

Advanced Design and Programming

Prof. Dr. Dirk Riehle

Friedrich-Alexander University Erlangen-Nürnberg

ADAP A01

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Course Learning Goals

- To acquire competence in ...
 - domain-independent
 - principles and practices of
 - advanced object-oriented
 - design and programming

Wahlzeit / Flowers Application

Wahlzeit

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About

This website is to show, discuss, and praise photos!

Photo Filter

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Filter!

Community

[This is the open source project Wahlzeit!](#)



Who/what/where is that?

[Click to show/hide description!](#)

Praise it!

☐ 10

☐ 9

☐ 8

☐ 7

☐ 6

☐ 5

☐ 4

☐ 3

☐ 2

☐ 1

Or [skip](#) it.

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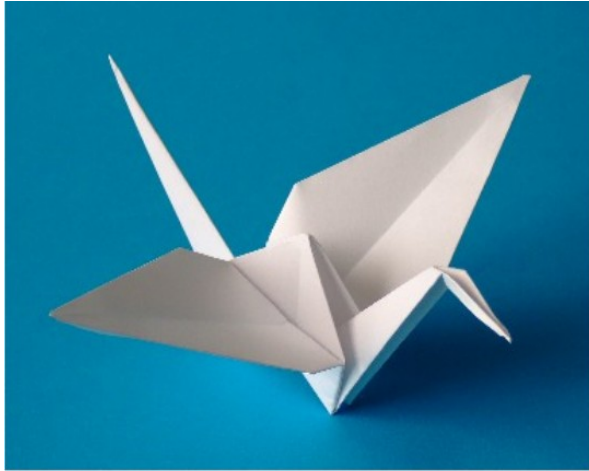
Please help keep this community site clean! photo as inappropriate if necessary.

This website is to show the best in photos!

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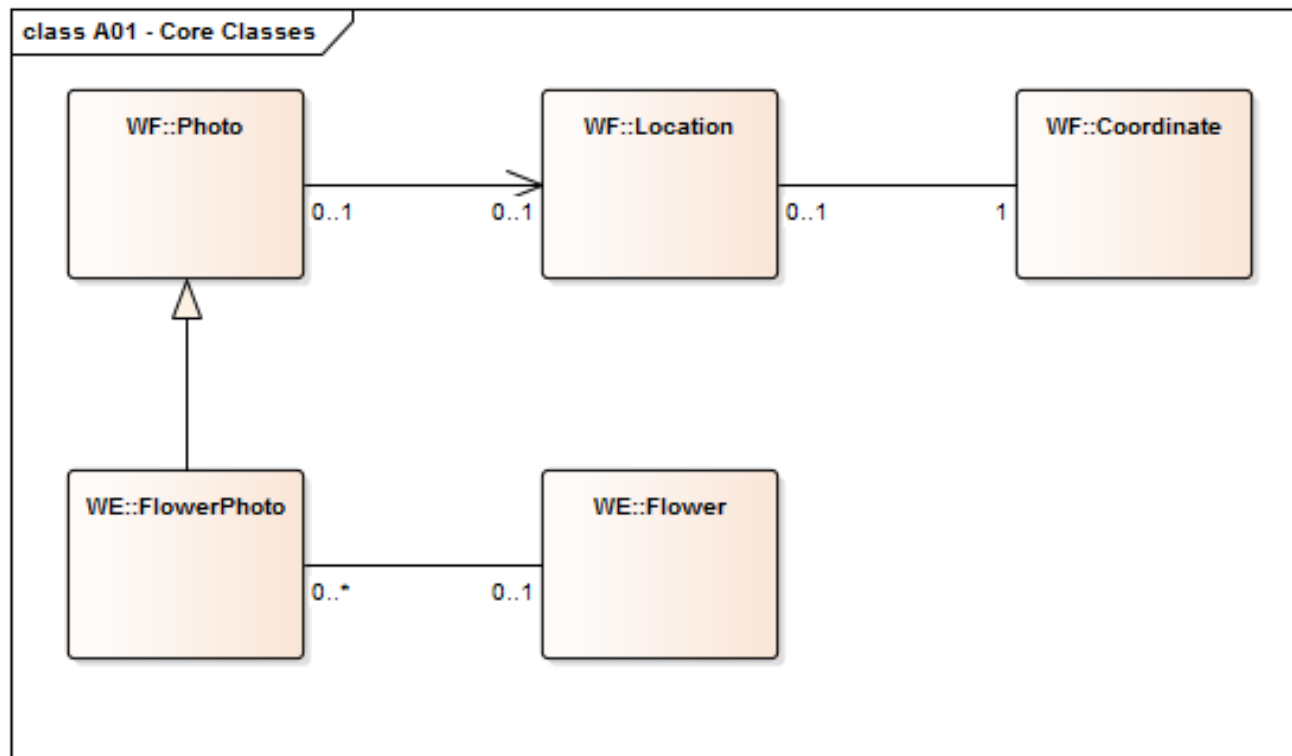
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Student Choice of Project 1 / 2



