AUDI RESOURCE PROCESS VISUALIZATION

Team 2 // Gumbrecht, Guo, König, Mühlroth, Stauffert

```
01 // PROJECT GOAL
02 // SOFTWARE DEMO
03 // SYSTEM ARCHITECTURE
04 // PROCESS REFLECTION
```

01 // PROJECT GOAL 02 // SOFTWARE DEMO 03 // SYSTEM ARCHITECTURE 04 // PROCESS REFLECTION

01 // PROJECT GOAL background

- 7 countries, 11 plants
- 1.5 million cars / year
- **4000** cars / day
- 1000 electrical components / car
- 4 million electrical components / day

How to monitor the status of electrical components in the global range?

01 // PROJECT GOAL AUDI'S NEEDS

- IT support to monitor factories, halls, production lines, testing devices and electrical components globally
- Collection of aggregated information in one single ITtool
- Comprehensive information of all available components in rea time
- Possibility of Customizing the application any time

01 // PROJECT GOAL VISION

66

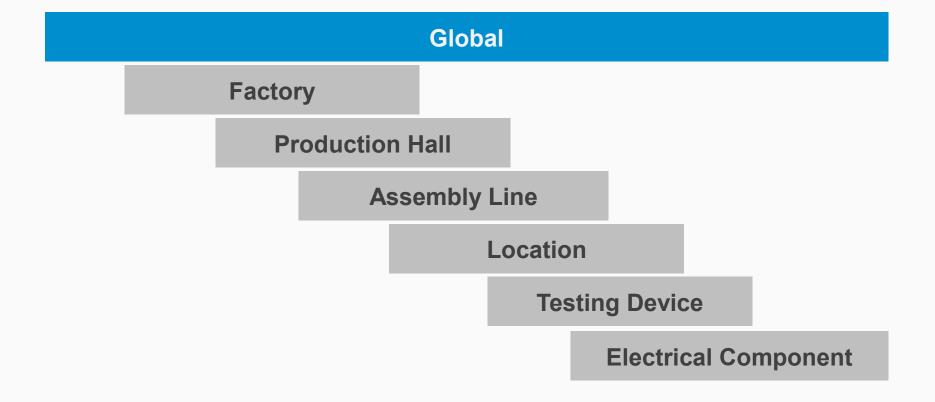
The AUDI Resource Process Visualization project aims to visualize the quality and testing status of the electrical components in AUDI's global production plants. A navigable world map allows hierarchical browsing and dive into every production unit. At each level of browsing, the aggregated quality and testing status is reflected.

"

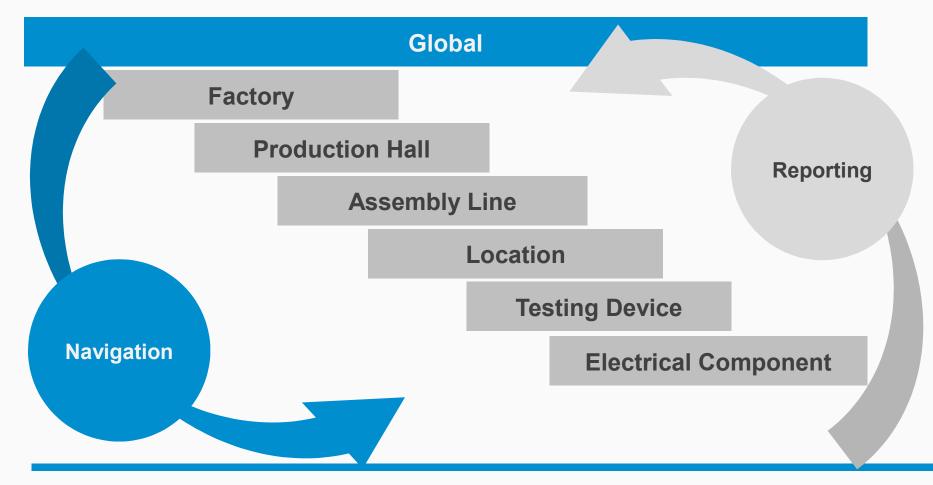
01 // PROJECT GOAL VISION



01 // PROJECT GOAL hierarchy



01 // PROJECT GOAL Feature DIVISION



17/07/2013 S

01 // PROJECT GOAL value delivery

Stakeholders

User

Administrator

Management

Enterprise

01 // PROJECT GOAL value delivery

- Functionality
- Customization
- UI with latest technologies

User

Management

- Information-intensive
- Quality controlling
- Assist decision-making

- Configurability
- Extensibility
- Cross-platform accessibility

Administrator

Enterprise

- Competitive advantage
- **■** Corporate reputation
- **■** Leadership in the market

