-p, --pprint Pretty print, more
verbose");
    }
    if(params pprint) {
    } else {
        params.sprint = true;
    }

    while (!params.argv.isEmpty()) {
        int s = params.argv.remove(0);
        Size foo = new Size(s);
        if (params.sprint) {
            foo.simple.print();
        } if (params pprint) {
            foo.pretty_print();
        }
    }
}

package org.visualphysics.layout;
```

```
public String simple_print()
{
    String result = Integer.toString(this.s);
    System.out.println(result);
    return result;
}
```

```
public String pretty_print()
{
    String result = "The size is: " + Integer.toString(this.s) + "."
    System.out.println(result);
    return result;
}

@Parameter(names={"-s", "--sprint"}, required=false, description =
"simple print")
public boolean sprint = false;

@Parameter(names={"-p", "--pprint"}, required=false, description =
"pretty print")
public boolean pprint = false;
```

```
@Parameter(names={"-h", "--help"}, required=false, description = "help
info")
public boolean help = false;

@Parameter()
public List<Integer> argv = new ArrayList<Integer>();

}
```