# Taking Shortcuts Beyond Your IDE

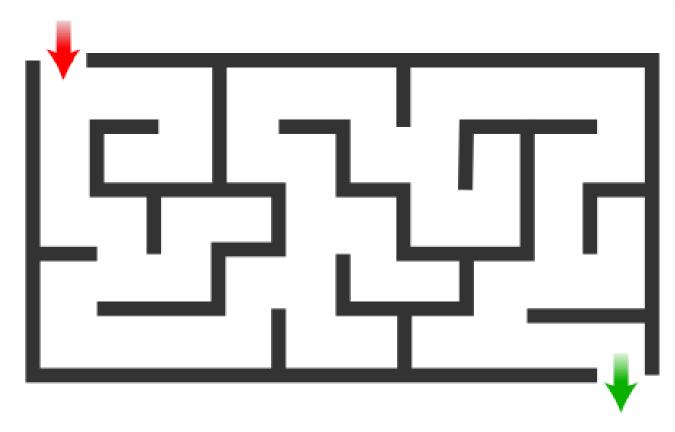
Annelore Egger





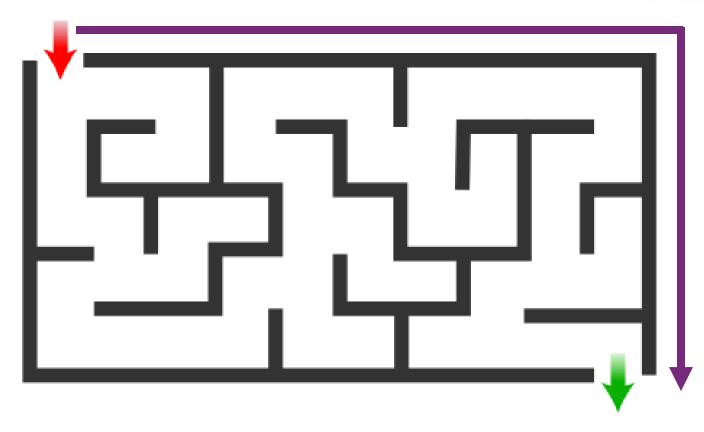
Better software, faster

# Can You Find The Shortest Path?





# Can You Find The Shortest Path?





# **About Me**

Frequent shortcut user

- BSc in Computer Science
- 8 years of programming experience

 Software Engineer, OpenValue Switzerland since May 2024







# **OpenValue Partners**





Certified by JetBrains



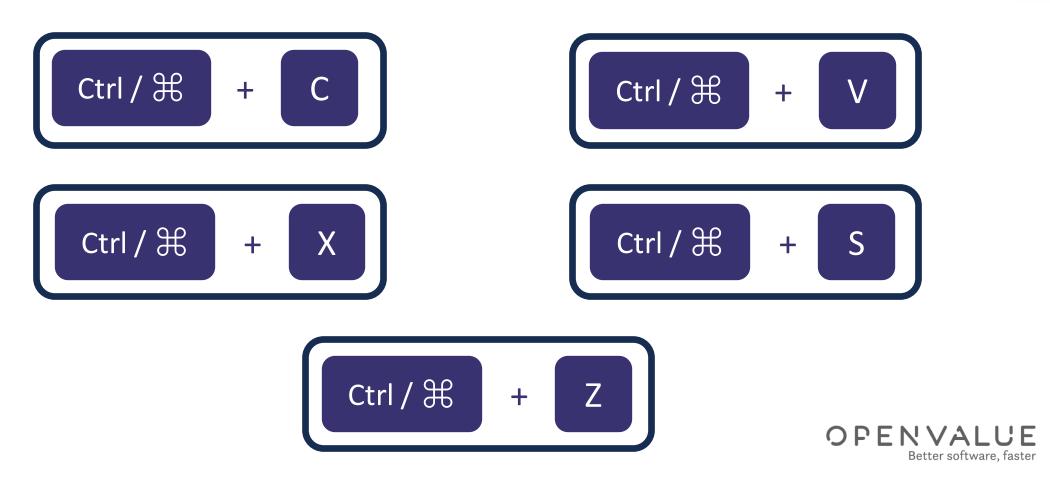


# **OpenValue Services**

- Locations in Europe and the USA
- JDK migration services
  - Plan to migrate away from Oracle JDK
  - JDK strategy workshop
  - Managed Migration
- More information on OpenValue and OpenValue Services: openvalue.eu



