Presentations

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(mostly based on material by Christian Kästner, Graham Horton)

Presentations at student conference

- 15 min Presentation (25 for two people)
- 10 min Question & Answers

- Finish late: cut off
- Finish early: more questions

- 3 Presentations per session
  - Agree on one notebook or prepare/practice to switch

Preparation

▸ Prepare for a talk!

▸ Preparation takes time (20x time of actual presentation)

▸ Do not prepare slides the evening before!

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Presenting Scientific Results

- Before writing a paper
    - Present ideas to colleagues for discussion
    - Put your ideas into order
    - Think about visualizations

- After writing a paper
    - Presenting an accepted paper at a workshop or conference
    - Give a rough overview: Problem, Solution, Evaluation
    - Convince audience to read the paper
    - Initiate a discussion (workshop)

- Paper and presentation often do not perfectly align

- (Lecture != Presentation)

Paper versus presentation

▸ In both:

 ▸ motivation

 ▸ clarity

 ▸ structure

▸ In presentation:

 ▸ Less time

 ▸ Fixed time

 ▸ Your presence matters

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Prepare for a very large room

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Workshop Room

What makes a successful presentation?

- Facts
  - Content
  - Structure
  - Cohesion / line of thoughts

- Visuals
  - Design of slides
  - Visualizations

- Appearance
  - Body language
  - Language
  - Subjective impression

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Structure

Goals

▶ Every presentation has a goal

▶ Every presentation has several tasks

▶ Answer these questions first:

    ▶ What is my goal?

    ▶ What is my main point?

    ▶ Why should the audience listen?

    ▶ Why is the topic interesting?

    ▶ Who will benefit from this presentation?

Structure

- Beginning: Connect to audience
  - Introduce yourself
  - Motivate your topic (why should they listen?)
  - Executive summary (main points, main results)
  - (Calm down)
- Middle: Convey information
  - Facts, Arguments, Results, Discussion
- End: Take home message
  - Summarize main points
  - Emphasize consequences
  - Future work

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Beginning

- What is the general problem?
- Why is this problem interesting?
- What is the specific problem?
- Why is this problem interesting?
- Which question(s) to answer?
- (State of the art)
- How to proceed and why?
- Goals and tasks?

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Middle

▸ What background knowledge is necessary?

▸ Which problems need to be solved?

▸ Which decisions to make?

▸ Which assumptions/simplifications and why?

▸ Experiments

▸ Results

▸ Interpretation

▸ Does this answer my hypothesis?

End

- What was the main result?

- How general are these results? (threats to validity)

- What are the consequences?

- What remains open? Which new questions arose? Future work?

- Thank for attention

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Typical problems

▶ Too quick introduction

▶ Problem remains unclear

▶ Consequences / results unclear

▶ Too much "what I did"

▶ Too little "why did I do this (each step)"

▶ Too little "what's the point"

▶ No connection between thoughts / slides

▶ Missing cohesion

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Slides

Technical Hints

- 20 min, about 7 to 15 slides

- Fontsize >= 18, sans-serif fonts (this is 29)

- Name, title and affiliation on every slide

- Slides number on every slide

- At most one topic per slide

- Visualization, colors where necessary

- Avoid overfull slides (> 7 objects or > 36 words)

- Avoid full sencences, instead summarize content using headwords.

Structure slide?

▶ Only if you have something to say

▶ Maybe only after motivation slides

Christian Kästner: Virtual Separation of Concerns — 6

Agenda

- **Problems and Advantages of Preprocessors**
- 4 Improvements
  - Views
  - Visual Representation
  - Disciplined Annotations
  - Product-Line-Aware Type System
- Summary and Perspective

Visualizations

▸ Assists memory

▸ Assists comprehension

▸ Emphasizes the content

▸ More accessible style

▸ If

  ▸ Meaning is clear

  ▸ Visualized content is correct

  ▸ Text is readable

Christian Kästner: Virtual Separation of Concerns

Academia: Compositional Approaches

Base / Platform

```
class Stack {
    void push(Object o) {
        elementData[size++] = o;
    }
    ...
}
```

Feature: Queue

```
refines class Stack {
    void push(Object o) {
        Lock l = lock(o);
        Super.push(o);
        l.unlock();
    }
    ...
}
```

Feature: Diagnostic

```
aspect Diagnostics {
    ...
}
```

Composition

```
class Stack {
    void push(Object o) {
        Lock l = lock(o);
        elementData[size++] = o;
        l.unlock();
    }
    ...
}
```

