

Praktikum „SEP: Java-Programmierung“

WS 2018/19

Eclipse und IntelliJ IDEA

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1. Grundlegende Fähigkeiten von Eclipse + IntelliJ verstehen
2. „Sprungbrett“ für eigenes Erlernen der IDEs schaffen

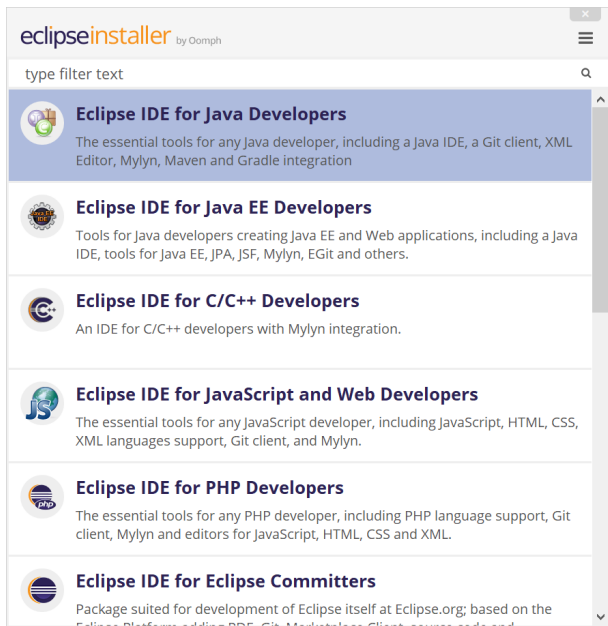
Unterstützung von:

- ▶ Programmierung
 - ▶ Code Completion
 - ▶ Code Navigation
 - ▶ Springe zu Definition
 - ▶ Zeige/Springe zu Benutzung
 - ▶ Zeige Klassen-Hierarchie
 - ▶ Refactoring
 - ▶ Hinweise auf (mögliche) Fehler/Verbesserungen
 - ▶ Syntaxfehler
 - ▶ Semantische Fehler (z.B. Zugriff auf null)
 - ▶ ...
 - ▶ Formatierung

- ▶ Projektverwaltung
 - ▶ Build-Tools
 - ▶ Dateiverwaltung
 - ▶ Versionsverwaltung (Git)
- ▶ Ausführung und Debugging
 - ▶ Konsole
 - ▶ (Conditional) Breakpoints
 - ▶ Auswertung von eigenen Befehlen auf aktuellem Programmzustand

- ▶ Immer gewünschte Warnungen und gewählte Formatierung prüfen!
- ▶ Plugin für Formatierung:
`https://github.com/google/google-java-format`

Eclipse: Installation



The screenshot shows the Eclipse Installer application window. At the top, it says "eclipseinstaller by Oomph". Below that is a search bar with the placeholder text "type filter text" and a magnifying glass icon. The main content area displays a list of IDE packages, each with an icon, a title, and a description. The first package, "Eclipse IDE for Java Developers", is highlighted with a blue background. The list includes:

- Eclipse IDE for Java Developers**: The essential tools for any Java developer, including a Java IDE, a Git client, XML Editor, Mylyn, Maven and Gradle integration
- Eclipse IDE for Java EE Developers**: Tools for Java developers creating Java EE and Web applications, including a Java IDE, tools for Java EE, JPA, JSF, Mylyn, EGit and others.
- Eclipse IDE for C/C++ Developers**: An IDE for C/C++ developers with Mylyn integration.
- Eclipse IDE for JavaScript and Web Developers**: The essential tools for any JavaScript developer, including JavaScript, HTML, CSS, XML languages support, Git client, and Mylyn.
- Eclipse IDE for PHP Developers**: The essential tools for any PHP developer, including PHP language support, Git client, Mylyn and editors for JavaScript, HTML, CSS and XML.
- Eclipse IDE for Eclipse Committers**: Package suited for development of Eclipse itself at Eclipse.org; based on the Eclipse Platform adding PDE, Git, Mylyn, Client, source code and...

At the bottom right of the window, there are navigation icons: a back arrow, a forward arrow, a search icon, and a refresh icon.

Live-Demo

Eclipse Cheatsheet

Strg+Shift+L	Cheatsheet
Strg+1	Quick-Fix
Strg+Space	Code-Completion
Strg+Klick	Springe zu Definition
Strg+Alt+H	Zeige Benutzungen
Strg+T	Typ-Hierarchie
Strg+O	Datei-Outline
Strg+Shift+T	Suche Java-Klasse
Strg+Shift+F	Formatieren

Activate Editor	F12
Activate Task	Ctrl+F9
Add Javadoc Comment	Alt+Shift+J
All Instances	Ctrl+Shift+N
Backward History	Alt+Left
Build All	Ctrl+B
Change Method Signature	Alt+Shift+C
Close	Ctrl+F4
Close All	Ctrl+Shift+F4
Collapse All	Ctrl+Shift+Numpad_Divide
Commit...	Ctrl+#
Content Assist	Ctrl+Space
Context Information	Ctrl+Shift+Space
Copy	Ctrl+Insert
Coverage	Ctrl+Shift+F11
Coverage Eclipse Application	Alt+Shift+E, E
Coverage JUnit Plug-in Test	Alt+Shift+E, P
Coverage JUnit Test	Alt+Shift+E, T

Press "Ctrl+Shift+L" to open the preference page.

Universalshortcut: **Strg+3**

- ▶ Kurze Tutorials in Eclipse:
Help -> Cheat Sheets
- ▶ Einführung in Debugging mit Eclipse:
https://www.eclipse.org/community/eclipse_newsletter/2017/june/article1.php
- ▶ Offizielle Webseite:
https://www.eclipse.org/getting_started/
- ▶ Ausführliche Cheat Sheets:
<https://github.com/pellaton/eclipse-cheatsheet>



Version: 2018.2.5
Build: 182.4892.20
Released: October 16, 2018
[Release notes](#)

[System requirements](#)
[Installation Instructions](#)
[Previous versions](#)

Download IntelliJ IDEA

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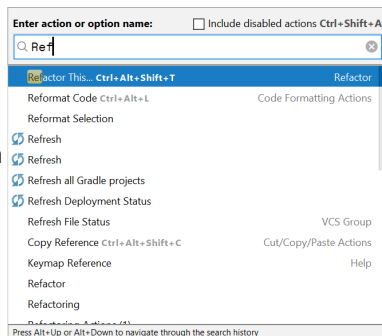
Java, Kotlin, Groovy,
Scala



Live-Demo

IntelliJ Cheatsheet

Strg+Shift+A	Befehlssuche
Alt+Enter	Quick-Fix
Strg(+Shift)+Space	(Smart-)Code-Completion
Strg+Klick	Springe zu Definition
Strg+Klick	Zeige Benutzungen
Strg+H	Typ-Hierarchie
Strg+F12	Datei-Outline
Strg+N	Suche Java-Klasse
Strg+Alt+L	Formatieren



Universalshortcut: **Shift,Shift** (hintereinander)

- ▶ Getting started: <https://www.jetbrains.com/help/idea/creating-and-running-your-first-java-application.html>
- ▶ Debugging: <https://www.jetbrains.com/help/idea/debugging-your-first-java-application.html>
- ▶ Ausführliches Cheatsheet:
https://resources.jetbrains.com/storage/products/intellij-idea/docs/IntelliJIDEA_ReferenceCard.pdf