# Free / Libre and Open Source Software

Prof. Dr. Dirk Riehle

Friedrich-Alexander University Erlangen-Nürnberg

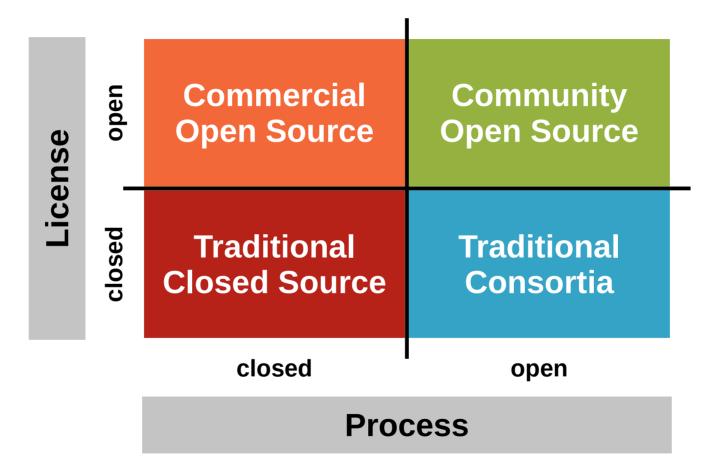
FOSS A01

Licensed under CC BY 4.0 International

#### Open Source is ... (First Take) [1]

- Software
  - that is provided to its users for free under an open source license
- A process
  - that uses the practices of open collaboration for superior results

#### **Open vs. Closed Source**



#### **Course Topics**

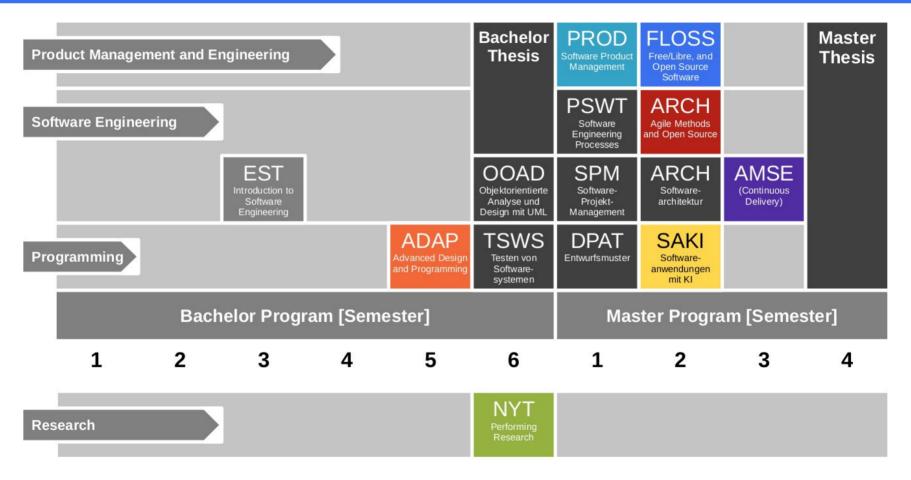
- Open source basics
  - Overview and history
  - Intellectual property
- Open source projects
  - Project communities
  - Development processes
  - Development tooling
- Corporate open source
  - Corporate governance
  - Corporate open sourcing
  - Inner sourcing

- Open source economics
  - Developer foundations
  - User foundations
  - Service and support firms
  - Distributor firms
  - Single-vendor firms
- Software developers
  - Labor economics