Student Choice of Project 2 / 2

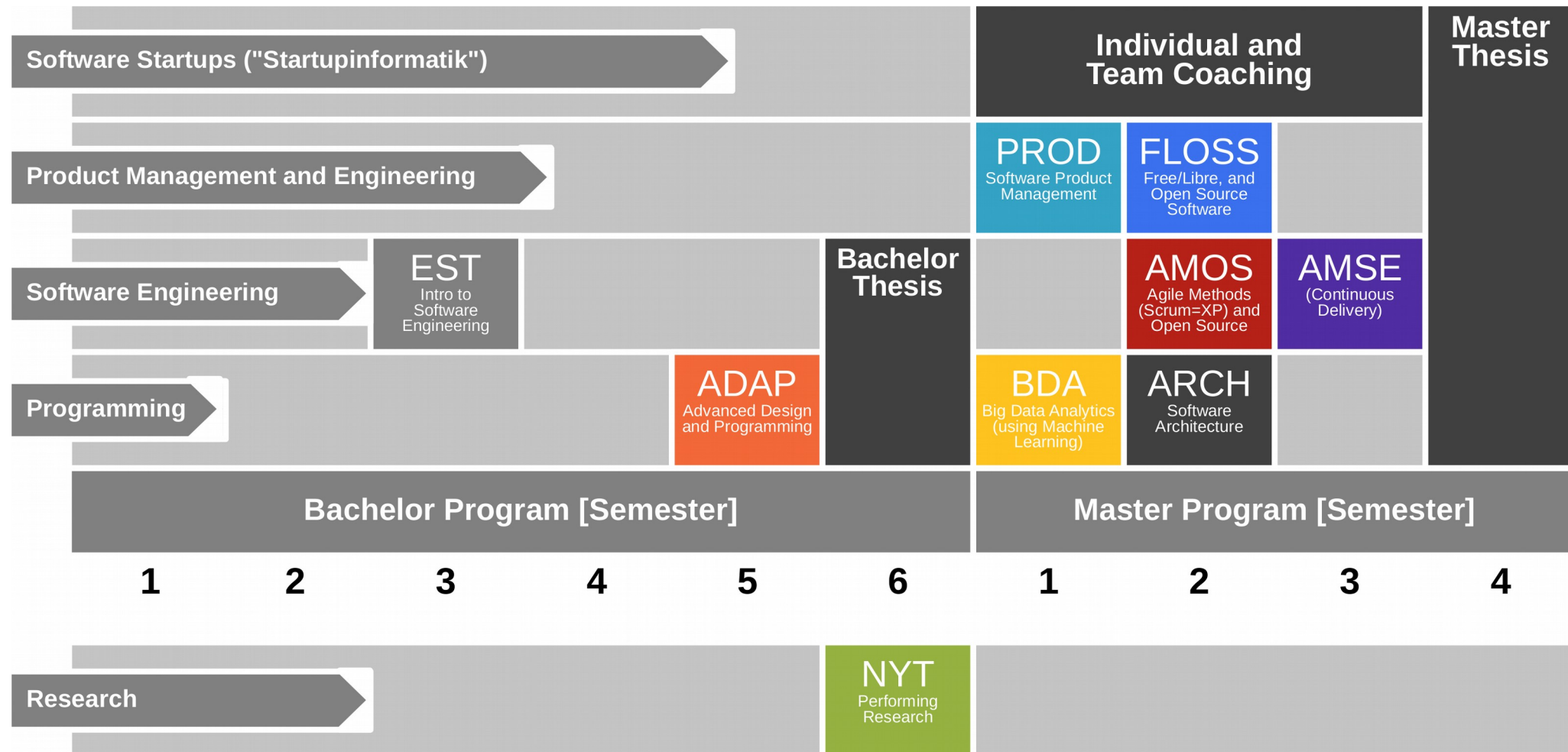
- Choose something that will provide you with domain classes
 - Food → Type of food, price, location
 - Landscapes → Location, season, camera
 - Postage stamps → Stamp, country, age
- You will need these domain classes for your homework



