

Gido Wahrmann

E-Mail: gido.wahrmann@hshl.de

Kristian Rother

E-Mail: kristian.rother@hshl.de

Stefan Henkler

E-Mail: stefan.henkler@hshl.de

► Requirements update

Deadline April 29

- Refine your system and define subsystems.
 - No concrete e.g. sensors or hw elements but the definition of required subsystems
 - E.g. a car consist of wheels, engine, ...
 - Use SysML for the description
- Identify an appropriate architecture
 - Which one fits best for your purpose
 - Layered Pattern
 - Five-layer Architecture Pattern
 - Microkernel Architecture Pattern
 - Channel Architecture Pattern
 - Recursive Containment Pattern
 - Hierarchical Control Pattern
 - Component-Based Architecture
 - Use SysML for the description
- Refine your design idea
 - As a prototype and / or a sketch / models etc.
 - Think about different alternatives (which one fits best for your purpose)
 - Prototype on a scale of 1:10 (x<25cm, y<20cm, z<22cm)

► **Systems Engineering Output - Summary**

Deadline April 29 – Discussion on April 30

- Systems Engineering Milestone (final deadline)
- Use case specification – make the concrete to be focused on scenario clear!
 - Use Case Diagram
 - Sequence and/or activity Diagram
- Context Diagram
 - SysML Block Diagram
 - SysML Constraint Diagram
- Requirements
 - SysML Requirements Diagram
- System structure
 - System / subsystem view including appropriate architecture
- Raw sketch of prototype