### Do You Use Shortcuts Other Than Those?



### **Motivation**

- Time saving
- Developers usually strive to be more efficient, might overlook the easiest ways.



Shortcuts are more than just the keyboard shortcuts



# **IntelliJ Productivity Guide**

IntelliJ IDEA uptime: 59 min, 14 sec, idle time: 21 sec, 821 ms

Code completion has saved you from typing at least 9.3K characters since 02.09.2024 (~158 per working day)

Quick-fixes have saved you from 177 possible bugs since 04.09.2024 (~3 per working day)

Feature	Group	Used ~	Last Used
Editor delete line	Code Editing	957 times	one hour ago
Basic code completion	Code Completion	782 times	53 minutes ago
Switcher	Navigation	734 times	one hour ago
Variable name completion	Code Completion	535 times	one week ago
Find in files	Navigation	404 times	5 days ago
Go to declaration	Navigation	391 times	one week ago
Find	Navigation	372 times	one week ago
Search Everywhere	Navigation	317 times	5 days ago

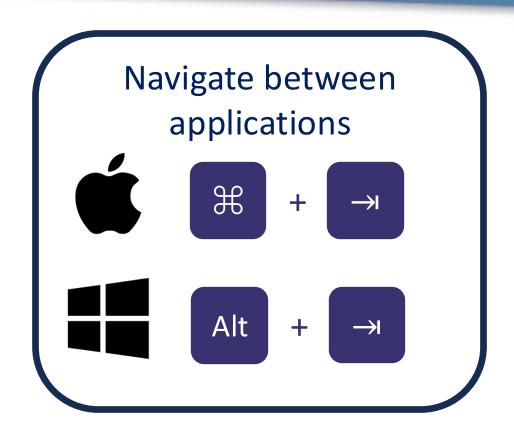


# **Advantages of Keyboard Shortcuts**

- Efficiency
- Less context switches

Navigate to recent tabs
(IntelliJ & VS Code)

Ctrl + →

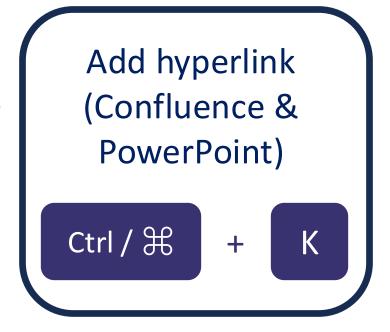




# How You Can Start Using More Keyboard Shortcuts

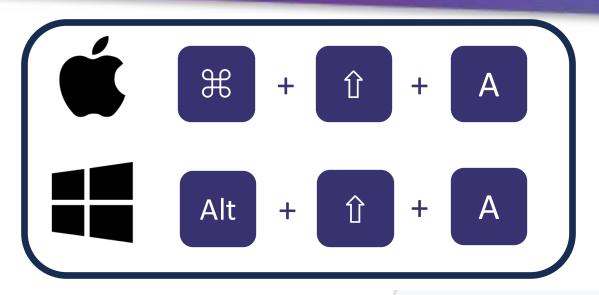
- Integrate learning shortcuts into your workflow
- Looking up shortcuts directly in the tool or online