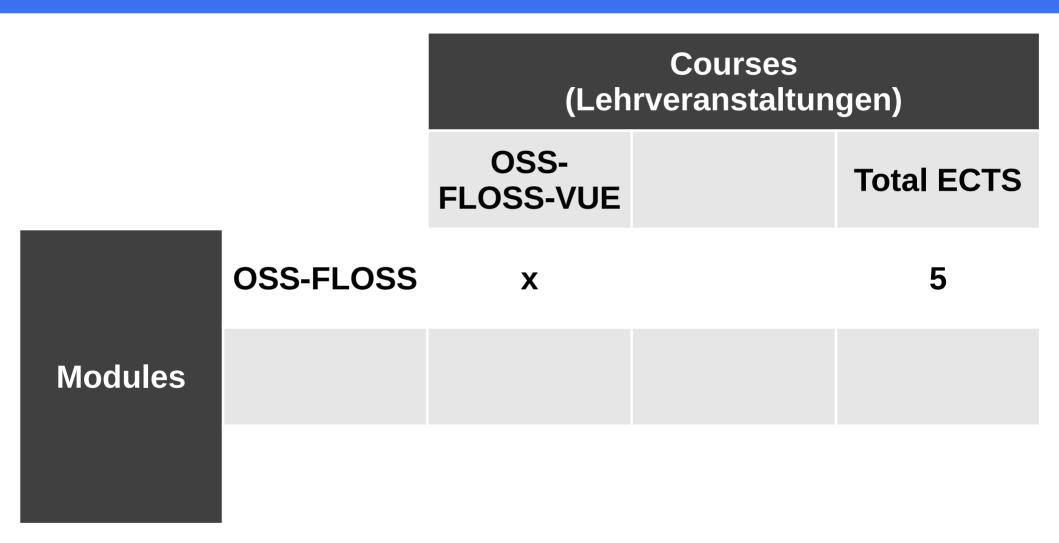
#### **Course Learning Goals**

- Students will gain a conceptual understanding of
  - key aspects of the software industry
  - how open source software projects work
  - how open source is changing the software industry
- Students will acquire a practical understanding of
  - simple tasks involved in each of the course topics

#### **Course Position in Curriculum**



#### **Courses and Modules**



#### Startupinformatik

Dein Weg zur Startup im Masterstudium, seit 2010!



http://startupinformatik.de



#### Course Grading [1]

- Class discussion (4 SWS) = 60 / 150 = 40%
  - Where class = lecture + exercise
  - Graded using [0|1|2|3] scheme
- Homework deliverables = 90 / 150 = 60%
  - Reduced to class quizzes this semester
  - Graded using [0..10] scheme

#### **Active Participation**

- 1. Showing up +
- 2. listening to the lecturer +
- 3. thinking about what you are hearing +
- 4. verbalizing your thoughts (speaking up) +
- 5. answering to someone else's thoughts +
- 6. collaborating to solve a problem +
- 7. adequate use of air-time

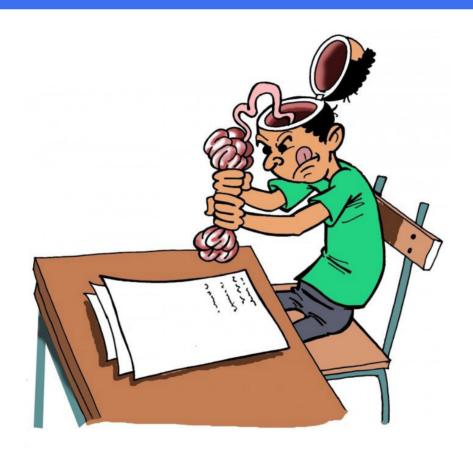
#### **Class Quizzes**

- Each class session starts with a class quiz
  - A quiz will test your understanding of last session's lecture(s)
  - A quiz typically has 5 questions and will last 10 minutes
  - The overall quiz is graded using [0..10] scheme (10 points in total)
- A class quiz will open precisely when class starts
  - The quiz is administered automatically through StudOn
  - It is your job to have reliable Internet access etc.
  - There is no way to make up for a missed quiz

#### **Requirement for Passing Course**

- At least 50% participation in all grade-relevant components
  - Class discussion
  - Homework deliverables

#### No Oral or Written Exam [1]



#### **Course Language [1]**

- Class
  - Lecturer: English
  - Student: Choice of German or English
- Homework
  - Submissions: English

#### **Course Communication**

- Announcements by email (through StudOn)
- Questions and answers using FSI Forum for course









WWW. PHDCOMICS. COM

#### **Course Information**

- Course index
  - https://goo.gl/czKB5y
- Course reader
  - https://goo.gl/AvSJNi

### Thank you! Questions?

dirk.riehle@fau.de – http://osr.cs.fau.de

dirk@riehle.org – http://dirkriehle.com – @dirkriehle

#### **Credits and License**

- Original version
  - © 2012-2019 Dirk Riehle, some rights reserved
  - Licensed under Creative Commons Attribution 4.0 International License
- Contributions

• ..

## Free / Libre and Open Source Software

#### Prof. Dr. Dirk Riehle

Friedrich-Alexander University Erlangen-Nürnberg

FOSS A01

Licensed under CC BY 4.0 International

It is Friedrich-Alexander University Erlangen-Nürnberg – FAU, in short. Corporate identity wants us to say "Friedrich-Alexander University".

#### Open Source is ... (First Take) [1]

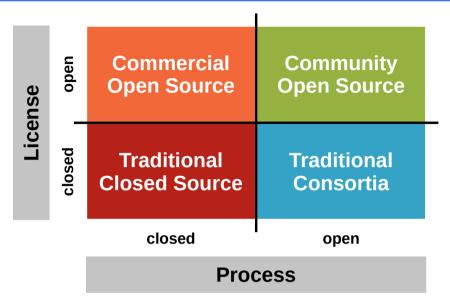
- Software
  - that is provided to its users for free under an open source license
- A process
  - that uses the practices of open collaboration for superior results

