Abstract

Course System Architecting Introduction
Abstract

This article describes the course Systems Architecting. The course is set up to make the art of system architecting more accessible. The course will address a wide spectrum of issues in relation with system architecture, such as: Processes, Business, Role and task of the system architect (team), Roadmapping, System Architect toolkit, Technical, Skills, and Psycho Social
<table>
<thead>
<tr>
<th>Session 1</th>
<th>Positioning the System Architecture Process, Product Creation Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 2</td>
<td>Role and Task of the System Architect</td>
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<tr>
<td>Session 3</td>
<td>Requirements Capturing</td>
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<tr>
<td>Session 4</td>
<td>System Architect Toolkit</td>
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<tr>
<td>Session 5</td>
<td>Roadmapping</td>
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<tr>
<td>Session 6</td>
<td>Product Families, generic developments</td>
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<tr>
<td>Session 7</td>
<td>Documentation, reviewing and other supportive processes; The role of Software in complex products</td>
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<tr>
<td>Session 8</td>
<td>BoM presentation</td>
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<tr>
<td>Session 9</td>
<td>Psycho Social side</td>
</tr>
<tr>
<td>Session 10</td>
<td>Wrap up, Expectations, How to continue, Evaluation</td>
</tr>
</tbody>
</table>
Structure

passive
Theory
dull

Insight
Practical Illustration
vivid

active
Interaction
vivid
Spin-off:
cross-fertilization

Abstraction
Exe

Theory
dull

Insight
Practical Illustration
vivid

Interaction
vivid
Spin-off:
cross-fertilization
Timing Template of one subject

9:00 10:00 11:00 12:00 12:30
13:30 14:00 15:00 16:00 17:00

interactive exploration    broadcast
break
broadcast     interactive discussion
break
groupwork    discussion
Rules of the Interactive Parts

- Your contribution is essential.
- Don’t monopolize the time, everyone also the quiet people should have the opportunity to contribute;
  *The facilitator will intervene if the contribution is limited to a small group of participants.*
- Respect the contribution of others;
  *Opinions can’t be wrong, difference of opinion is normal and called pluri-formity.*
- The course format is highly experimental and based on improvisation, constructive proposals are welcome;
  *it is your course! Regular evaluations will give the opportunity to influence the rest of the course.*
Rules of the Broadcast Parts

- Please write your questions/remarks/statements on yellow stickers and attach them at the end on the P-flip. 
  *These will be used in the interactive section for discussion and to increase insight.*
- Short clarification questions are welcome, 
  *discussion will take place in the interactive part.*
- Stupid questions don’t exist. Learning is based on *safe* and *open* interaction. 
  *Very individual oriented questions can be referred to a break or after the session.*
Abstract

The Gaudí project is described. The goals of the project, the way of working, and an outline for the period 2001 to 2003. The deliverables in terms of documents are positioned by means of a two-dimensional map. Courses based on the Gaudí material are described. The current status of the courses is given.
Goals of the Gaudí Project

• Consolidate existing Systems Architecting Methods
  evaluate, reflect, generalize

• Make the Systems Architecting art more accessible
  case descriptions

• Enable the education of (future) System Architects
  curriculum, course material

• Research new or improved Systems Architecting Methods
  industry as laboratory
Modular approach
Show Early to Get Feedback

leading principle:

show documents under construction
but clearly show their status

idea
planned
preliminary
draft
concept
draft
finished
idea
usable
stable
but still
alive

The Gaudí Project
Gerrit Muller

version: 3.1
September 9, 2018
GPdocumentStates
Growth of the System Architect

- Root technical knowledge
- Generalist technical knowledge
- Business, application insight
- Process insight
- Psychosocial skills
Positioning Courses

Gaudi courses

- Performance Architecting System Performance
- Modeling System Modeling and Analysis
- CAFCR Multi-Objective System Architecting and Design
- SARCH System Architecting
- Platforms and Evolvability Architecting Evolvable Product Families
Productivity: number of new entries

<table>
<thead>
<tr>
<th>Year</th>
<th>SARCH</th>
<th>CAFCR</th>
<th>Modeling</th>
<th>Evolvability</th>
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<tbody>
<tr>
<td>1999</td>
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<td>30</td>
<td>8</td>
<td>6</td>
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<td>15</td>
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Average productivity: 22 entries

Philips to BUC

ESI

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GPproductivity