Characteristics of a Useful Exemplar

• Domain-applicable
  – Makes it easier

• Level of detail
  – Family of problems
  – Identify variation points

• Length:
  – 1-2 pages
  – Link to potential realizations and related artifacts

• Context:
  – Where is it in the “adaptation loop”
    • What’s being monitored (e.g., performance, reqt changes, env conditions)
  – What application scenario?

• What is the “special” adaptive capability that you can’t get with traditional SE techniques?
  – Pose hypothesis about how you can address problem posed by exemplar that can’t be addressed with traditional SE and computing systems
  – How do you measure the gain that you can get with an adaptive solution?
Candidate Exemplars

• Ubiquitous computing
  – E.g., Situational Student Helper (Ghezzi et al)
  – TeleAssistance (Smart Homes/Emergency) [IET Software, ICSE09]

• Web-services
  – Adaptive news server (Znn.com)

• Autonomic robots
  – Emergency Rescue Robots
  – 1 or more robots perform a given task
  – Cooperation/negotiation
  – Unreliable communication