In-vehicle information management

Provide drivers the information that they need: prioritize based on context.

HMI manager

1. Information is sent by applications as messages with properties "importance" and "urgency".
2. MentalState stores/shares messages received from applications: context of information.
3. PriorityManager uses importance/urgency/MentalState to determine message priorities.
4. Presentation templates are loaded upon request from the PresentationManager.

Configuration Time

- Ontology: OWL
- Message classes:
  - Safety
  - Navigation
  - Vehicle control
  - Traffic
  - Services
- Rule engine: SWRL

Timeliness & safety

- Standardization
- Deductive reasoning
- Computational power of on-board units

Runtime

Finite State Machine

"Heavy weight solution in light weight environment"