

ProcDSL + ProcEd - a Web-based Editing Solution for Domain Specific Process- Engineering

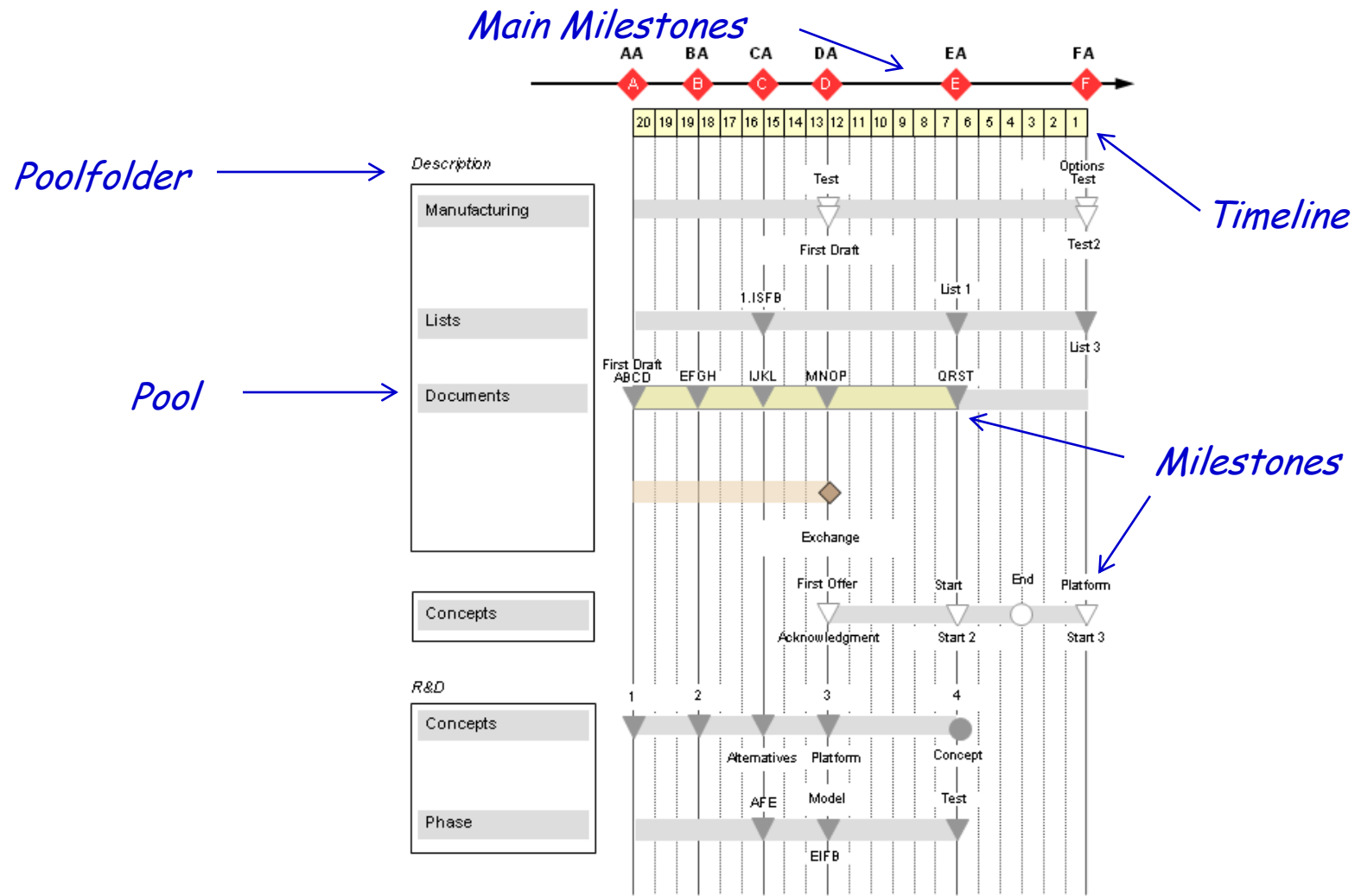
Christian Berger, **Tim Gülke**, Bernhard Rumpe
Software Engineering
RWTH Aachen

<http://www.se-rwth.de/>

Executive Summary

- Many companies already have a **specific layout** for their process plans, often, for easier editing and publishing throughout the organization, on **Microsoft PowerPoint slides**
- These layouts and the specific syntax on the created plans are **agreed on** in the company, sometimes with help of external consultants
- Already existing process modeling environments like ARIS or ADONIS are **not very flexible** when it comes to non-standard publication layouts
- Our editor uses a **DSL** constructed specifically for the plans used by the company and is flexible enough to be **easily adapted** to changes or improvements to **layout** and/or **logic** behind it
- Using AJAX technology, the editor is web-based and can therefore easily adjusted

