

Introducing JShell



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What Is JShell?

| | | |
|---------------|---|----------------------|
| R ead | → | type code |
| E val | → | execute code |
| P rint | → | see results |
| L oop | → | interactively refine |

Like Lisp, Groovy, Scala

Why JShell?



Quickly test ideas

No `public static void main(String[] args)` ceremony

Direct feedback without compilation



Exploring APIs

Code completion

Built-in documentation



Teaching tool

No IDE, just Java

Demo

JShell Basics

Using JShell: Basics

Demo

JShell: Declarations

Using JShell: Declarations

Using JShell: Environment

```
jshell> int x = 1
x ==> 1
|   modified variable x : int
|   update overwrote variable x : int

jshell> System.out.println(
println(

jshell> System.out.println("Hello Pluralsight")
Hello Pluralsight

jshell> class Simple {
...>     public String simple;
...> }
|   created class Simple

jshell> 
```

/save mysession.jsh



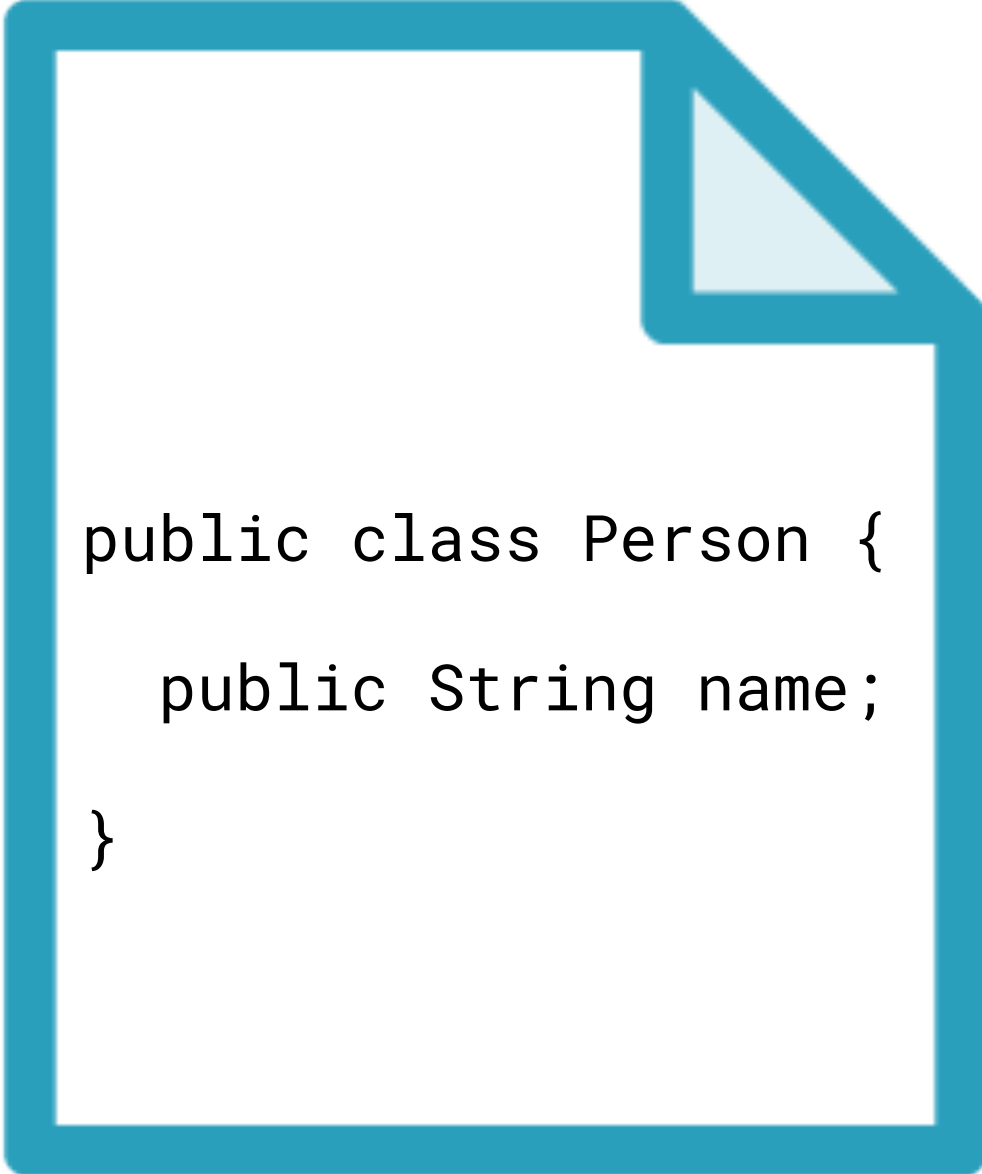
mysession.jsh

```
jshell> /open mysession.jsh
Hello Pluralsight

jshell> 
```