[1] Derived from the OSI definition at http://opensource.org

Free / Libre and Open Source Software

2

#### **Open vs. Closed Source**



Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

3

#### **Course Topics**

- Open source basics
  - Overview and history
  - Intellectual property
- Open source projects
  - · Project communities
  - · Development processes
  - · Development tooling
- Corporate open source
  - · Corporate governance
  - · Corporate open sourcing
  - · Inner sourcing

- Open source economics
  - · Developer foundations
  - User foundations
  - · Service and support firms
  - Distributor firms
  - Single-vendor firms
- Software developers
  - · Labor economics

#### **Course Learning Goals**

- · Students will gain a conceptual understanding of
  - · key aspects of the software industry
  - how open source software projects work
  - how open source is changing the software industry
- · Students will acquire a practical understanding of
  - simple tasks involved in each of the course topics

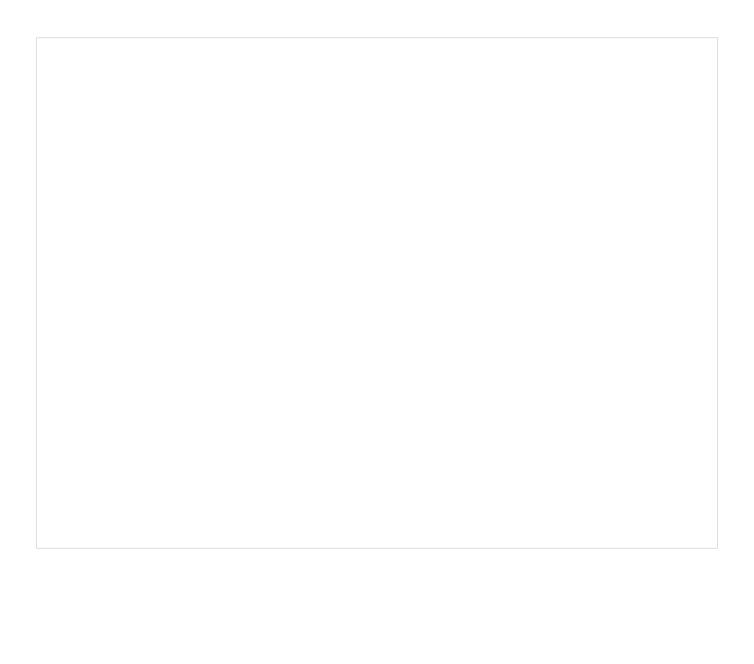
Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

5

Course Position in Curriculum	
	Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

#### **Courses and Modules**

		Courses (Lehrveranstaltungen)		
		OSS- FLOSS-VUE		Total ECTS
	OSS-FLOSS	x		5
Modules				



#### **Course Grading [1]**

- Class discussion (4 SWS) = 60 / 150 = 40%
  - Where class = lecture + exercise
  - Graded using [0|1|2|3] scheme
- Homework deliverables = 90 / 150 = 60%
  - · Reduced to class guizzes this semester
  - Graded using [0..10] scheme

Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

#### **Active Participation**

- 1. Showing up +
- 2. listening to the lecturer +
- 3. thinking about what you are hearing +
- 4. verbalizing your thoughts (speaking up) +
- 5. answering to someone else's thoughts +
- 6. collaborating to solve a problem +
- 7. adequate use of air-time

Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

#### **Class Quizzes**

- Each class session starts with a class quiz
  - A quiz will test your understanding of last session's lecture(s)
  - A quiz typically has 5 questions and will last 10 minutes
  - The overall quiz is graded using [0..10] scheme (10 points in total)
- · A class quiz will open precisely when class starts
  - The quiz is administered automatically through StudOn
  - It is your job to have reliable Internet access etc.
  - There is no way to make up for a missed quiz

Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

#### **Requirement for Passing Course**

- At least 50% participation in all grade-relevant components
  - · Class discussion
  - Homework deliverables

Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

No Oral or Written Exam [1]	
[1] You still have to register for the course	Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved 14

#### **Course Language [1]**

- Class
  - · Lecturer: English
  - Student: Choice of German or English
- Homework
  - Submissions: English

[1] See http://osr.cs.fau.de/2012/03/10/english-or-german-deutsch-oder-englisch/

**15** 



- Announcements by email (through StudOn)
- Questions and answers using FSI Forum for course

Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

#### **Course Information**

- Course index
  - https://goo.gl/czKB5y
- Course reader
  - https://goo.gl/AvSJNi

Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved

**17** 

Thank you! Questions?
dirk.riehle@fau.de – http://osr.cs.fau.de dirk@riehle.org – http://dirkriehle.com – @dirkriehle  DR

#### Credits and License

- Original version
  - © 2012-2019 Dirk Riehle, some rights reserved
  - Licensed under Creative Commons Attribution 4.0 International License
- Contributions
  - ...

Free / Libre and Open Source Software © 2019 Dirk Riehle - Some Rights Reserved