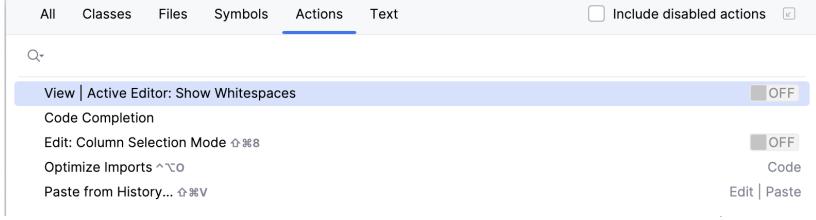
View	Insert	Format	Ar
✓ Normal		¥	1
Slide So	rter	H	2
Notes Pa	age	H	3
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Presente	er View	7	$\subset$
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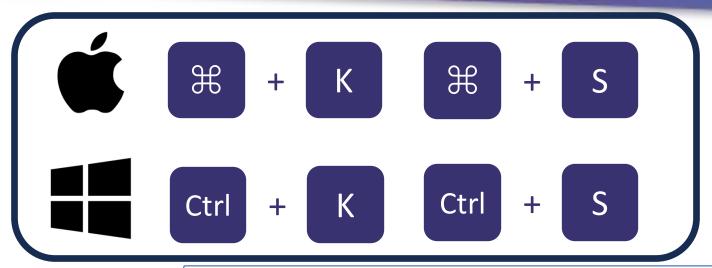


# **IntelliJ: List Actions**





# VS Code: Keyboard Shortcuts Menu



Type to search in keybindings

Command	Keybinding	When	Source
Accept Inline Completion	^ <b>&amp;</b> 7	accessibleViewIsShown && accessibleViewCurre	System
Accept Inline Suggestion	Tab	<pre>inlineEditIsVisible &amp;&amp; tabShouldAcceptInline</pre>	System
Accept Next Word Of Inline Suggestion	₩ →	inlineSuggestionVisible && !editorReadonly	System
Accessible Diff Viewer: Go to Next Difference	F7	isInDiffEditor	System
Accessible Diff Viewer: Go to Previous Differ		isInDiffEditor	System
Add Cursor Above	T # T	editorTextFocus	System
Add Cursor Below	(T) (H) (V)	editorTextFocus	System

# Tools that help to learn shortcuts

- Plugins
  - <u>Key Promoter X</u> (IntelliJ), <u>Key Promoter</u> (VS Code)
- Other tools
  - <u>KeyCombiner</u> (for Mac, Windows and Linux)
  - Mac (<u>Cheatsheet</u>, <u>ShortcutDetective</u>,...)
  - Windows (<u>Microsoft PowerToys</u> see <u>shortcut guide</u>)



#### **PowerPoint**

- ₩ , Preferences...
- # H Hide PowerPoint
- ™ H Hide Others
  - ₩ Q Quit PowerPoint
- \alpha \alpha \quad Quit and Keep Windows

#### File

- ₩ N New Presentation
- ♠器 P New from Template...
  - **# 0** Open...
- ☆器 O More...
- ₩ W Close
- ₩ S Save
- ☆# S Save a Copy...
  - ₩ P Print...

#### Edit

- ₩ Z Undo Move Object
- ₩ Y Redo New Slide
- ₩ X Cut
- ₩ C Copy
- ₩ V Paste
- ^₩ V Paste Special...
- 飞☆器 V Paste and Match Formatting
  - # A Select All
  - ₩ D Duplicate
  - ₩ **F** Find...
  - F Advanced Find...
  - ^ H Replace...
  - ^₩ Z Toggle Drawing
    - E Emoji & Symbols

#### View

- **¾ 1** Normal
- ¥ 2 Slide Sorter
- ※ 3 Notes Page
- # 4 Outline View
- ₩ 5 Reading View
- ⊕# ← Slide Show
- ^ → Show Outline
- ™ 1 Slide Master
- ™ 2 Handout Master
- ™ 3 Notes Master
- ™# R Ribbon
- へて器 **G** Guides
  - ☆ Gridlines
- ™ O Fit to Window
  - ₩! Zoom In
  - # Zoom Out
  - F Enter Full Screen

#### Insert

- ☆端 N New Slide
- ☆器 D Duplicate Slide
- **☆**器 M Comment

#### **Format**

- ⊕# C Pick Up Colour Scheme
- ☆※ 2 Slide Background...

