openHPI's Coding Tool Family:
CodeOcean, CodeHarbor, CodePilot

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openHPI – Some Numbers

> 40,000 Certificates

> 150,000 Registered users

> 400,000 Enrollments

GERMAN DESIGN AWARD NOMINEE 2016

digita 2014

BrandonHall GROUP EXCELLENCE AWARDS Learning 2014

openHPI's Coding Tool Family

Deutschland Land der Ideen

Thomas Staubitz, Ralf Teusner,
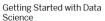
Ausgezeichneter Ort 2015

Chart **2** Nationaler Förderer Deutsche Bank

Other Instances

Getting Started with Data Science

SAP HANA Cloud Platform* Essentials (Repeat)

openSAP

- Cooperation with SAP - 2013
- ~2.000.000 Enrollments
- https://open.sap.com

Introduction to Zika virus disease

Risk communication essentials

World Health Organization

- Cooperation with WHO - 2016
- https://openwho.org/

Mastering Digital Transformation

Running
Modeling Business Processes with BPMN
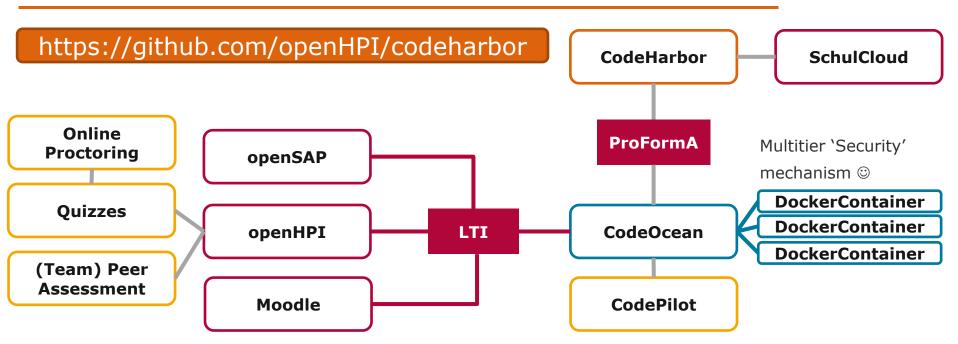
mooc.HOUSE

- White label MOOC Platform
- https://mooc.house/
- Signavio, acatech, Charité, msg systems

openHPI's Coding Tool Family
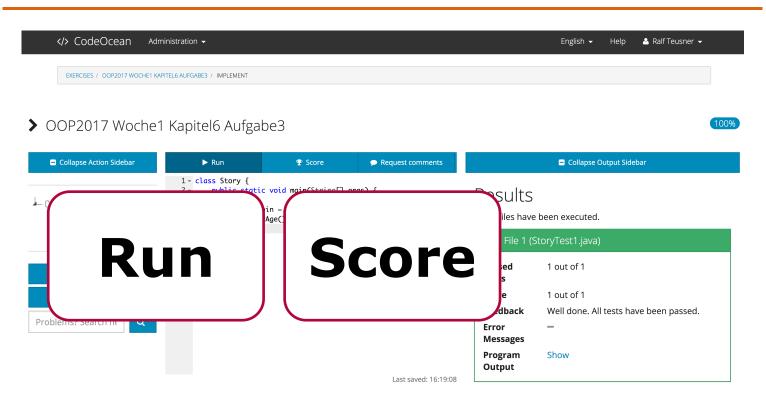
Thomas Staubitz, Ralf Teusner

Chart **3**

openHPI –
CodeOcean, CodeHarbor, CodePilot
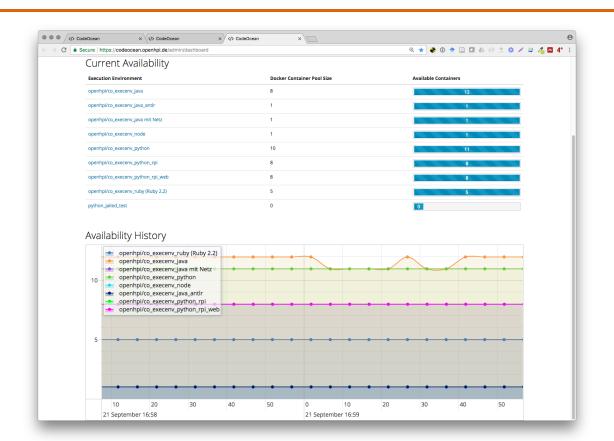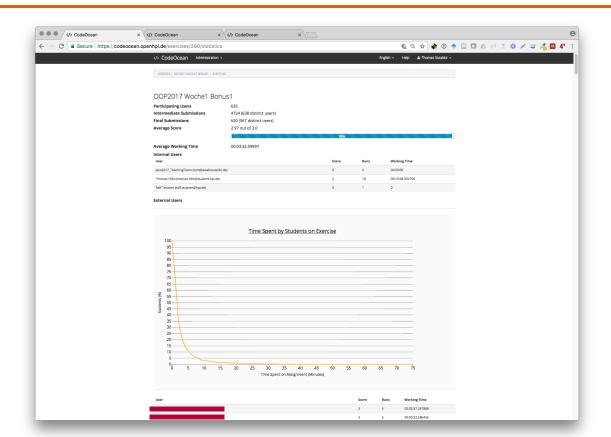
CodeOcean –
Code Execution and Grading in the Browser