Skills Required for Course

- Required prior student skills
 - Programming in Java
 - Working with git
- Familiar with at least one
 - Operating system (default: Linux)
 - Command line (default: bash)
 - Development environment (default: Eclipse)
- Expected of student
 - Willingness to learn by themselves

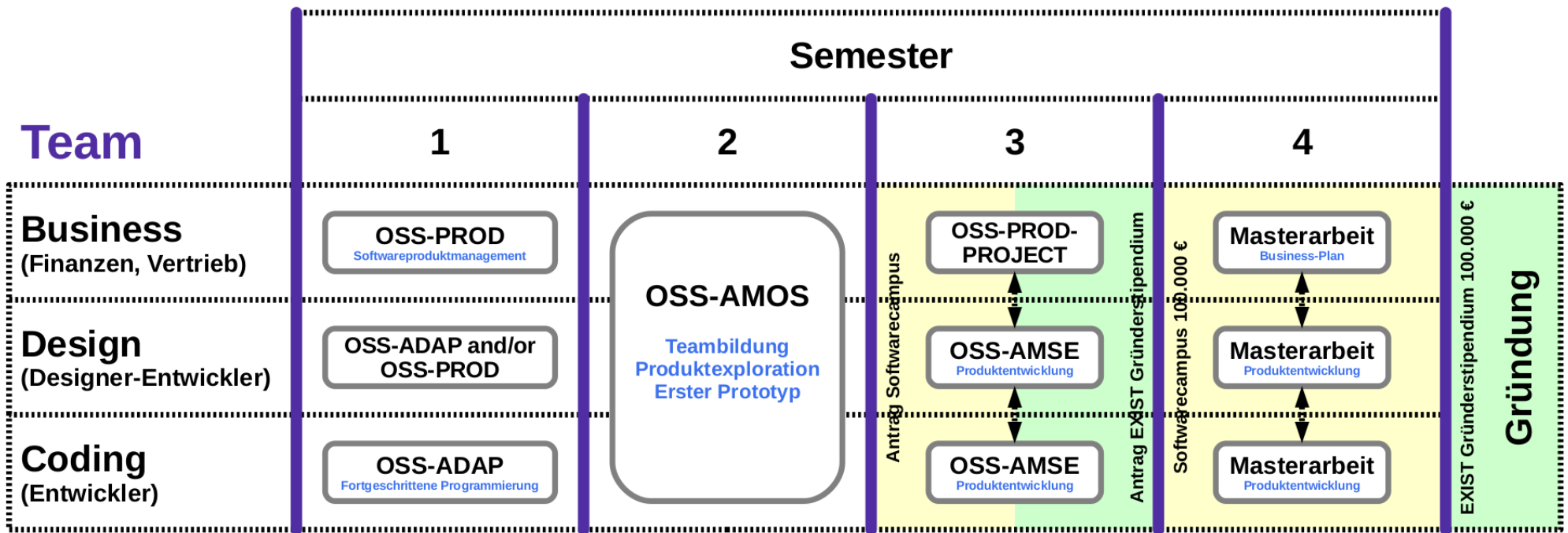
Course Position in Curriculum



ADAP is Part of Startupinformatik

Startupinformatik

Dein Weg zur Startup im Masterstudium, seit 2010!



