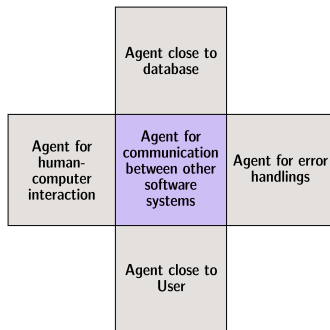# Presentation-Abstraction-Control

Gruppen H und I

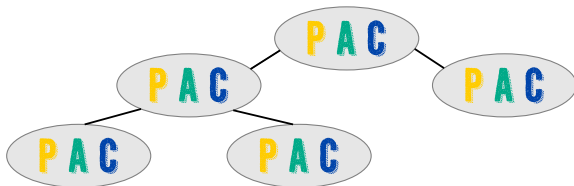Software Engineering WS 17/18

December 4, 2017

PROBLEM

There are three main Problems based on that:

- Agents often maintain their own state and data

- Interactive agents provide their own user interface

- Systems evolve over time

Ann-Kathrin

There are three main Problems based on that:

- Agents often maintain their own state and data
- Interactive agents provide their own user interface
- Systems evolve over time

SOLUTION

- Tree-like hierarchy of PAC agents
- PAC agents consist of:
    - **Presentation** component (visible behavior)
    - **Abstraction** component (data model with its functional operations)
    - **Control** component (connects data model and view; provides communication between other agents)

PAC
└─Solution

└─Solution

Lucas

- Tree-like hierarchy of PAC agents
- PAC agents consist of:
  - **Presentation** component (visible behavior)
  - **Abstraction** component (data model with its functional operations)
  - **Control** component (connects data model and view; provides communication between other agents)

STRUCTURE

2017-12-04

PAC
└─Structure

└─Structure

Nicole, Jaqueline

TOP-LEVEL AGENT

PAC
└─Structure
    └─Top-Level Agent
        └─Top-Level Agent
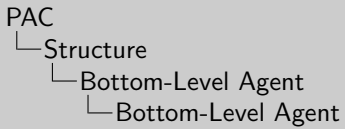
2017-12-04

Nicole, Jaqueline

BOTTOM-LEVEL AGENT

- Presentation component
    - specific view on the object
    - provides access to functions
    - maintains information
- Abstraction component
    - maintains agent-specific data
- Control component
    - manages relation between abstraction and presentation component
    - communication to intermediate agents

PAC
└─ Structure
   └─ Bottom-Level Agent
      └─ Bottom-Level Agent

Vera

- Presentation component
  - specific view on the object
  - provides access to functions
  - maintains information
- Abstraction component
  - maintains agent-specific data
- Control component
  - manages relation between abstraction and presentation component
  - communication to intermediate agents

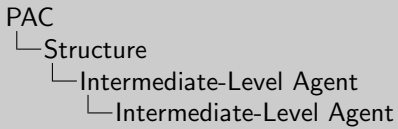## INTERMEDIATE-LEVEL AGENT

Responsibility:

- coordinate lower-level PAC agents
- Composes lower-level PAC agents to a single unit of higher abstractation
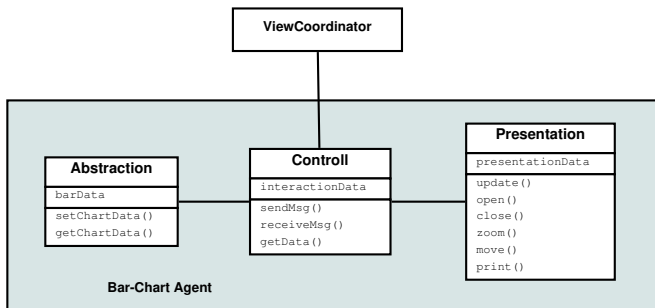
Responsibility:
- coordinate lower-level PAC agents
- Composes lower-level PAC agents to a single unit of higher abstractation

Anna

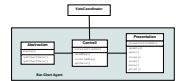Kann raus bei Platzmangel

INTERMEDIATE-LEVEL AGENT

- abstract component manages the data
- presentation component implements user interface
- control component communicates with top-level and bottom-level agents

Anna
gekürzt, lange Version:

- abstract component manages the data $\rightarrow$ responsible for all currently active views

- presentation component implements user interface $\rightarrow$ creates a tool to view the election data for example in bar or pie charts

- control component communicates with top-level and bottom-level agents $\rightarrow$ control all subordinate agents

DYNAMICS

Bild 1

2017-12-04

Nicole

Bild 1

DYNAMICS

Bild 2

Nicole

KNOWN ISSUES

PAC
└─Known Uses

　　　└─Known Issues

2017-12-04

Fabian

QUELLEN

PAC
└─Known Uses

└─Quellen

Rebecca