17/07/2013 **1***

01 // PROJECT GOAL
02 // SOFTWARE DEMO
03 // SYSTEM ARCHITECTURE
04 // PROCESS REFLECTION

02 // SOFTWARE DEMO LIVE PRESENTATION

AUDI Resource Hierarchy Visualization Vorsprung durch Technik Global Lancaster York -Wadden Могилёв Lübeck ishPreston Olsztyn + Гродно Hamburg SeaManchester Groningen Bydgoszcz Бобруйск Bremen Барановичи Nottingham Орёл Солигорск Limerick Włocławek Birmingham Worcester Hannover Waterford Magdeburg Bielefeld Мозырь Cottbus Głogów Kalisz Łódź Hamm Курск Radom Lublin Canterl Kassel Leipzig Erfurt Chemnitz Лушьк ✓ Katowice Житомир Celtic Sea Харків Біла Церква Plzeň Rouen Тернопіль Черкаси /Žilina ано-Франківськ Сло Павлоград Augsburg Linz Freiburg im Breisgau Orléans Bălți Suceava Нікополь Budapest Debrecen Anger: Tours Innsbruck Veszprém Szolnok Oradea Bistrita Graz Миколаїв Мелітополь Békéscsaba Cluj-Napoca Херсон lőlzano - Boze Varazo Genève Onești Trento Timișoara Deva Sibiu Brașov Focșani Limoges Lyon Grenoble Slavonski Broo Târqu liu Ploiesti Banja Luka Bologna Bucuresti Craiova Avianon Saraievo Firenze Oviedo Mostar Pau Лесковац Santiago de Compostela Powered by Leaflet Vitoria/Gasteiz green = OK, yellow = warning, red = critical, grey = unknown

Information Block 1

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et

Information Block 2

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et

proj2.ss13.osramos:de/

Information Block 3

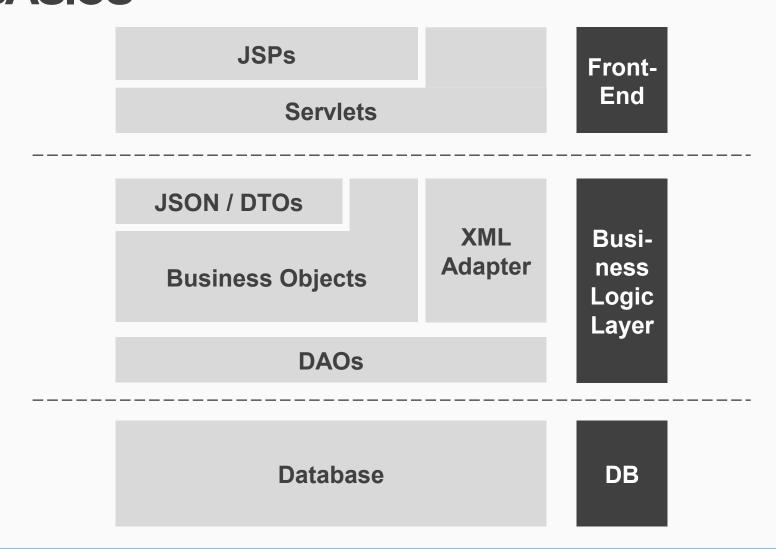
Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores.

© AMOS Project Team 02 // 2013. Alle Rechte vorbehalten.

