Crossroads

Semantics and the Mobile Web

Presented by Evan Patton
Semantic Web

- Two Parts
  - Data storage and retrieval
    - RDF+XML
    - N-Triples
  - Reasoning Capabilities
    - OWL
Reasoning at the consumer level has only recently become feasible

Take my Mac:
- 2.4 GHz Intel Core 2 Duo, 2 GB RAM
- Loading time from RDF to Pellet Inf. Graph
  - 20-30 seconds
That’s all well and good, but...

Most of the world isn’t connected to the Internet yet

Most of the newer connections in the US and abroad are mobile devices

Mobile devices are comparable to desktops of 10 years ago in terms of computational power
620 MHz
80 MB RAM
My first foray into mobile computing and ontology visualization

Came about before the release of the full iPhone SDK

Served entirely as a web application
Load OWL Document:

Wine Ontology

Loaded Documents:

None

About

About OWL Mobile
Limitations

Making applications for mobile devices is a difficult process

Things to consider:

- Slower processors, generally single core
- Less RAM + no virtual memory
- Battery life
Current Solution

- Move processing into the cloud
- Not exactly cost effective
- Millions of users with individual data will require processing on an enormous scale
- Internet connectivity is a necessity
Future Work

- Wine Agent 2.0
- Updating the wine ontology
- Making the Semantic Web mobile
- Distributed reasoning
- “Social” reasoning
Questions?

Wine Agent

- Login
- Create New User

Recommendations
- Get Recommendations
- Recommend Wine for Meal
- Recommend Meal for Wine
- Group Wine Recommendation

Manage Recommendations
- Make New Recommendation
- View My Recommendations