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UNIVERSITÄT
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INF

FAKULTÄT FÜR
INFORMATIK

Distributed and Operating Systems Group

Advanced Operating System Issues (AOSI)

Excercise Sheet 1

Due date: 25.10.2012

1 Definition: Distributed Operating System

1. Characterize the distributed behaviour of the following examples
 - A local network of Windows 7 PCs accessing a central file server
 - A notebook accessing a Web page over a WLAN-Hotspot
 - A rendering farm calculating a new Pixar movie
 - A car breaking using the ABS system
2. Define and explain the different transparencies, which are beneficial for distributed systems.
3. What are positive aspects of a distributed system and which additional problems may arise from the decision of using a distributed approach?
4. Is a multi-core computer a distributed system? Justify your decision!

2 Programming Abstractions

Charecterize the difference between the following pairs of abstractions:

- | | |
|---------------------|-----|
| Object ↔ Class | (1) |
| Object ↔ Component | (2) |
| Object ↔ Actor | (3) |
| Component ↔ Service | (4) |