<http://startupinformatik.de>

Gewinner 1ter Preis 2015
Programm zur Startup-
Förderung an Hochschulen



Courses and Modules

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

VUE = Lecture + exercise (Vorlesung + Übung)
PROJ = Project

Course Grading [1]

- Understanding of lecture content (2 SWS) = $30 / 150 = 20\%$
 - Graded using [0..10] each class session using StudOn quizzes
- Understanding of exercises (2 SWS) = $30 / 150 = 20\%$
 - Graded using [0|1|2|3] scheme evaluated using active participation
- Homework assignments = $90 / 150 = 60\%$
 - Graded using [0..10] each

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 - Graded using [0..10] each by course instructors

Class Quizzes

- Each class session starts with a class quiz
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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

Homework Grading

| Categories | Points | | | | | Criteria |
|--------------------------------------|---|---------------|---------|------------|-------|--|
| | Disagree | Disagree some | Neutral | Agree some | Agree | |
| Form (10%) | Does the deliverable meet formal requirements? | | | | | Does the deliverable meet page length requirements, has the right language, has required header, etc.? |
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Requirement for Passing Course

- At least 50% participation in all grade-relevant components
 - Class quizzes
 - Active participation
 - Homework submissions

No Oral or Written Exam [1]



[1] You still have to register for the course

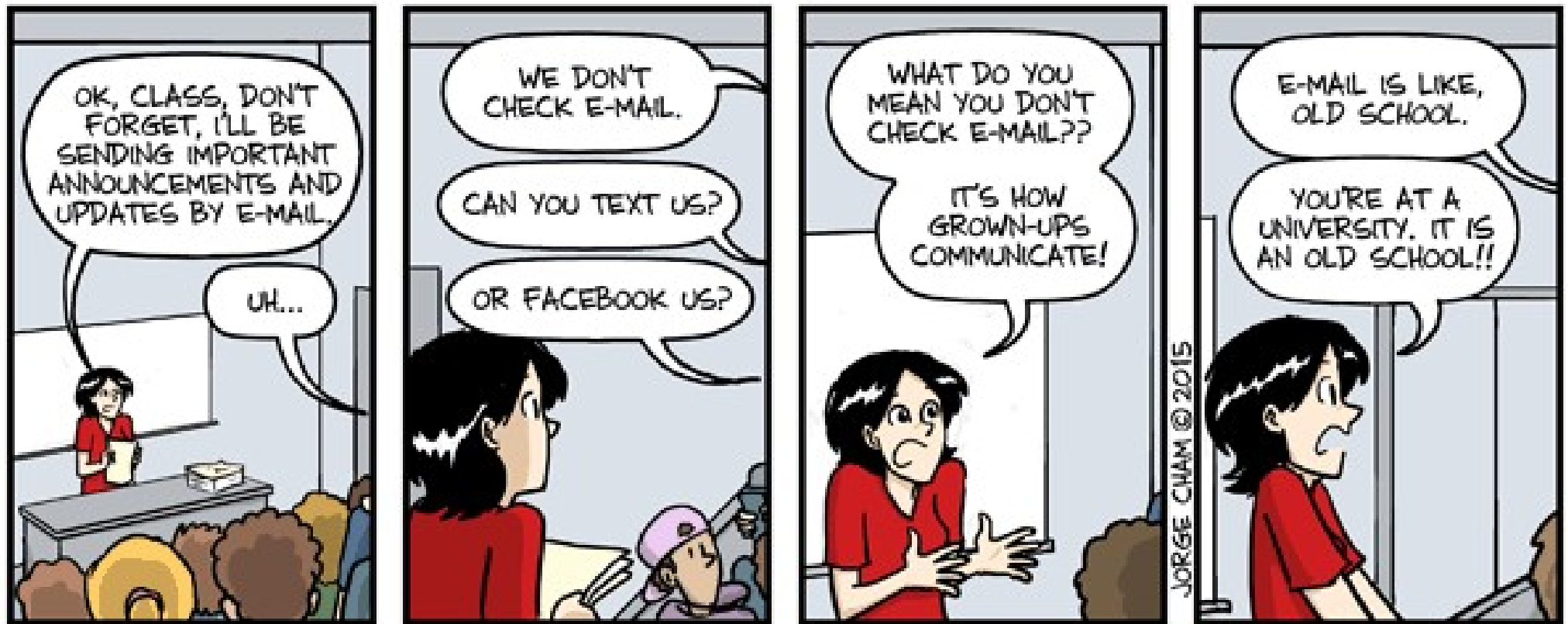
Course Language [1]