#### Arrange

▼# U Selection Pane...

#### Tools

^業 L Smart Lookup...

#### Slide Show

- ூ¥ ← Play from Start
- ¥ ← Play from Current Slide

#### Window

- ₩ M Minimise
- 28 F Fill
- 28 C Centre
- 28 ← Left
- 28 → Right
- 28 ↑ Top
- 28 ↓ Bottom
- 29 ← Left & Right
- 31 ← Left & Quarters
- 29 → Right & Left
- 31 → Right & Quarters
- 29 ↑ Top & Bottom
- 31 ↑ Top & Quarters
- 29 ↓ Bottom & Top
- 31 ↓ Bottom & Quarters
- 28 R Return to Previous Size

#### Help

#### **Screenshots**

- ◆第 3 Save Screenshot
- ^分器 3 Copy Screenshot
- ♠ 4 Save Screenshot (Selection)
- ^分器 4 Copy Screenshot (Selection)

#### CheatSheet

- # command
- ▼ option/alt
- control/ctrl

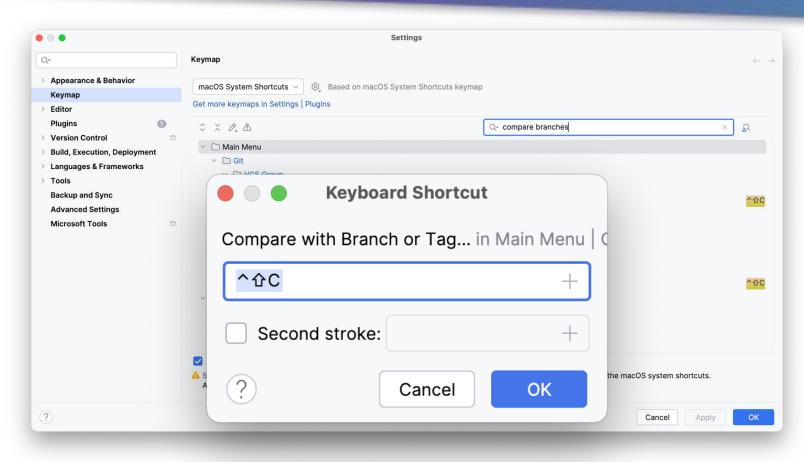
# **Custom Shortcuts**

- IntelliJ
- VS Code

- Other Tools
  - Karabiner Elements
  - Keysmith
  - <u>AutoHotkey</u> (for Windows)



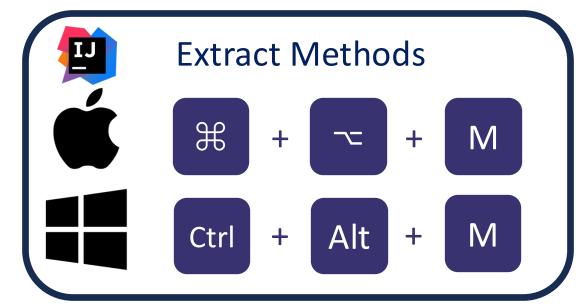
# **Custom Shortcuts In IntelliJ**



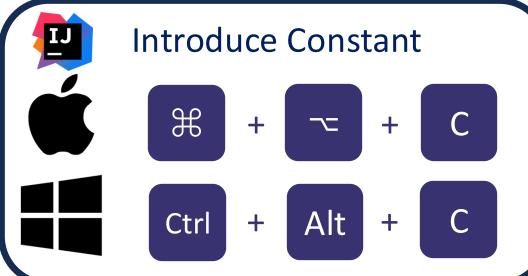


# **Shortcuts in Your IDE**

- Refactoring (<u>IntelliJ</u>, <u>VS Code</u>)
  - Rename
  - Extract Methods
  - Inline