01 // PROJECT GOAL
02 // SOFTWARE DEMO
03 // SYSTEM ARCHITECTURE
04 // PROCESS REFLECTION

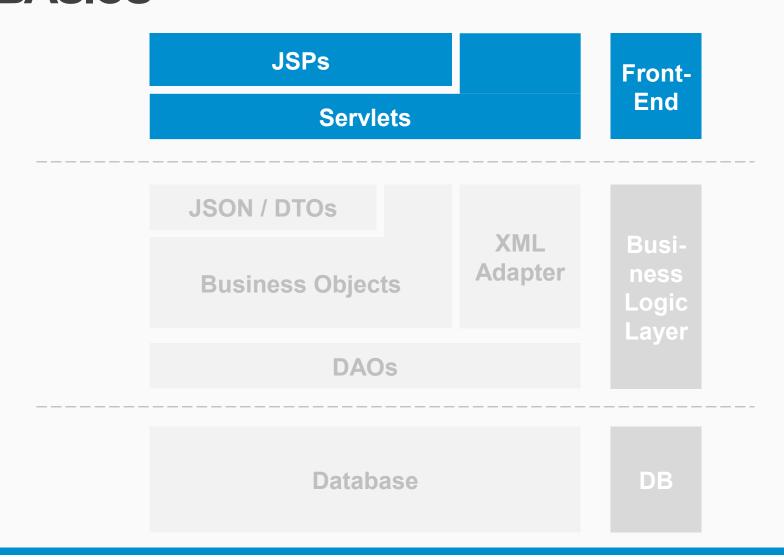
01 // PROJECT GOAL
02 // SOFTWARE DEMO
03 // SYSTEM ARCHITECTURE
FRONT-END
BUSINESS LOGIC LAYER
DATABASE
04 // PROCESS REFLECTION

03 // SYSTEM ARCHITECTURE BASICS

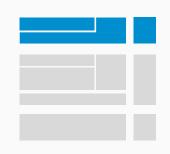


01 // PROJECT GOAL
02 // SOFTWARE DEMO
03 // SYSTEM ARCHITECTURE
FRONT-END
BUSINESS LOGIC LAYER
DATABASE
04 // PROCESS REFLECTION

03 // SYSTEM ARCHITECTURE BASICS



03 // SYSTEM ARCHITECTURE FRONT-END REQUIREMENTS



Front-End requirements:

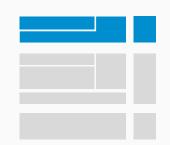
Fluid Columns set relative to others

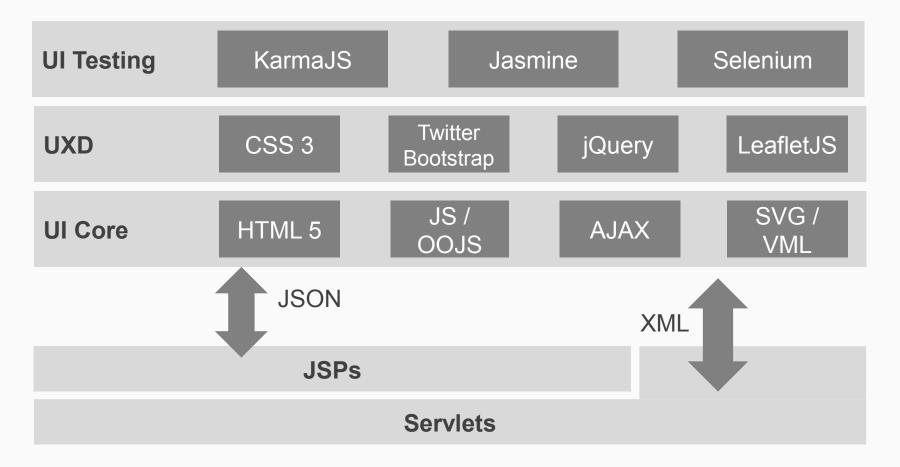
Responsive Fluid grid for usage on PC / notebook / tablets

Adaptive Supporting different screen sizes

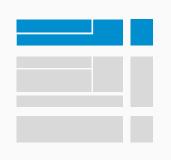
AUDI CI Design Web-fonts, colors, page grid

03 // SYSTEM ARCHITECTURE FRONT-ENd overview





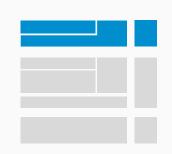
03 // SYSTEM ARCHITECTURE FRONT-END BASIC STACK





17/07/2013 **2**′

03 // SYSTEM ARCHITECTURE FRONT-END PLUGINS (excerpt)