Module
Components
Frameworks, Plug-ins
Feature-Modules / Mixin Layers / ...
Aspects / Subjects, Hyper/J

Different kinds of visualizations

- Diagrams
- Photos
- Clip-arts

Simplify visualizations

▸ A microprocessor consists of X, Y and Z…
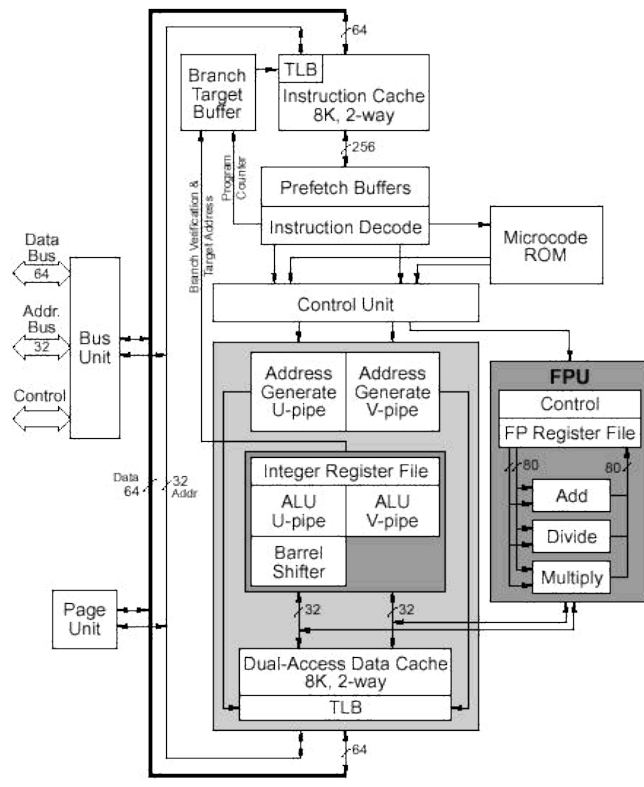
Figure 1. Pentium block diagram.
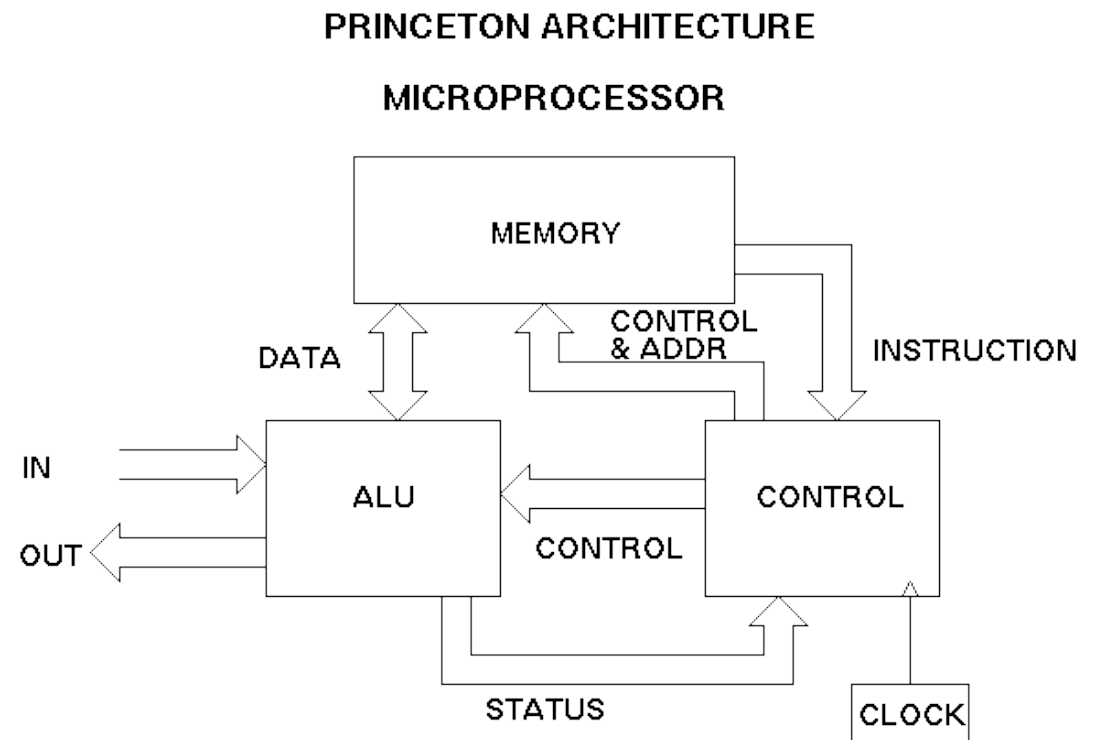
Animation