San Francisco Java User Group 2025 – Taking Shortcuts Beyond Tour Tour Tour Tour Tour Taking Shortcuts

```
import java.util.Scanner;
4
5
       public class TemperatureConverter {
6
           public static void main(String[] args) {
               Scanner foo = new Scanner(System.in);
 8
               System.out.println("Temperature Converter");
               System.out.println("1: Celsius to Fahrenheit");
10
               System.out.println("2: Fahrenheit to Celsius");
11
               System.out.print("Choose an option: ");
12
               int choice = foo.nextInt();
13
14
               if (choice == 1) {
15
                   System.out.print("Enter temperature in Celsius: ");
16
                   double celsius = foo.nextDouble();
17
                   double fahrenheit = (celsius * 9 / 5) + 32;
18
                   System.out.println("Temperature in Fahrenheit: " + fahrenheit);
19
               } else if (choice == 2) {
20
                   System.out.print("Enter temperature in Fahrenheit: ");
21
                   double fahrenheit = foo.nextDouble();
22
                   double celsius = (fahrenheit - 32) * 5 / 9;
23
```

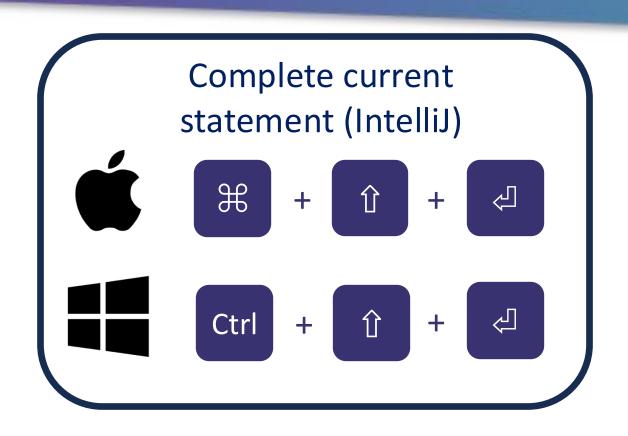
package temperatureconverter;