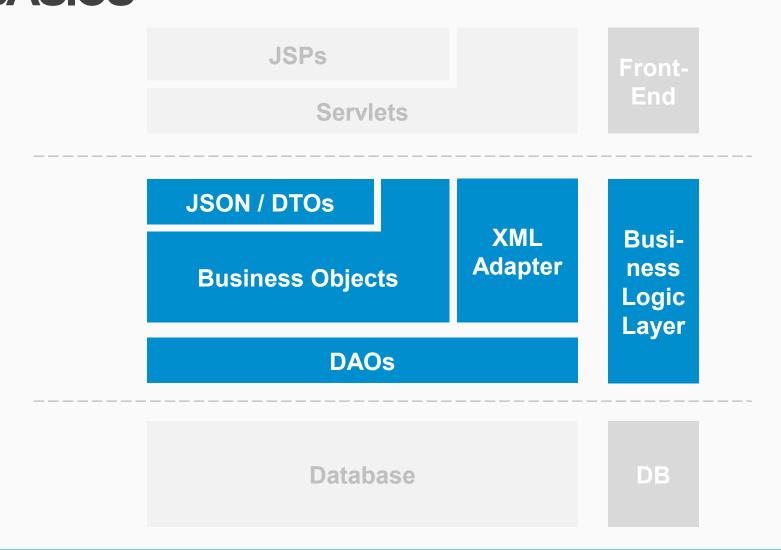




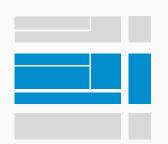


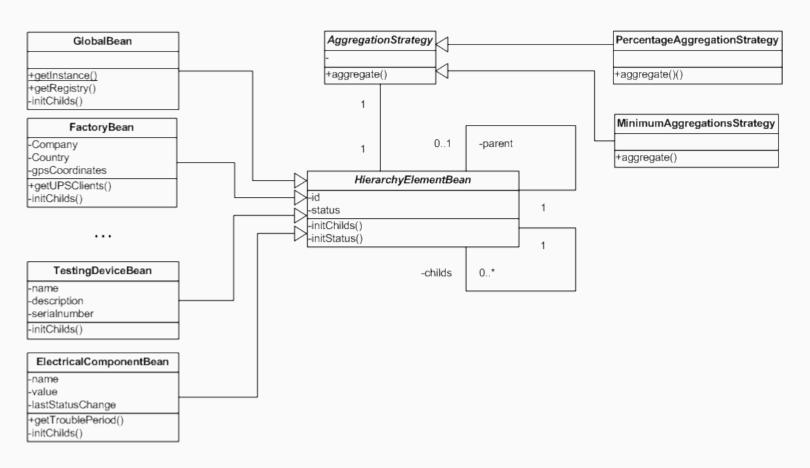
01 // PROJECT GOAL
02 // SOFTWARE DEMO
03 // SYSTEM ARCHITECTURE
FRONT-END
BUSINESS LOGIC LAYER
DATABASE
04 // PROCESS REFLECTION

03 // SYSTEM ARCHITECTURE BASICS

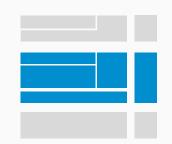


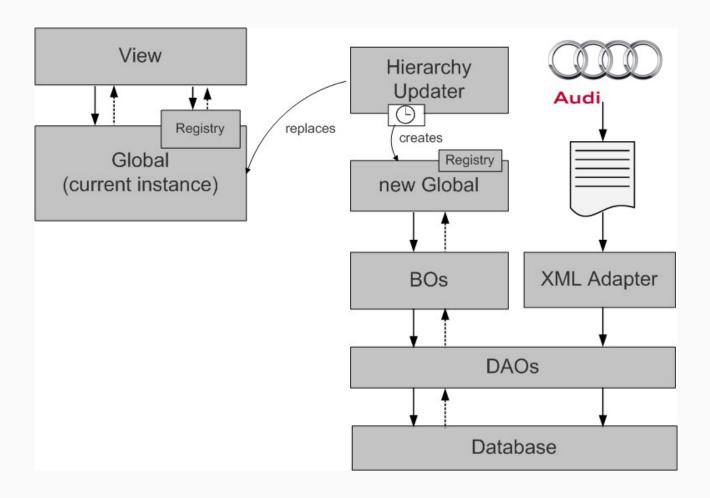
03 // SYSTEM ARCHITECTURE Class diagram (excerpt)



