



JVM REPL = jshell

# Author



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# Resources

<https://github.com/infoshareacademy/jjdd4-materialy-jshell>

- **/resources** – slides & gifs
- **/quests** – assignments & challenges
- **/src** – small demonstration project

# Goals of workshop

1. Get used to jshell
2. Repetition of native Java APIs
3. Learn Java 9 & Java 10

```
> jshell
```

# jshell – how REPL works?

```
grovm@Piotr-Dev ~  
λ |
```

---

# jshell about itself

```
jshell> /help intro
```

```
intro  
=====
```

```
The jshell tool allows you to execute Java code, getting immediate results.  
You can enter a Java definition (variable, method, class, etc), like: int x = 8  
or a Java expression, like: x + x  
or a Java statement or import.  
These little chunks of Java code are called 'snippets'.
```

```
There are also the jshell tool commands that allow you to understand and  
control what you are doing, like: /list
```

```
For a list of commands: /help
```

# So, what is jshell again?

// CLI tool

// REPL = Read-Evaluate-Print-Loop

// Provided by Oracle in JDK 9+



# Why?

// Learning language

// Testing Java nuances

// Focus on solution, not on quality

# Demo

# Navigation

How to...

... exit?

... search?

... break snippet?

... re-run last snippet?

... auto-finish snippet?

# Linux-inspired

/exit or CTRL+D

CTRL+R

CTRL+C

UP-Arrow

TAB

# jshell commands

Listing current  
session state



- /vars
- /imports
- /methods
- /types
- /list
- /history

# jshell commands

## **Save session to file:**

/save file-name.jsh

## **Open and load file:**

jshell {file-name.jsh}

# jshell commands

/open <file-name>



// YOUR SCRIPTS

/open PRINTING

// println(„string”)

/open JAVASE

// import all packages

# Goal of the workshop

**EXPLORE** java!

With help of jshell



# Challenge #1

## Standard library training

There is **70 String** methods

How many of them you know?



# Challenge #2

## New & shiny Java features

// Do you remember LocalDate?

// How to easily create collections?

// Did you heard of type inference?

# jshell + maven

# How to experiment in project?

Projects are **BIG**.

How long it takes  
to redeploy **WILDFLY** project?

## WITH IDE

/ main method

/ new Test

/ Debugger  
(ALT+F8 = evaluate)

## WITH JSHELL

You can load all  
classes

# Run your project in jshell

```
mvn compile
```

```
mvn dependency:build-classpath  
  -DincludeTypes=jar  
  -Dmdep.outputFile=cp.txt
```

```
jshell --class-path  
  `cat cp.txt`:target/classes
```

See [mvn-shell.sh](#)

# Challenge #3

## Jshell in maven project

# Challenge #4

## Tricky interview questions



# Further learning



# Resources – jshell tutorial

## JShell Tutorial

Robert Field

April 15, 2017

- [Introduction](#)
  - [What is JShell](#)
  - [Starting JShell](#)
- [Snippets](#)
  - [Trying it out](#)
  - [Changing Definitions](#)
  - [Forward Reference](#)
  - [Exceptions](#)
  - [Tab Completion -- Snippets](#)
  - [Snippet Transformation](#)
- [Commands](#)
  - [Commands -- Introduction](#)
  - [Tab Completion -- Commands](#)
  - [Command Abbreviation](#)
  - [Editors](#)
- [Shell Editing](#)

# Wideo presentation [PL][50min]

Java9 and REPL by Kuba Marchwicki





# Contact me

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