

PA1308 Self Study Package - Architecture Transformations

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Abstract

In this study package you'll learn which architectural transformations you can apply on your architecture after an evaluation.

1 Architecture Transformations

Why, what and how?

- What have design patterns and architecture transformations in common?
- After applying an architecture transformation, why is it important to re-evaluate the architecture?
- Choose which architecture transformation has a bigger impact on the architecture. Explain and motivate your choice:
 - apply a design pattern vs. imposing an architectural pattern
 - apply a design pattern vs. distribute requirements
 - imposing an architectural style vs. convert NFRs to functionality

Hints:

[2] (Attention: Use BTH technical report and not IEEE paper since that is shortened)

Advanced reading:

[1,3]

References

- [1] O. Barais, J. Lawall, A.-F. Le Meur, and L. Duchien. Safe integration of new concerns in a software architecture. In *Engineering of Computer Based Systems, 2006. ECBS 2006. 13th Annual IEEE International Symposium and Workshop on*, pages 10 pp. –64, March 2006.

- [2] J. Bosch and P. Molin. Software architecture design: evaluation and transformation. In *Engineering of Computer-Based Systems, 1999. Proceedings. ECBS '99. IEEE Conference and Workshop on*, pages 4 –10, March 1999.
- [3] S.J. Carriere, S. Woods, and R. Kazman. Software architectural transformation. In *Reverse Engineering, 1999. Proceedings. Sixth Working Conference on*, pages 13 –23, October 1999.