(Exemplary) Layout to be used



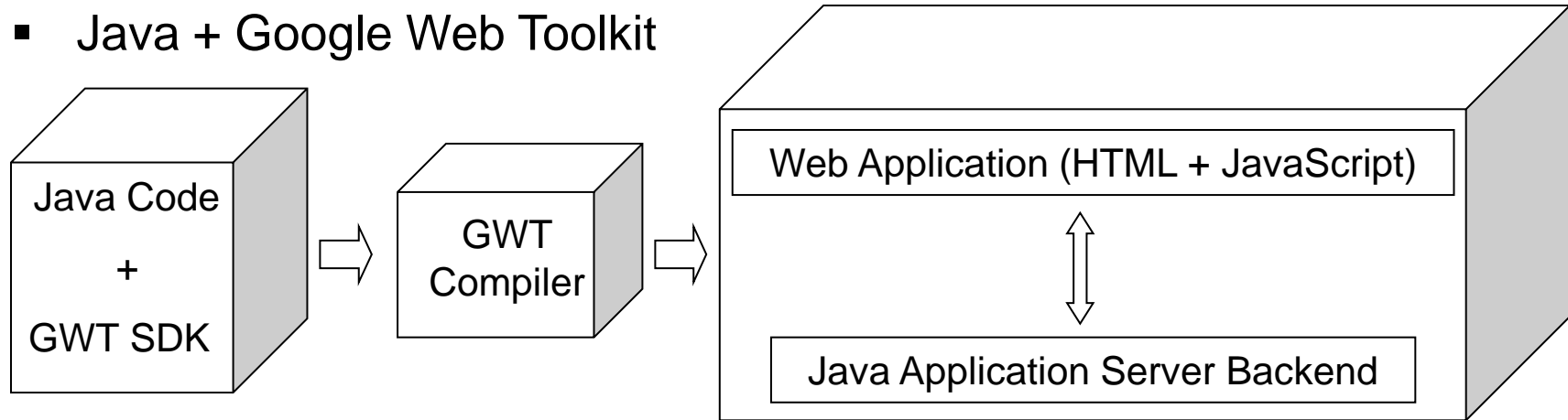
Tasks

- Editor for Milestone-plans
 - Use layout and logic determined by company
 - Multi-user application
 - DragAndDrop-Editor
 - Simple usability (e.g. like Microsoft PowerPoint)
 - Formal data-model to ensure consistency

- Technology:
 - File-based documents, representing instances of the process-DSL
 - Separation between layout and data
 - Web-based (no installation (not even Browser-Plugins like Macromedia Flash) necessary)
 - Server-side handling of document storage

Technology

- Java + Google Web Toolkit



- Advantage: Development and testing is done in plain JAVA (and not e.g. JavaScript)
- GWT-DND: DragAndDrop-Library for GWT
- Application Deployment in Apache Tomcat
- Eclipse IDE
- MontiCore: Used to generate parser, lexer and AST for the data-model

GUI 1/2

Welcome to ProcEd! - Windows Internet Explorer

http://localhost:8080/proced/ProcEd.html

Datei Bearbeiten Prozess

Business Unit A in Brand A

KO KOA KOI

36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12

Konzept
 Modellbildung
 Planung
 Architektur
 Design
 Qualitätsmanagement
 Test
 Produktpflege

Modellevaluation
 Modellabnahme
 1. Architekturentwurf
 Architekturabnahme
 2. Architekturentwurf
 Marktevaluation
 finales Produktdesign
 1. Designvorschlag
 Abnahme: Design
 Modelltest
 Qualitätsvorgabe
 1. Testentw.
 1. Architekturvalid.
 2. Testentw.
 2. Architekturvalid.

Meilensteinplan-Objekte

Poolordner
Pool
Hauptmeilenstein
Meilenstein

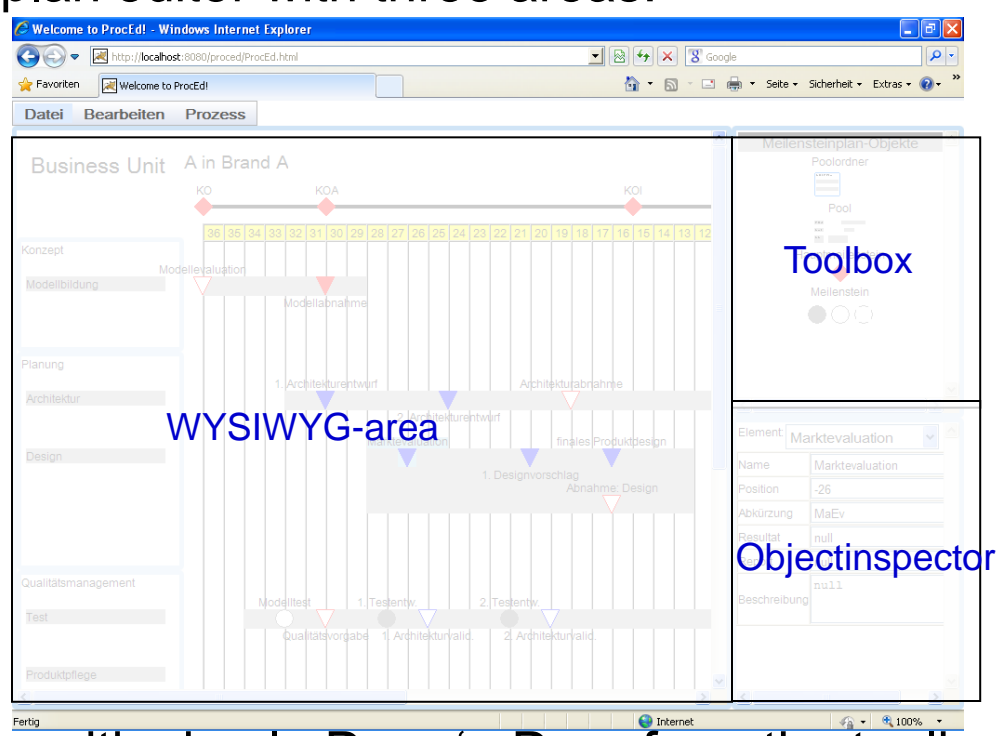
Element: **Marktevaluation**

Name	Marktevaluation
Position	-26
Abkürzung	MaEv
Resultat	null
Report	null
Beschreibung	null

Fertig Internet 100%

GUI 2/2

- Startpage with menu-bar in Microsoft Windows-Style
- Milestone-plan editor with three areas:



- Easy to use with simple Drag 'n Drop from the toolbox to the WYSIWYG-area
- Elements in the plan can be clicked and edited with the Objectinspector

Fin.

Thank you!