Domain description for the hands-on activities

ONTOLOGIES AND SEMANTIC WEB
2007/2008
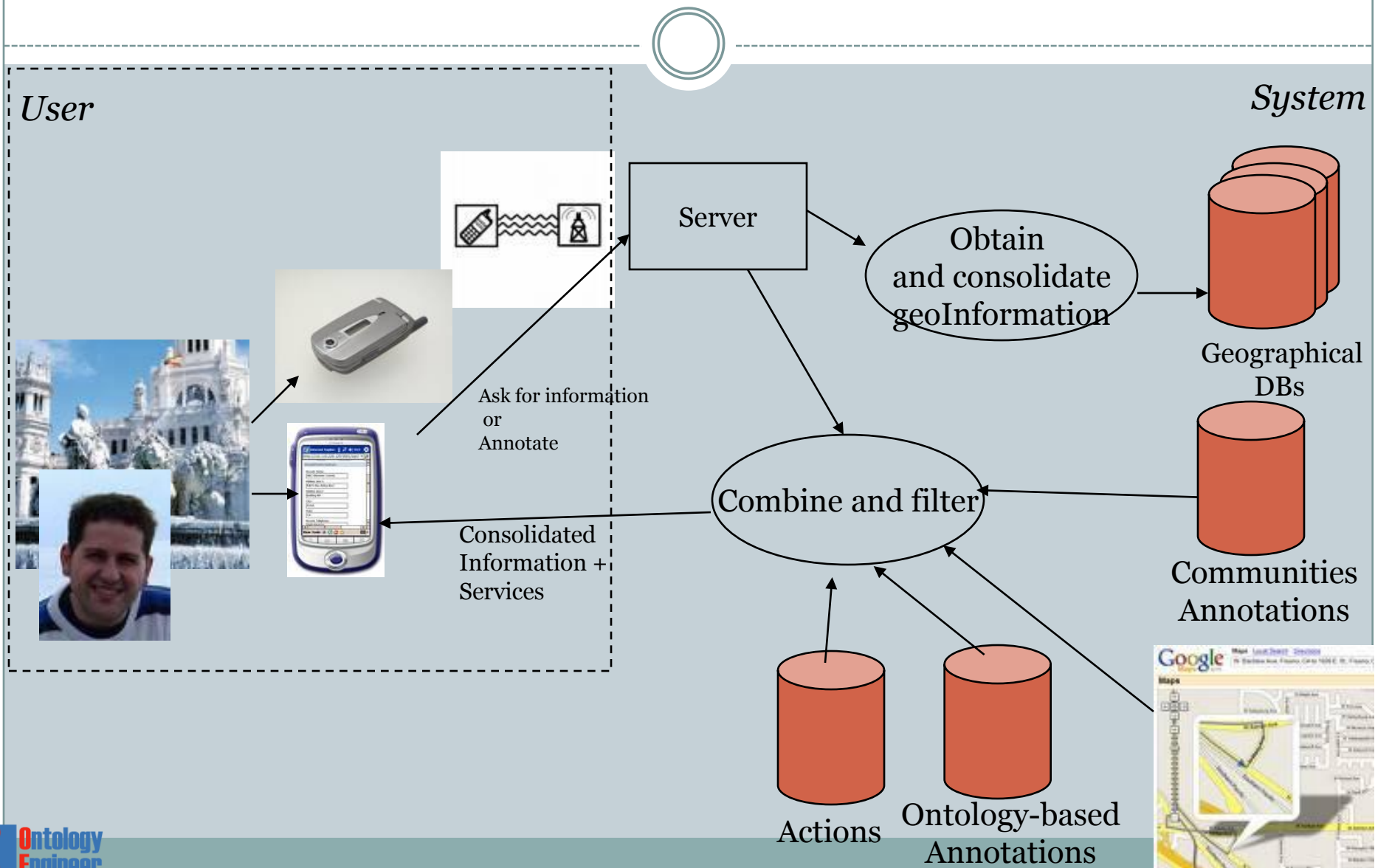
OSCAR CORCHO
(OCORCHO@FI.UPM.ES)
OCTOBER 11TH, 2007

A pilgrim in St. James' Way (Camino de Santiago)

- Diverse routes for pilgrims (almost DIY)
- Self-emergent community of pilgrims
  - People that talk about their experiences during the way
  - People that join together in the joy of walking
  - Mobile users
- People want to
  - Find interesting locations
  - Find community services
  - Provide information

Semantic Web (+ Web2.0) system for pilgrims

User

System

Server

Ask for information
or
Annotate

Consolidated
Information +
Services

Obtain
and consolidate
geoInformation

Geographical
DBs

Combine and filter

Communities
Annotations

Actions

Ontology-based
Annotations

Ontology
Engineer
ingGroup

Sub-domains for this system

- Geographical locations and points of interest
  - Cities, villages, rivers, hills, etc.
- Buildings
  - Churches, abbeys, etc.
  - Architectural styles
- Art
  - Paintings, sculptures, music, poetry, etc.
  - Artistic styles
- Community services
  - Food, accommodation, health, etc.
- Likes and dislikes, tastes, personalisation

Relationship with hands-on activities (I)

- **Selection of case studies**
  - Describe useful services
  - Find suitable information sources
  - Find suitable ontologies
- **Ontology implementation in RDF(S) and OWL**
  - Prototypes of ontologies in each area
- **Terminological resources**
  - Find and compare terminological resources (thesauri, databases, etc.) in each area
  - Transform terminological resources into ontologies
- **Multilingual ontologies**
  - Ontologies in Spanish, English (and Galician?)

Relationship with hands-on activities (II)

- **Ontology engineering**
  - Ontology development activity planning
  - Requirement specification
  - Ontology mapping
    - Upper-level with domain
    - Domain with domain (combining groups)
- **Annotation**
  - Generate RDF from texts (selected information sources)
  - Generate RDF from databases (selected information sources)