▶ Use animation with care

▶ Use
  ▶ to focus attention (~ laser pointer)
  ▶ to visualize a process / several steps
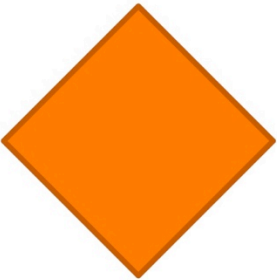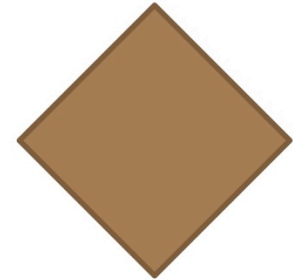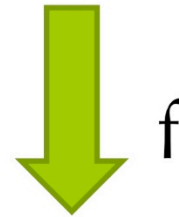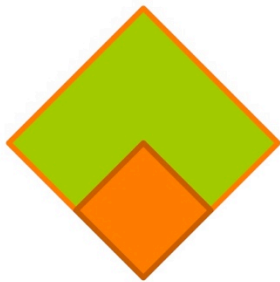
▶ Do not use without specific purpose

x_1

f

y_1

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x_1 x_2

f f

y_1 y_2

x_1

f

y_1

x_2

f

y_2

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x_1

x_2

f

f

y_1

y_2

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x_1

f

f invoked again! ☹

y_1

x_2

f
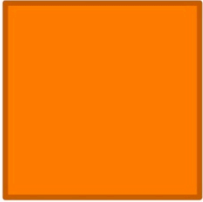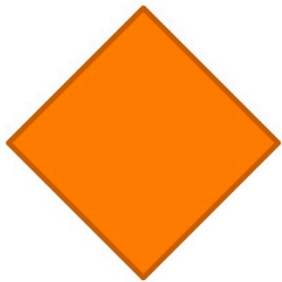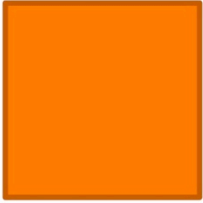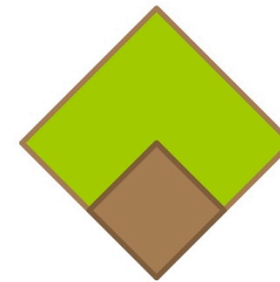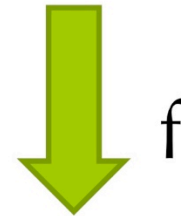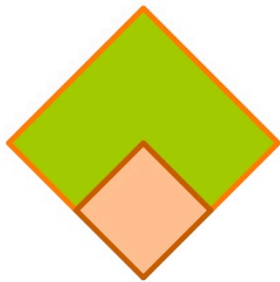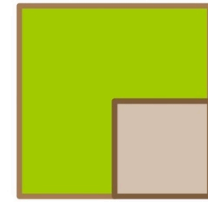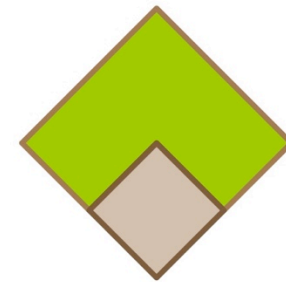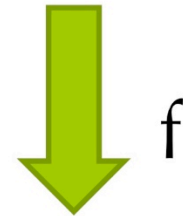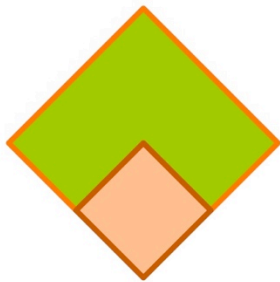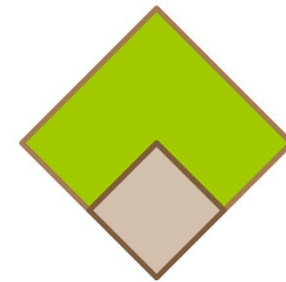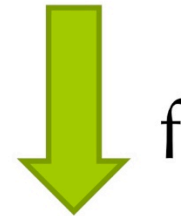
y_2

