Today

- Express verbally our desired goal
  Example: overview our courses which a shift to
- Implementation of SQL
- Discussion of "rules" and limitations
- Further: more complete business rules
  Example: % of usage of advanced class rooms
Composable Security

Threat

System Capabilities

System "SPD" class number
indicating measurable security
Semantics

Future Systems

Middleware

Network

Sensor

Security, Privacy, Dependability

Measurable Security

Anly, Early
Lessons learned from "first exercise on rules in ontologies"

Student (??) ∨ Course (??) →

Study (??, ??) =

"internal" properties
implcations

Help SWRL Query
= SQURL
∩ SQURL: select (??, ??)
Protege 3.x vs 4.x

SWRL in Protege 4.x

Properties & "internal reasoning" in Protege

Martin

Philip

Jose
Rule 3:

- beer
- restaurant
- bars

"or"

- person
- car
- school
- petrol

"sells petrol"

- places with hamburgers
- selling petrol

- list of places

and not possible
Limitations of ontologies & rules

SWRL: no "or"

Ontology: meat

Owl is

Open world assumption → Everything which is not forbidden is allowed

Close world assumption → Only things which are explicitly allowed are allowed (everything else is forbidden by default)

In security

⇒ open to everybody, except +, y, z

Closed for everybody, open for holders of an ID card

Alice, Jim,...