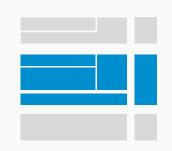


03 // SYSTEM ARCHITECTURE Data flow



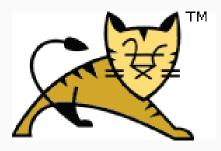


03 // SYSTEM ARCHITECTURE Technology stack







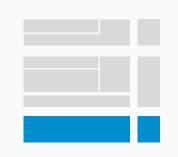


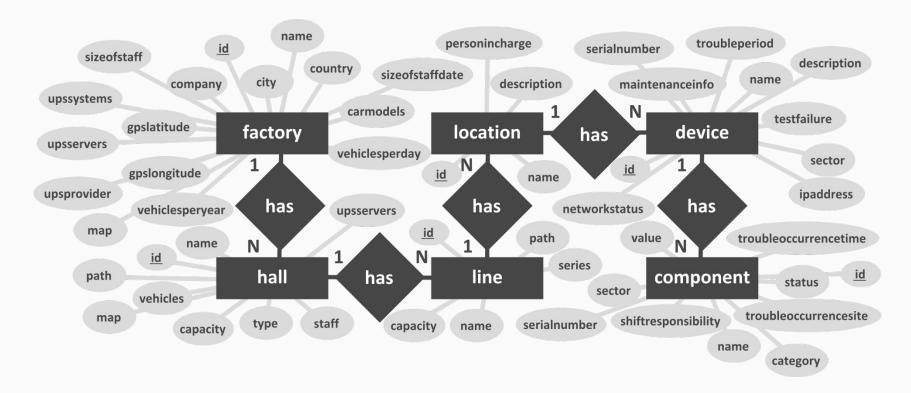
01 // PROJECT GOAL
02 // SOFTWARE DEMO
03 // SYSTEM ARCHITECTURE
FRONT-END
BUSINESS LOGIC LAYER
DATABASE
04 // PROCESS REFLECTION

03 // SYSTEM ARCHITECTURE BASICS

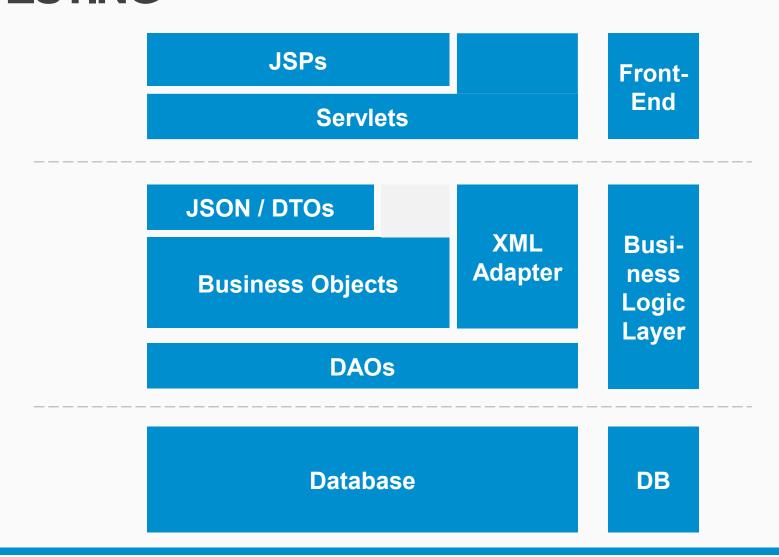
JSPs End Servlets JSON / DTOs XML Busi-**Adapter Business Objects** Logic **DAOs Database** DB

03 // SYSTEM ARCHITECTURE Database ER-Diagram





03 // SYSTEM ARCHITECTURE TESTING



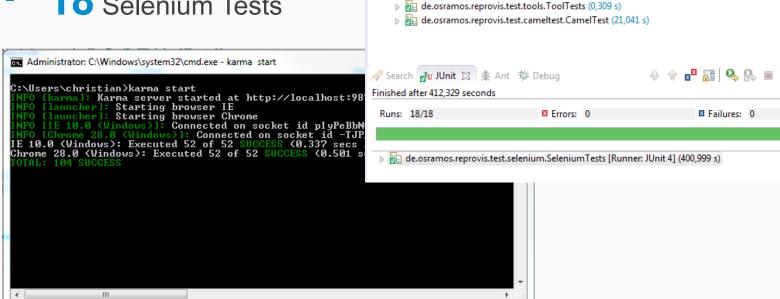
17/07/2013 **3***

03 // SYSTEM ARCHITECTURE TESTING



■ Failures: 0

- 153 JUnit Tests
- **52** Javascript Tests
- 18 Selenium Tests



17/0**7**/2013

Errors: 0

de.osramos.reprovis.test.AllUnitTests [Runner: JUnit 4] (3.093,469 s)

de.osramos.reprovis.test.daotests.DAOTests (80,137 s)

Finished after 3.093,531 seconds

Runs: 153/153

01 // PROJECT GOAL
02 // SOFTWARE DEMO
03 // SYSTEM ARCHITECTURE
04 // PROCESS REFLECTION

04 // PROCESS REFLECTION





Thank you! Questions?

Team 2 // Gumbrecht, Guo, König, Mühlroth, Stauffert