# **Shortcuts in Your IDE**

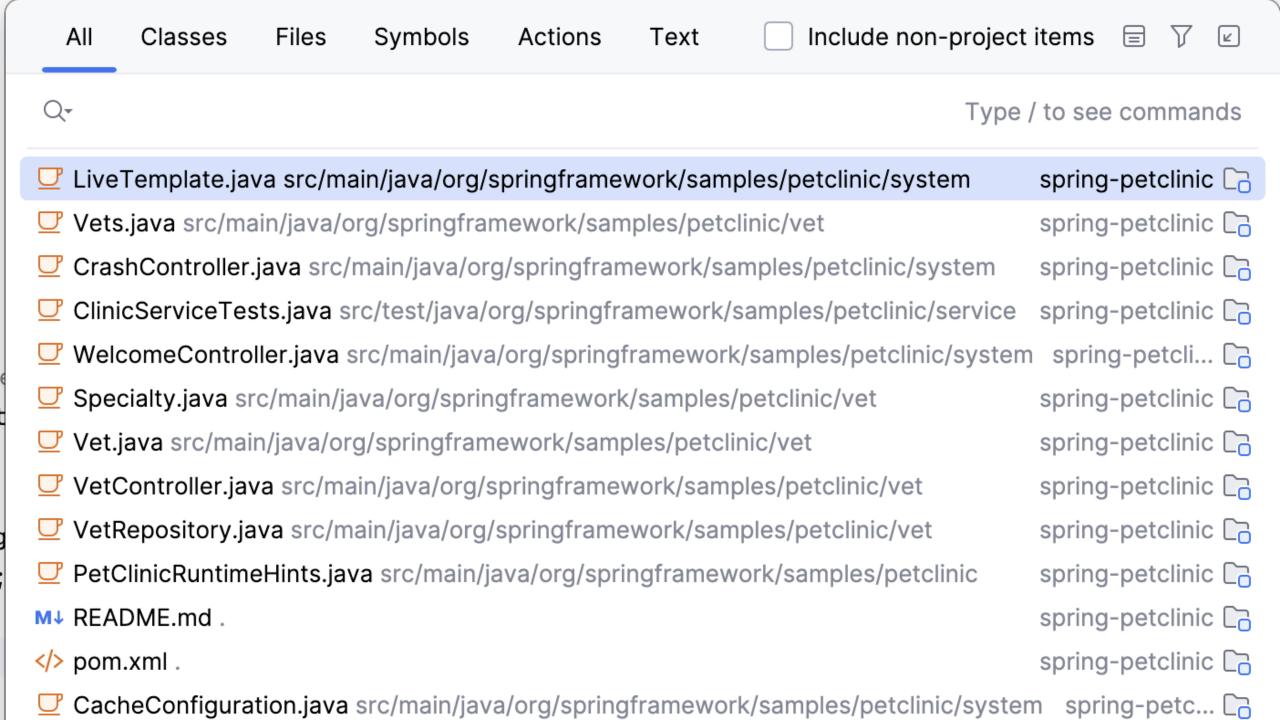
Code generation

Code completion

Search everywhere







# SonarQube for IDE (previously SonarLint)

✓ ☐ EntityUtils.java (1 issue)
 ♠ (-, -) Add a private constructor to hide the implicit public one. 12 years ago
 ✓ ☐ Owner.java (1 issue)
 ♠ (-, -) Merge this if statement with the enclosing one. [+1 location] 1 year ago
 ✓ ☐ OwnerController.java (1 issue)
 ♠ (-, -) Define a constant instead of duplicating this literal "error" 3 times. [+3 locations] 3 months ago
 ✓ ☐ OwnerControllerTests.java (16 issues)
 ✓ ☐ PetController.java (1 issue)
 ♠ (-, -) Immediately return this expression instead of assigning it to the temporary variable "owner". 3 months ago



### **Useful IDE Features**

- Download suggested plugins
- Add business terms to the dictionary (and download additional languages)
- Look at suggestions but also question them!
- "clean IDE"
- Local History
- Live templates



```
package org.springframework.samples.petclinic.system;

public class LiveTemplate { no usages new *
   public static void main(String[] args) { new Integer() }
}
```

# **Helpful Automations**

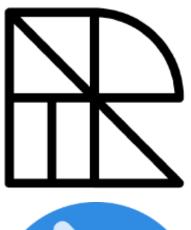
- IntelliJ Commit checks (previously "Before commit")
  - Code formatting
  - Optimizing imports
  - Running SonarQube for IDE analysis
- Git hooks
- Regularly run git fetch
- Automatic saving (e.g., VS Code, KeePass)



# Version upgrades

OpenRewrite







# **OpenRewrite Example**

- Java 21 Upgrade
- Searched 1064 Files, 88 Files changed → max. effort 15 minutes
- Changes:
  - Introduction of .formatted instead of String.format
  - getFirst instead of get(0), getLast instead of get(x.size() 1)
  - instanceof pattern matching
- Simplifications
- Using new features
- > Leads to more consistency