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

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

Course Communication

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



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Open Source Governance

- Do not add reciprocally-licensed libraries to your project
 - May make later desired license change difficult, including proprietary use
 - Check with osr-adap@group.riehle.org whether library is OK
- Rules of thumb on license choice
 - **OK: Permissive licenses (BSD, MIT, Apache)**
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- Professionals (i.e. companies) use code scanners to check
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- For contributions to Wahlzeit, we require a rights grant
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Course Information

- Step 1: Course index
 - <https://goo.gl/H9Zcmy>
- For everything else, see Step 1

Thanks! Questions?

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

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- Contributions
 - ...

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

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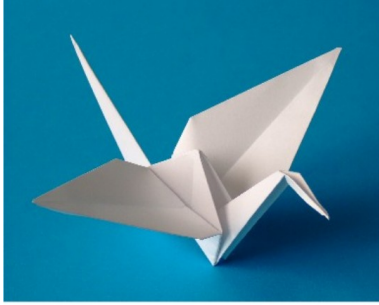
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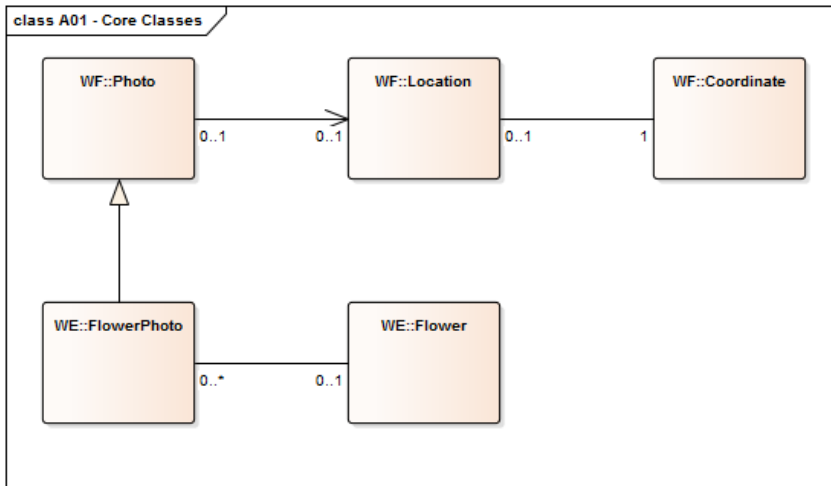


[1] Photos courtesy of Wikipedia with various CC licenses

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Student Choice of Project 2 / 2

