

## Programmieren I

# Praktikum-2: "Klassendefinitionen II"

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```
class Address
                                                     class Employee
   public String city;
                                                        public String name;
   public String street;
                                                        public int age;
   public String phone;
                                                        public long salary;
                                                        public long companyID;
   public String fax;
                                                        Address address;
   public Address(String city, String
  street, String phone, String fax) {
                                                        public byte[] photo;
     this.city = city;
     this.street = street;
     this.phone = phone;
     this.fax = fax;
                       Java Class Declarations
```



## Programmieren I

## Praktikum-2: "Klassendefinitionen II"

**OLAT: Unterslagen** 

-> Praktikum

-> <u>02 Klassendefinitionen Praktikum-2.pdf</u>

or



## Praktikum

## Ordinary Praktikum



1 JOLLY

#### **GROUPS:**

The students form teams of two people and communicate under which username (ZHAW abbreviation) the teams are formed to the lecturer.

#### **TASKS:**

- INDIVIDUAL TASK: Every member of the team perform each task individually (in the individual "<u>fork</u>"). This means that the students <u>need to share</u> the individual solutions done in their GIT repositories to the lecturer.
- MERGE: Then, in a collaborative manner the students merge their solutions proposing one final (improved) solution (e.g., in a folder called "merged-praktikum-1")
- SHARING THE FINAL SOLUTION: The final solution of the exercise (i.e., "merged-praktikum-1") should be shared to the lecturer <u>"always" in the same repository</u> (i.e., one of the student Git repository)

#### **DELIVERY**:

If not otherwise communicated, at least 24 hours BEFORE the next lab session.

#### **EVALUATION:**

For each team of two, 2 "Praktika" will be assessed (1 in the first 4 weeks and 1 afterwards). *Score ranges 0 - 5 (bad 0, ok 3, good 5)*The selection is random and will not be communicated in advance.

## **Fast Track**



?

#### **Level Test:**

They make the placement test on their own and check your solution by using the "Solution".

**Selbstkontrolle:** Selbstkontrolle by reading and answering the questions (online).

Classes: Lessons can be selectively visited (Self-control).

#### Simple individual project:

- Extension of the text-based adventure **game** "Zuul" from the textbook (described in Chapter 6 and 9).
- Alternatively, implement simplified text-based version of games like "Snake, Pac-man, Naval Battle, Laser Reflection Game, Bubble Spinner, Asteroids Game" or <u>Propose a project.</u>

#### Meeting with the lecturer:

Check and feedback of your work in a total of <u>3 meetings</u> with the lecturer:

- 1) the student has <u>2 (max 3) weeks to select and describe</u> <u>the project</u> (which feature will be implemented of the game, etc.)
- 2) Middle of the course (check of the ongoing project)
- 3) A final meeting close to the end.

## Teams



TEAM 1: Welti Louis Fahrni Nicolas



TEAM2:

Daniel Medimorec Nasserzadeh Seyed Mohammad Mahdi



TEAM3:

Manuel Berweger
Marco Forster



**TEAM4:** 

Livio Abegg Alain Basler



TEAM5:

Marvin Tseng
Dan Hochstrasser



TEAM6:

Daniel Medimorec Mahdi Nasserzadeh



Vatansever Burak



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### or

https://olat.zhaw.ch/auth/1%3A1%3A1022555435%3A2%3A0%3Aserv%3Ax/02\_Klassendefinitionen\_Praktikum-2.pdf

4 TASKS, 1 is OPTIONAL

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### TASK1 (max 20 min.)

"Write the outcome of the various operation and method calls "

```
public void ausgeben() {
  int int1 = 1, int2 = 2, int3 = 3;
  double double1 = 3.0, double2 = 4.0;
  boolean boolean1 = true;

System.out.println(int1 + int2 + int3--);
  System.out.println(int3);
  System.out.println(--int3);
```

Be precise
and
differentiate
between
integer and
floating point

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### TASK2

1. Fork the repository "https://github.engineering.zhaw.ch/prog1-kurs/02\_Praktikum-2\_Ausdruck" as indicated in

https://olat.zhaw.ch/auth/1%3A1%3A1013057491%3A2%3A0%3Aserv%3Ax/99 Anleitung-Arbeiten-mit-Git.pdf

2. Check your results of Task 1.

If you have made a mistake somewhere? If so, try to understand exactly why you were wrong.

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### TASK3

1. Fork the repository "https://github.engineering.zhaw.ch/prog1-kurs/02\_Praktikum-2\_Auto" as indicated in

https://olat.zhaw.ch/auth/1%3A1%3A1013057491%3A2%3A0%3Aserv%3Ax/99 Anleitung-Arbeiten-mit-Git.pdf

2. Use BlueJ

to implement a class modelling a "car"

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### **TASK4 (OPTIONAL)**

1. Fork the repository "https://github.engineering.zhaw.ch/prog1-kurs/02\_Praktikum-2\_Konto" as indicated in

https://olat.zhaw.ch/auth/1%3A1%3A1013057491%3A2%3A0%3Aserv%3Ax/99\_Anleitung-Arbeiten-mit-Git.pdf

- 2. Copy your "Bank Account" from the Praktikum 1 in the repository
- 3. Extend this class so that incorrect entries are detected and rejected