### Renovate

```
. +
             @@ -31,7 +31,7 @@
31
      31
                   "devDependencies": {
      32
                     "@eslint/compat": "1.2.7",
32
      33
                     "@eslint/eslintrc": "3.3.0",
33
34
                     "@eslint/js": "9.20.0",
      34 +
                     "@eslint/js": "9.21.0",
                     "@playwright/test": "1.50.1",
      35
35
                     "@tailwindcss/vite": "4.0.8",
36
      36
37
      37
                     "@testing-library/dom": "10.4.0",
  -1-
             @ -45,7 +45,7 @
                     "@vite-pwa/assets-generator": "0.2.6",
45
      45
                     "@vitejs/plugin-react": "4.3.4",
46
                     "@vitest/browser": "3.0.6",
      47
47
48
                     "eslint": "9.20.1",
      48 +
                     "eslint": "9.21.0",
                     "eslint-config-prettier": "10.0.1",
      49
49
                     "eslint-plugin-react": "7.37.4",
50
                     "eslint-plugin-react-hooks": "5.1.0",
51
      51
             aa _337 17 ±337 17 aa
```

# **Using Existing Libraries**

Check if a solution already exists before implementing something new

Properly document your framework

 Using your own framework takes more time as new employees have to be trained



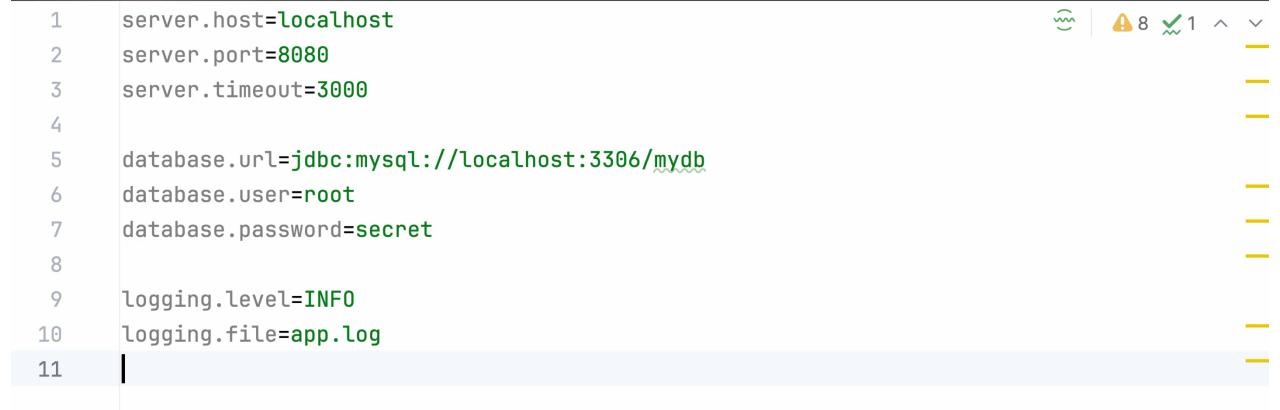
### **More Shortcuts**

Column selection/multi-cursor editing

Middle button/back button on mouse

GitHub Copilot, JetBrains AI, ChatGPT → check company policy first!





### **More Shortcuts**

- Column selection/multi-cursor editing
- Middle button/back button on mouse



### **Pitfalls**

Custom shortcuts or shortcuts from a tool could override an existing shortcut

Be careful when refactoring (sometimes IDEs are almost too good)

Keyboard shortcuts not the same across platforms

**Shortcuts conflicts** 

16:48

Find Action... and 11 more shortcut conflict with macOS shortcuts. Modify these shortcuts or change macOS system settings.

Modify Shortcuts Don't Show Again



### When NOT to take Shortcuts

Keep proper code review process

- Think about what the tools propose to do
  - Do not ignore warnings/errors

Consciously decide when to take shortcuts



# Conclusion

If there is something you do often: can it be simplified/automated?

Try one new shortcut or automation technique each week

Do what works for you



### Slides



# Thank you for your attention

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- anneloreegger
- in /in/anneloredev
- <u>
  @AnneloreDev</u>
- @anneloredev



# **Further resources**

• Top 15 IntelliJ IDEA Shortcuts

### Sources

• Icons from: <a href="https://uxwing.com/">https://uxwing.com/</a>

