**Softwaretechnikprojekt**
**Netzwerkmonitoring mit agilen Methoden**

FACH
HOCHSCHULE
LÜBECK

University of Applied Sciences

# Server

# for perfSONAR UI app

Mirco Bohlmann, Sascha Degener, Benjamin Konrad, Fabian Misiak, Florian Rüffer, Clemens Schlei, Reinhard Winkler

# Overview

- Agile methods

- Process modell

- Next steps

# Agile methods

- Feature Driven Development (FDD)

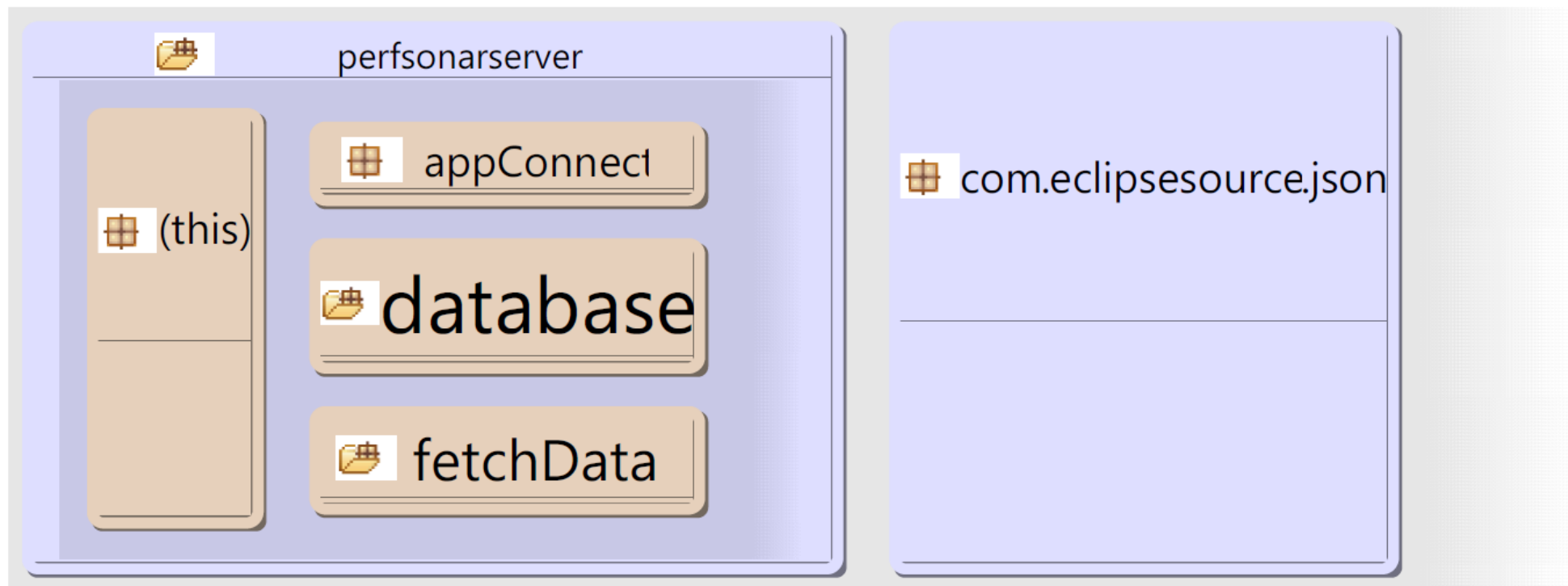| Develop an Overall Model | → | Build a Features List | → | Play by Feature | → | Design by Feature | ⇄ | Build by Feature |
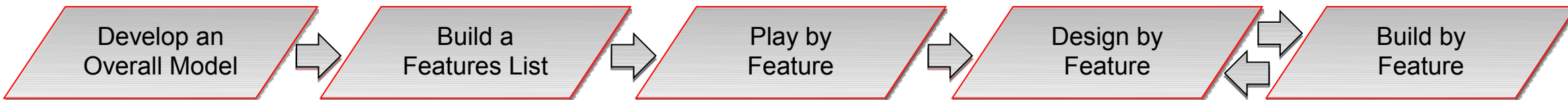
- Pair Programming
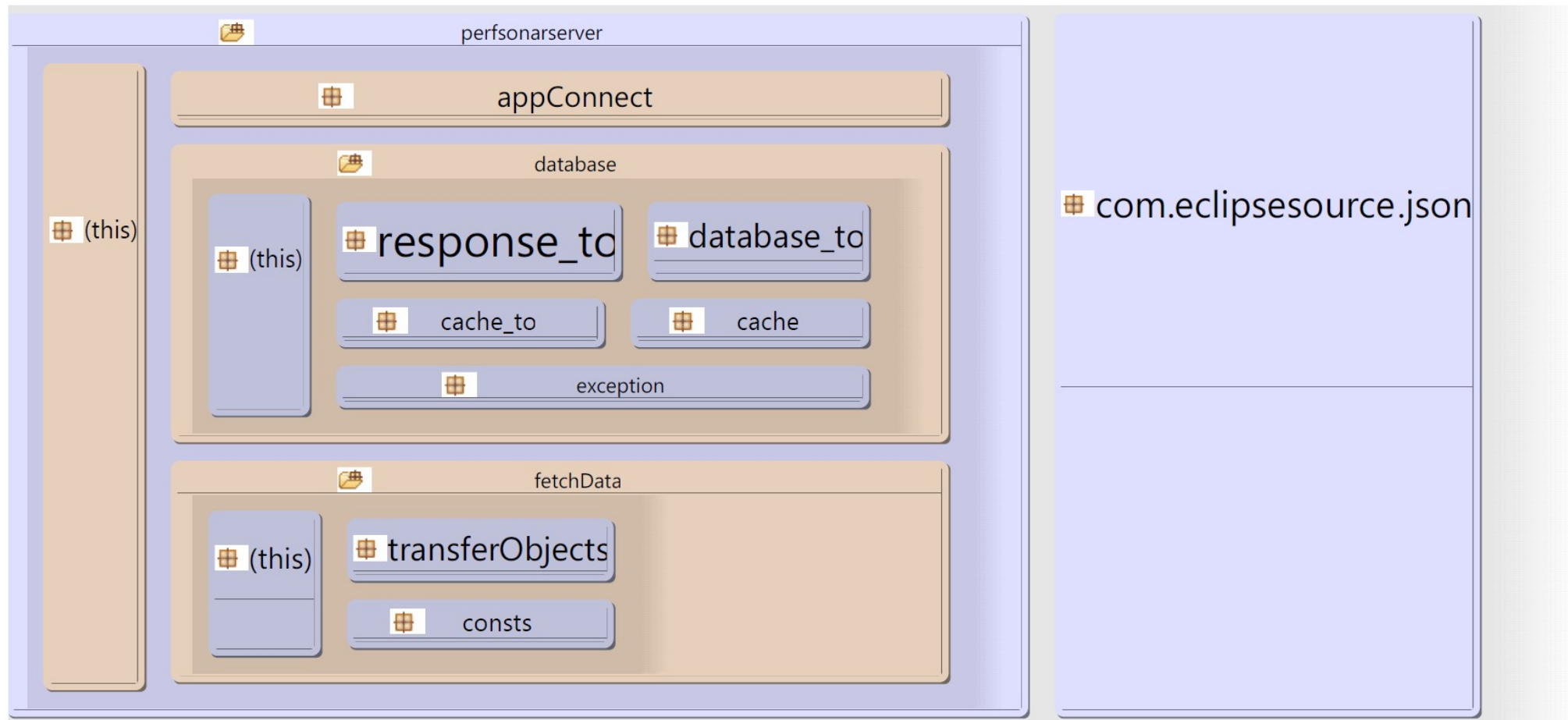
# #1 Develop an Overall Model