/open mysession.jsh

Using JShell: Environment



```
public class Person {  
    public String name;  
}
```

Person.java

/open Person.java



```
jshell> /open Person.java  
  
jshell> /types  
|    class Person  
  
jshell> Person p = new Person();  
p ==> Person@31a5c39e  
  
jshell> p.name = "Sander"  
$3 ==> "Sander"  
  
jshell> 
```

Using JShell: Environment

**Set classpath to load
from JARs**

```
jshell --class-path ...
```

JShell API

A shell in your own application

Code-completion functionality

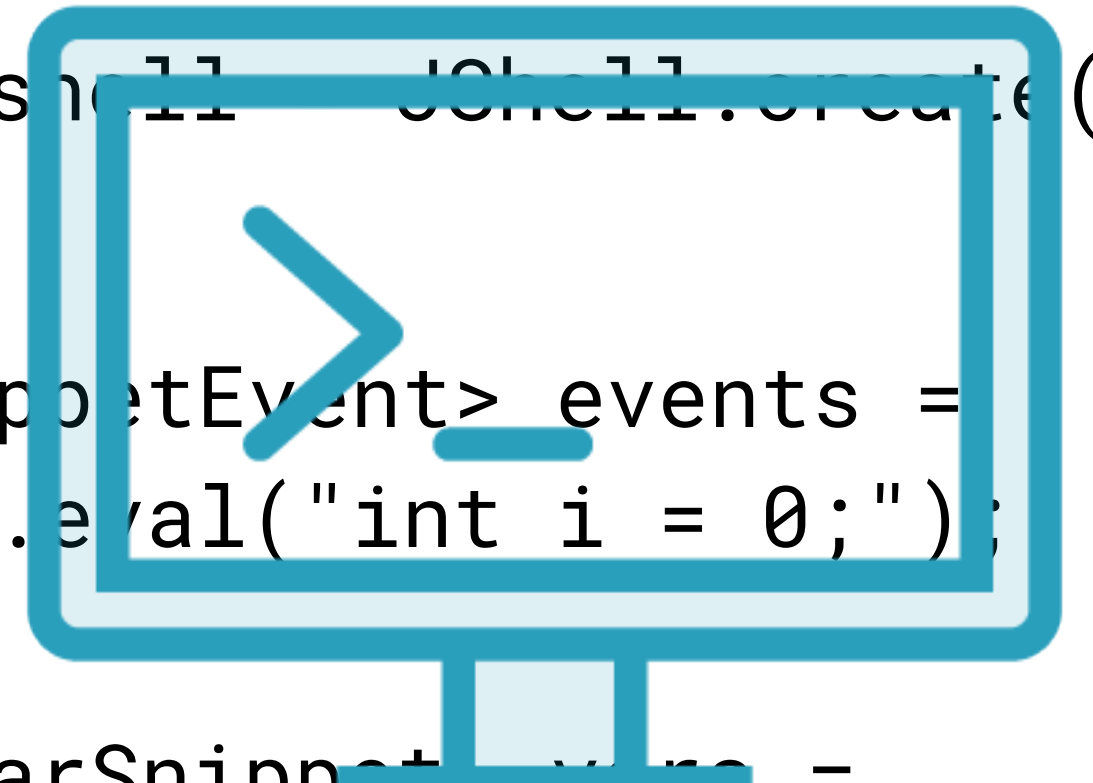
Source code analysis

IDE Integration

```
JShell jshell = JShell.create();
```

```
List<SnippetEvent> events =  
    jshell.eval("int i = 0;");
```

```
Stream<VarSnippet> vars =  
    jshell.variables();
```



Summary



Quickly test ideas



Exploring APIs



Teaching tool