Animation: Die Todsünde

‣ **Punkt 1   Blah blah blah blah blah blah**
  ‣ Punkt 1-1   Blah blah blah blah blah blah
  ‣ Punkt 1-2   Blah blah blah blah blah blah

‣ **Punkt 2   Blah blah blah blah blah blah**
  ‣ Punkt 2-1   Blah blah blah blah blah blah
  ‣ Punkt 2-2   Blah blah blah blah blah blah

‣ **Punkt 3   Blah blah blah blah blah blah**

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Abläufe visualisieren

▸ **Erklärung eines Warteschlangensystems:**

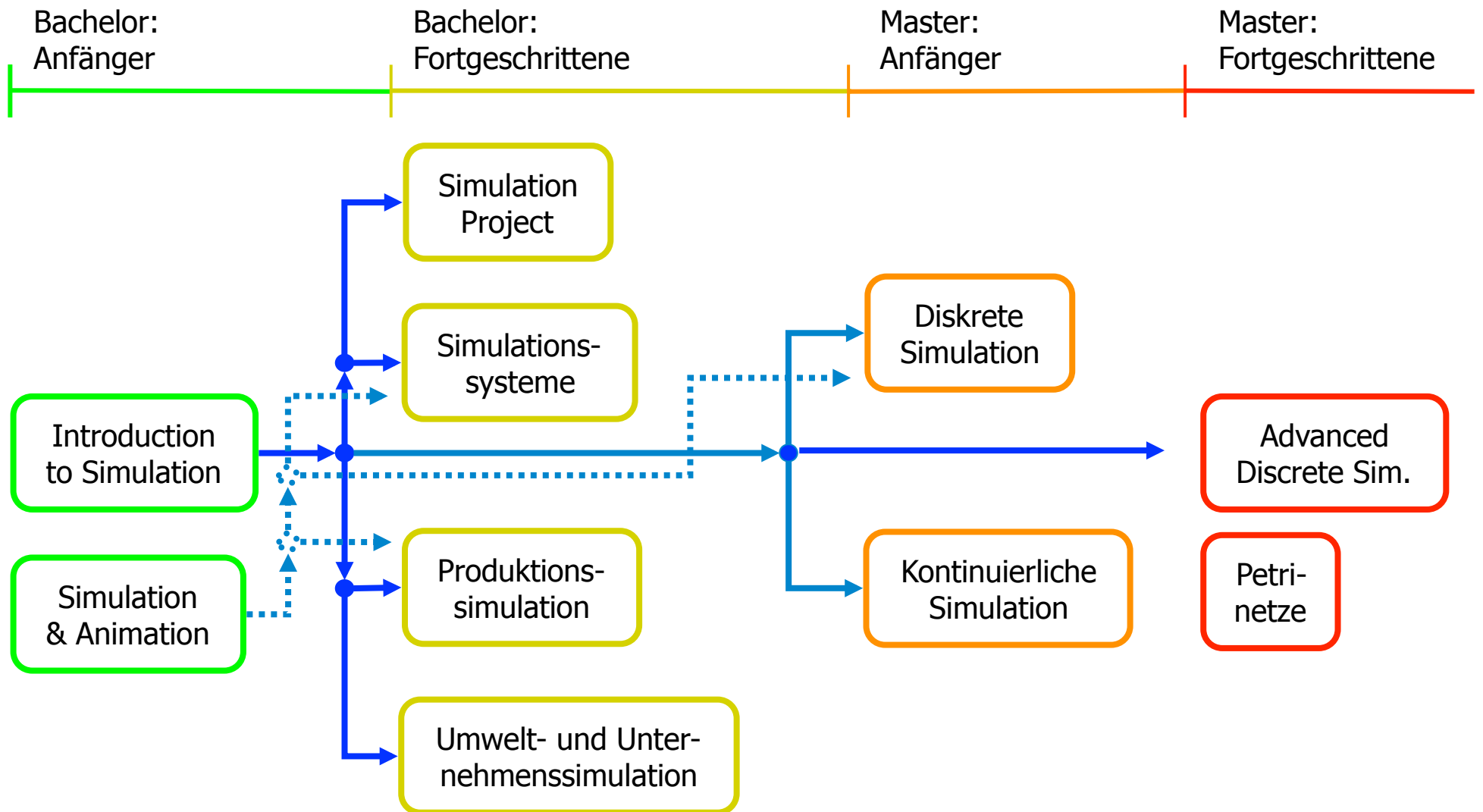# Aufmerksamkeit lenken

Bachelor:
Anfänger

Bachelor:
Fortgeschrittene

Master:
Anfänger

Master:
Fortgeschrittene

Simulation Project

Simulations-systeme

Diskrete Simulation

Introduction to Simulation

Advanced Discrete Sim.