CodeOcean –
Code Execution and Grading in the Browser

openHPI's Coding Tool Family

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Chart **6**

CodeOcean –
Code Execution and Grading in the Browser

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Chart **7**

CodeOcean –
Code Execution and Grading in the Browser
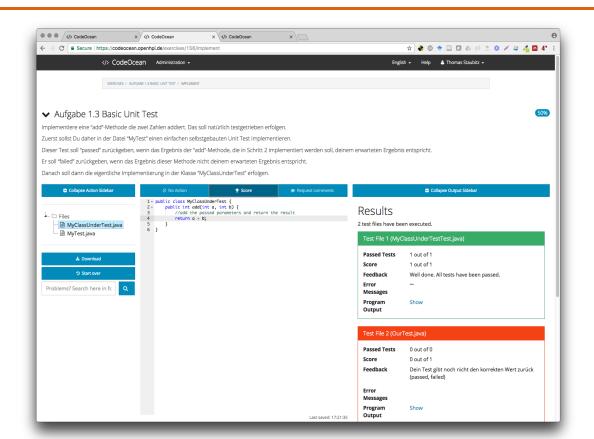
CodeOcean –
Code Execution and Grading in the Browser

- **In use:**
  - □ Java – JUnit
  - □ Python – PyUnit + custom for Turtle exercises
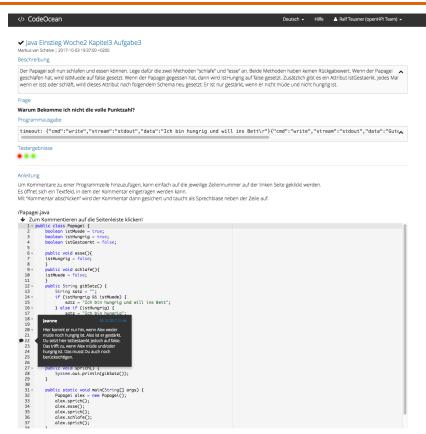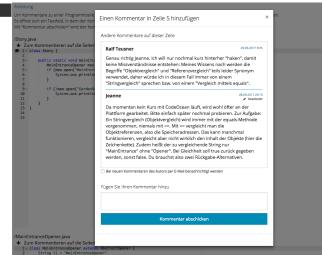 - □ Ruby – RSpec
  - □ NodeJS
- **Possible:**
  - □ All other programming languages (that can be run on a Linux system)
  - □ Todo: create Docker image + write adapter for test framework

- Test-Driven Development
- Virtual lab for "Smarthome" courses

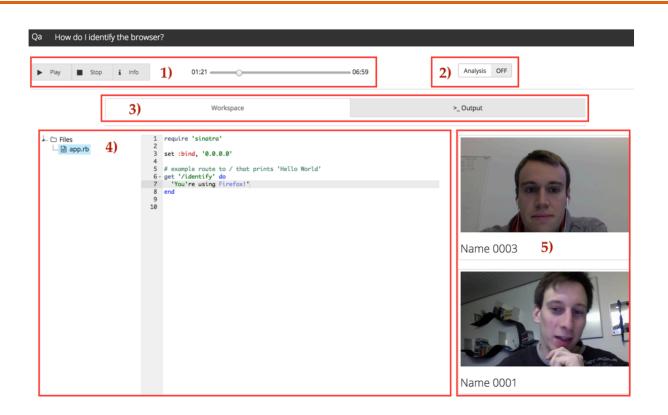**openHPI's Coding Tool Family**

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Chart **9**

CodeOcean –
Code Execution and Grading in the Browser

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Chart **10**

CodePilot –
A Peephole to Participants
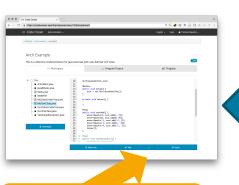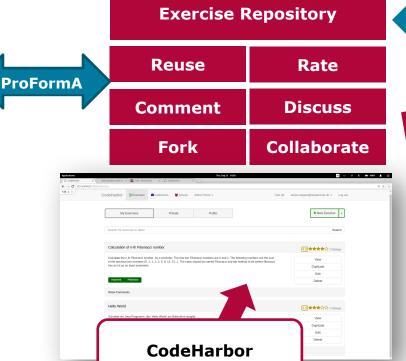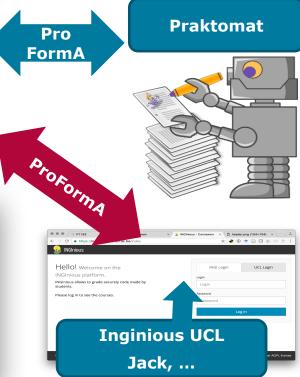
CodeHarbor –
Repository for Autogradable Coding Exercises

Exercise Repository

Reuse — **Rate**

Comment — **Discuss**

Fork — **Collaborate**

Pro FormA

ProFormA

ProFormA

Praktomat

CodeOcean

CodeHarbor

Inginious UCL Jack, …

CodeHarbor –
Open Questions

Community Building

Connect Graders

XML

ProFormA

Hosting

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Chart **13**

The floor is open for discussion!

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