

# Tools für dein SEP

## Continuous Integration

FSinfo  
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25. Juli 2019

# Wofür ist das gut?

- ▶ Regelmäßiges, automatisches Bauen und Testen des gesamten Projekts
- ▶ Zeitnahe Entdeckung von Fehlern
- ▶ Schnelles Finden des schuldigen Commits
- ▶ Automatische Benachrichtigung (z. B. über E-Mail)
- ▶ Voraussetzung: Build-System (z. B. Gradle, Maven, Ant, ...)

- ▶ Jenkins
- ▶ Travis CI
- ▶ Gitlab CI/CD

- ▶ Unterstützt Gradle, Maven, Ant, ...
- ▶ Self-Hosted (Java)
- ▶ Etwas aufwändige Einrichtung, aber sehr mächtig
- ▶ URL: `https://jenkins.io`

- ▶ Sehr gut in Github integriert
- ▶ Einrichtung sehr einfach
- ▶ Unterstützt Gradle, Maven und weitere
- ▶ Support für verschiedene Datenbanken
- ▶ Gehostet bei <https://travis-ci.org>
- ▶ Als Student kostenlos über Githubs *Student Developer Pack*  
<https://education.github.com>

## Your GitHub Student Developer Pack

You now have free access to all of the included developer tools. Offers use unique links, coupon codes, GitHub login or direct links to grant access. You can find all the information that you'll need to access each tool below.

### The tools



Hosted search API that provides





## Travis CI

Continuous integration platform  
for open source and private  
projects

**Details** Private builds (normally  
\$69/month) while you're a student

Get access by connecting your  
GitHub account on [Travis CI](#)

🔗 Help available at [Travis CI  
support](#)

The screenshot displays the Travis CI dashboard for the repository 'poehlerj / testing-demo'. The top navigation bar includes 'Travis CI', 'Dashboard', 'Changelog', 'Documentation', and 'Help'. A search bar for repositories is located on the left. The main content area shows the build status for 'master' as 'failed'. The commit is signed-off by 'Jonas POehler' and the build failed due to a 'Run for 37 sec' error, occurring '1 minutes ago'. Below the build status, there are tabs for 'Job log' and 'View config'. The 'Job log' is expanded, showing a terminal output with the following commands and their results:

```
1: Worker information
2: Build system information
...
150: $ git clone --depth=0 --branch=master https://github.com/poehlerj/testing-demo.git poehlerj/testing-demo
151:
152: $ java -version
153: openjdk version "11.0.2" 2018-01-15
154: OpenJDK Runtime Environment 28.0 (build 11.0.2+9)
155: OpenJDK 64-Bit Server VM 28.0 (build 11.0.2+9, mixed mode)
156: $ java -Xmx512m -version
157: java: 11.0.2
158: $ mvn install -DskipTests -Dmaven.javadoc.skip=true -S -V
159: $ mvn clean verify
160: [INFO] Scanning for projects...
161: [INFO]
162: [INFO] -----> < @: jonaspoehler/testing-demo >-----
163: [INFO] Building testing-demo 1.0-SNAPSHOT
164: [INFO] -----> [jar ]-----
165: Downloading from google-maven-central: https://maven-central.storage-download.googleapis.com/repos/central/data/org/guava/guava/maven-plugins/maven-clean-plugin/2.3/maven-clean-plugin-2.3.jar
166: [INFO]
```

- ▶ Beispielprojekt unter:  
`https://github.com/poehlerj/testing-demo`