- Server based on Java

- MongoDB database

- JSON files send to APP

- Three Layered Architecture

# Package diagram

# Package diagram

# Class diagramm

- Fetch data

# #2 Build a Features List

- Fetch data
- Transform data
- Store data
- Evaluate data
- Receive request
- Send response

# #3 Plan By Feature

- Fetch data
- Transform data

Clemens Schlei,
Florian Rüffer

- Store data
- Evaluate data

Sascha Degener,
Benjamin Konrad

- Receive request
- Send response

Mirco Bohlmann,
Fabian Misiak,
Reinhard Winkler

# #4 Design By Feature

- Fetch data
    - SOAP request via HTTP

- Transform data
    - XML to java objects

# #4 Design By Feature

- Store data

  – Based on MongoDB

  – Caching with chunks

  – Delay, jitter and loss data

  – Multithread capable

# #4 Design By Feature

- Receive Request

  – Request as JSON object by app
    via HTTP POST

  – Transform JSON to Java TO

  – DB request via Java TO

- Send Response
  - Transform Java TO to JSON
  - Send HTTP POST response to app

# Next Steps

- Fetch data
    - Queue for requests
    - Combine utilization interfaces for input and output

# Next Steps

- Database

  - Auto update

  - Implementing other features

  - Delete data thread save

  - Evaluate data

# Next Steps

- Communication with App
  - Implement utilization and dashboard requests
  - Timeout prevention

**Softwaretechnikprojekt**
**Netzwerkmonitoring mit agilen Methoden**

FACH
HOCHSCHULE
LÜBECK

University of Applied Sciences

# Many thanks

# for your attention

Mirco Bohlmann, Sascha Degener, Benjamin Konrad, Fabian Misiak, Florian Rüffer, Clemens Schlei, Reinhard Winkler