Results of Group X

SEAMS 2010 Exemplar Session
Exemplars Participants have worked on resp. published on ...

- Body Sensors for Heart Monitoring
- Traffic Monitoring
- Distributed Deployment and Dynamic Reconfiguration Manager
- Dynamic Configurable Services (OSCI Framework; many systems build with)
- Rescue System
- Health Treatment Booking System
- Energy-aware and Self-Repairing Washing Machine
- Traffic Controller
- Chat Server
- Autonomous Shuttle System
  - Decentralized Convoy and Fleet Coordination
  - Optimization of the behavior within a single Shuttle (Strict Hierarchical System)
- User-Driven Adaptation of Interactive Environments

Remark: All (besides me) agree upfront to deliver a complete description 😊
Properties of the Exemplars?

• Why not ZNN? No high-level description
• Selection criteria: Problem must fit to the approach you want to study

Outcome:
• Not too small and not too big
• Good documentation
• Test/Use cases resp. Scenarios (fulfilled and not fulfilled)
• Classification of the Exemplars (w.r.t. several dimensions/criteria)
  – Anticipated Adaptations?
  – Status (Industrial Application, Real; Research Prototype, ...)
  – ...

Classes of Adaptive Software

• There are Problems that “are” inherent Self-Adaptive
• There are problems where a Self-Adaptive Solution is beneficial
• And there are systems where a Self-Adaptive Solution is overkill!

• Open vs. Closed Self-Adaptive Systems?
• Anticipated vs. Unanticipated Self-Adaptive Problems
• Self-Adaptive Systems covering Anticipated vs. Unanticipated needs