

Architecting System Performance; Course Overview

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Abstract

Course overview of the course Architecting System Performance.

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January 3, 2017
status: preliminary
draft
version: 0.3

1. Course introduction	8. Emerging Behaviour	15. Measuring Performance
2. Managing system performance	9. Budgeting	16. Resource Management
3. Course didactics	10. Modeling Paradigms	17. Greedy and Lazy Pattern
4. Connecting breadth and depth	11. Applications and Variations	18. Scheduling
5. Performance Modeling	12. Model Analysis	19. Robust Performance
6. Level of Abstraction	13. Reasoning Approach	20. Bloating, Waste, and Value
7. Visualizing Dynamic Behavior	14. Defining Performance	

Nuggets Architecting System Performance

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Assignments in Face-to-Face Module

0. elevator case

supersystem

system

subsystem

1. sketch the problem
goal

use case

key performance
parameters

main
concepts

critical
technologies

2. make conceptual model of the current situation

- model dynamic behavior
- model 0-order kpp using functions (as simple as possible)
- quantify contribution to kpp using observed data

3. explore customer and business relevance

- develop story
- model workflow and performance
- model customer value as function of kpp

4. make conceptual model of potential solutions

- model the foreseen solution
- model & compare 2 alternative solutions

5. list questions and uncertainties, reformulate problem and goal, and formulate gaps and options

6. develop an elevator pitch to report you findings and recommendations to management