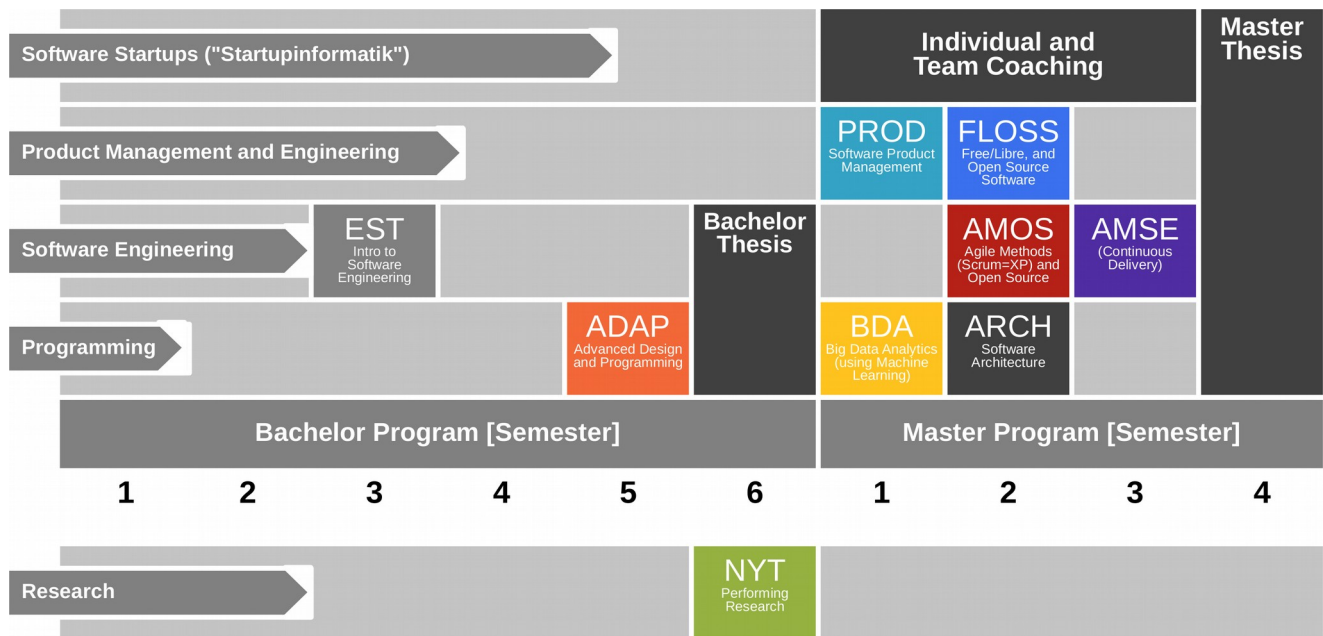
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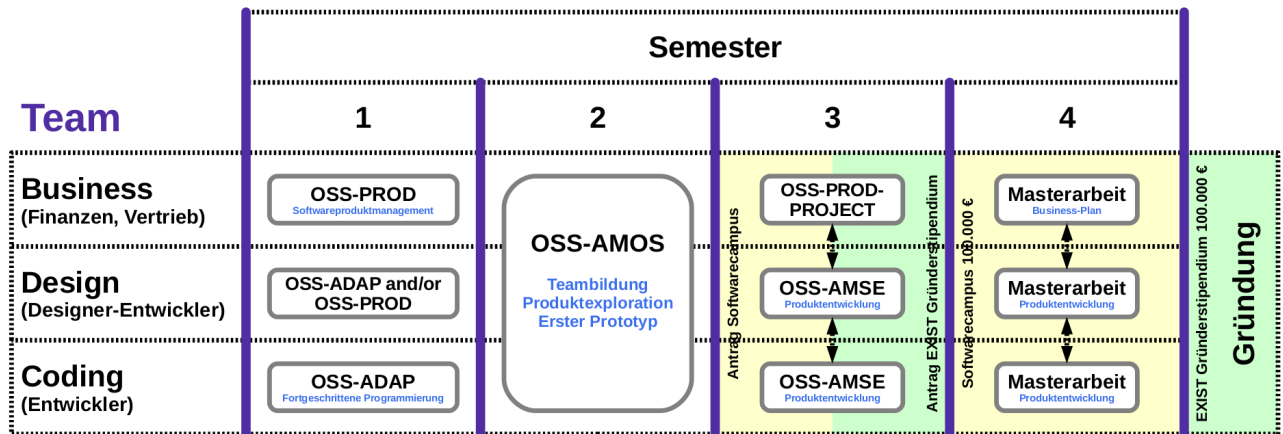
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DR

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