Universität des Saarlandes

Fakultät 6 – Fachrichtung 6.2 – Informatik

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Architectural Thinking for Intelligent Systems, WS 2020/21

Assignment for Lecture 7

Formulate the system vision and system idea. Create views to communicate the system idea.

We formulate the vision for our system and sketch a first idea of its architecture. Furthermore, we work out the context view, think carefully about the operational model and dive deeper into system behavior. We capture our findings in runtime and distribution views.

1) Develop a vision for the system to be developed. Write the vision according to the structure of the vision statement presented in lecture 7.

2) Sketch an initial system idea and create an architecture overview diagram. Work out two different views of this overview diagram for the viewpoint of the business owner and the viewpoint of the developer team. Show relevant system components in these views.

3) Develop the context view for your system. Are all actors and users represented? Have you captured the system environment completely and specified all interfaces to surrounding systems? Annotate the interfaces with all events and information objects that flow across the system boundaries.

4) Which interfaces will require the biggest project effort? Where are critical dependencies to environmental systems? In which dependencies to external systems do you locate the biggest risks?

5) How will the system be used and deployed in everyday life? Create a runtime and distribution view that explains a possible operational model.

6) Which of your architectural decisions influence the operating costs? Where are the largest cost drivers for development and maintenance?

Submission

Instructions can be found in slide deck A1-BasicConcepts and on the course website.