Simulation & Animation

Produktions-simulation

Kontinuierliche Simulation

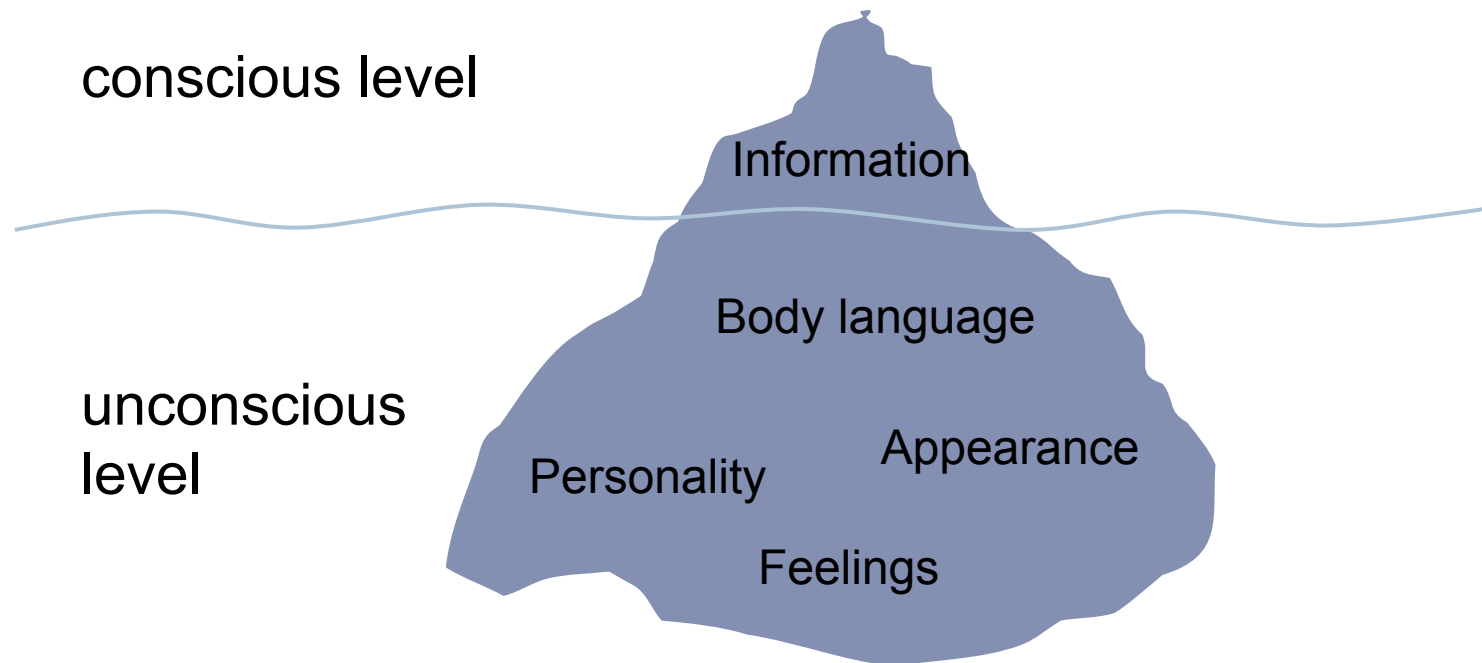Petri-netze

Umwelt- und Unter-nehmenssimulation

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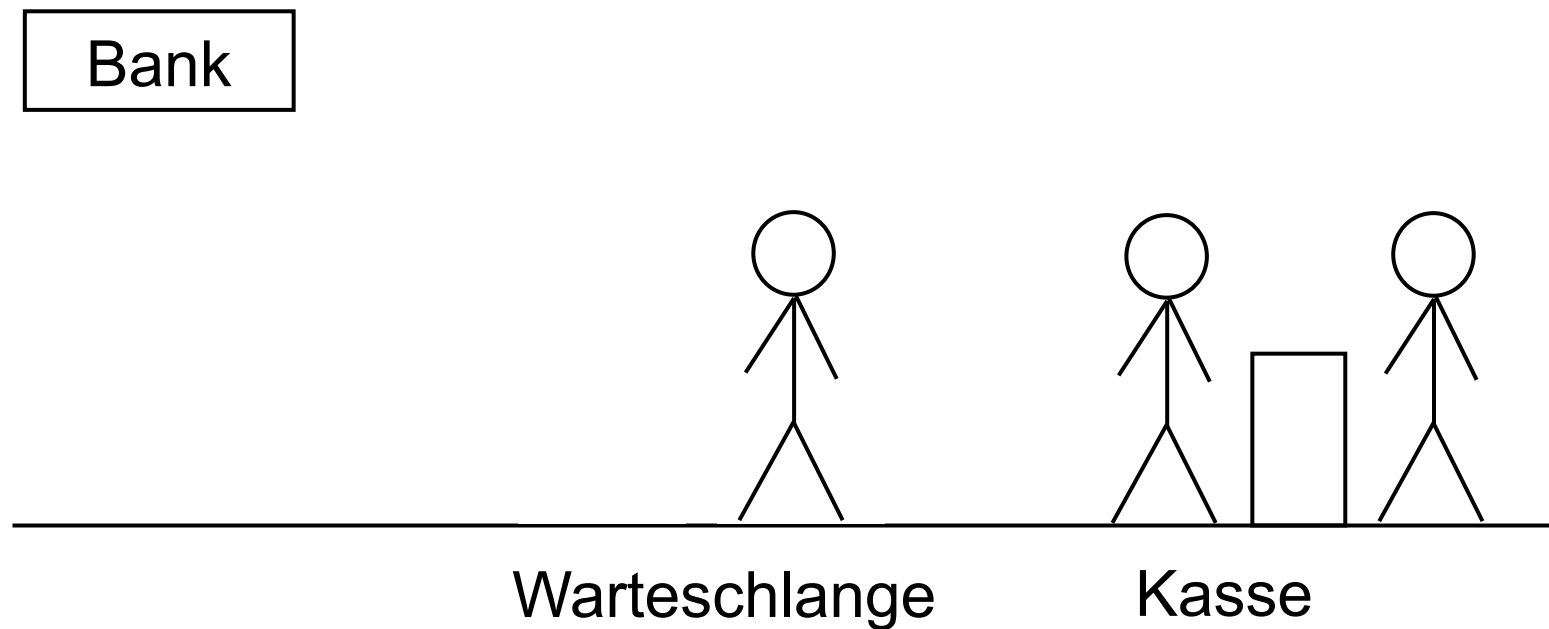
Checklist for visualizations

▶ Can text be replaced by visualizations?

▶ Is the meaning clear?

▶ Are the facts correct?

▶ All texts and details readable?

▶ No unnecessary or misleading elements?

▶ Does it help comprehension?

Presentation

Communication

▸ You cannot not communicate

conscious level

Information

Body language

unconscious
level

Personality

Appearance

Feelings

Where to stand

▸ Facing the audience

▸ Not too far away

▸ Don't hide the projected image

▸ Don't hide behind furniture

Posture

▸ Upright

▸ Open

▸ Relaxed

▸ Stable

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Movement

▸ Don't fidget

▸ Emphasize thoughts with gestures and facial expressions

▸ Calm, but not fixed

Eyes

▸ Look at the audience

▸ Try to look at everybody naturally

▸ Do not stare at screen

Voice / Language

▸ Slow enough

▸ Loud enough

▸ Clear pronounciation

▸ Enough pauses

▸ Avoid monotony

▸ Keep sentences simple

▸ Don't read

Timing

▸ Practice timing

▸ If faster when nervous plan ahead

▸ Have a timer during presentation

▸ Check speed during presentation

▸ Practice fast and slow version of last 3 slides (maybe have an extra slide you might skip)

Some Last Tips

▸ Always be prepared

- ▸ Have a PDF version of your slides
- ▸ On at least 2 USB sticks & internet
- ▸ Prepare presentation before the session, usually only one laptop

▸ Laser pointer hard to see in large rooms -> animations instead

▸ No dress code in computer science conferences

▸ Practice timing and phrasing!

Feedback & Grading

- 6 Criteria
  - Motivation and goals clear?
  - Content (structure, cohesion, clarity, conclusion?)
  - Slides (amount, style, visualizations)
  - Presentation & body language
  - Clarity (understandable, slang, missing background inform.)
  - Timing (don't be late!)
- Feedback sheet for everybody

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Take-away slide

▸ Prepare for a presentation

▸ Make goals and motivation crystal clear

▸ Careful slide layout with visualizations where suitable

▸ Calm and focused presentation