

# An ontology-based context management and reasoning process for UbiComp applications

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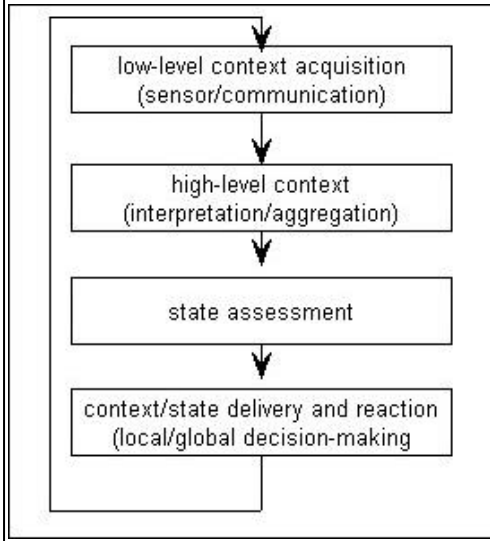


## An approach for building a context-aware UbiComp system



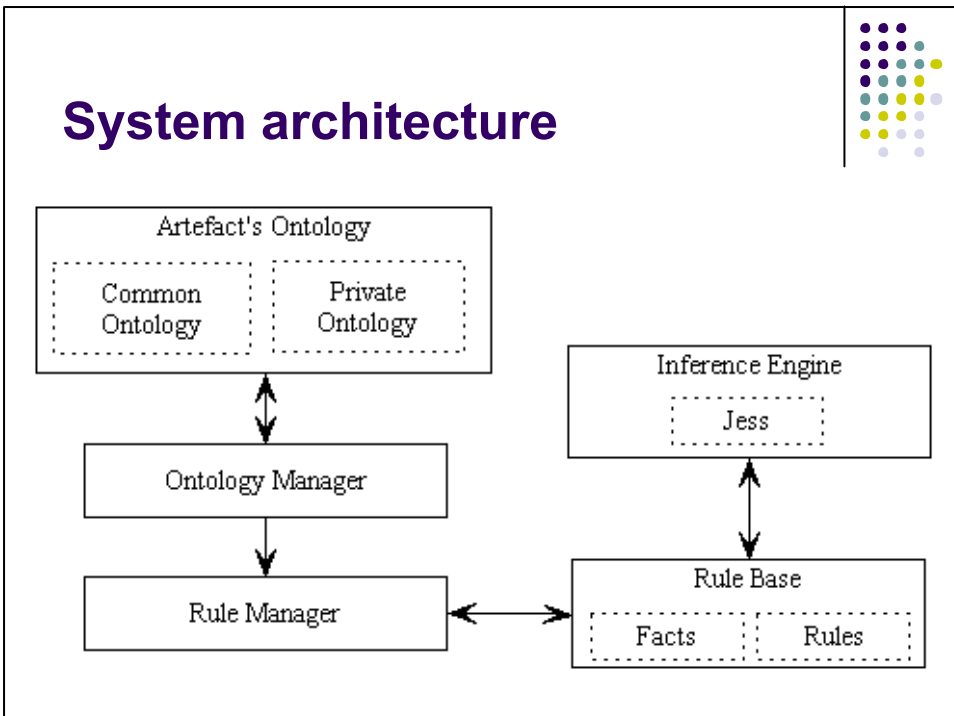
- **Lexical Level:** translates environmental signals to context events
- **Syntactical/Representation Level:** translates context events to meaningful context information using an ontology
- **Reasoning Level:** provides models for context fusion in context hierarchies
- **Planning Level:** defines strategies and schedules actions to be taken in response to context variance
- **Interaction Level:** provides models for personal and collective interactions in Aml environments

## Context management process



- Acquisition of raw data from sensors
- Sensors' output interpretation to higher level context / Aggregation of various context
- Artefact's state assessment
- Response activation based on local / global context information

## System architecture



**Fin**

Thank you very much!

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