Ad-me: A Context-Sensitive Advertising System within a Mobile Tourist guide

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Research Motivation

- M-commerce is set to witness phenomenal growth.
- Mobile *context-sensitive* advertising is at an embryonic stage.
- Existing electronic tourist guides do not take full advantage of *context*.
- Lack of interoperability with the various wireless devices. (PDAs & cellular phones)

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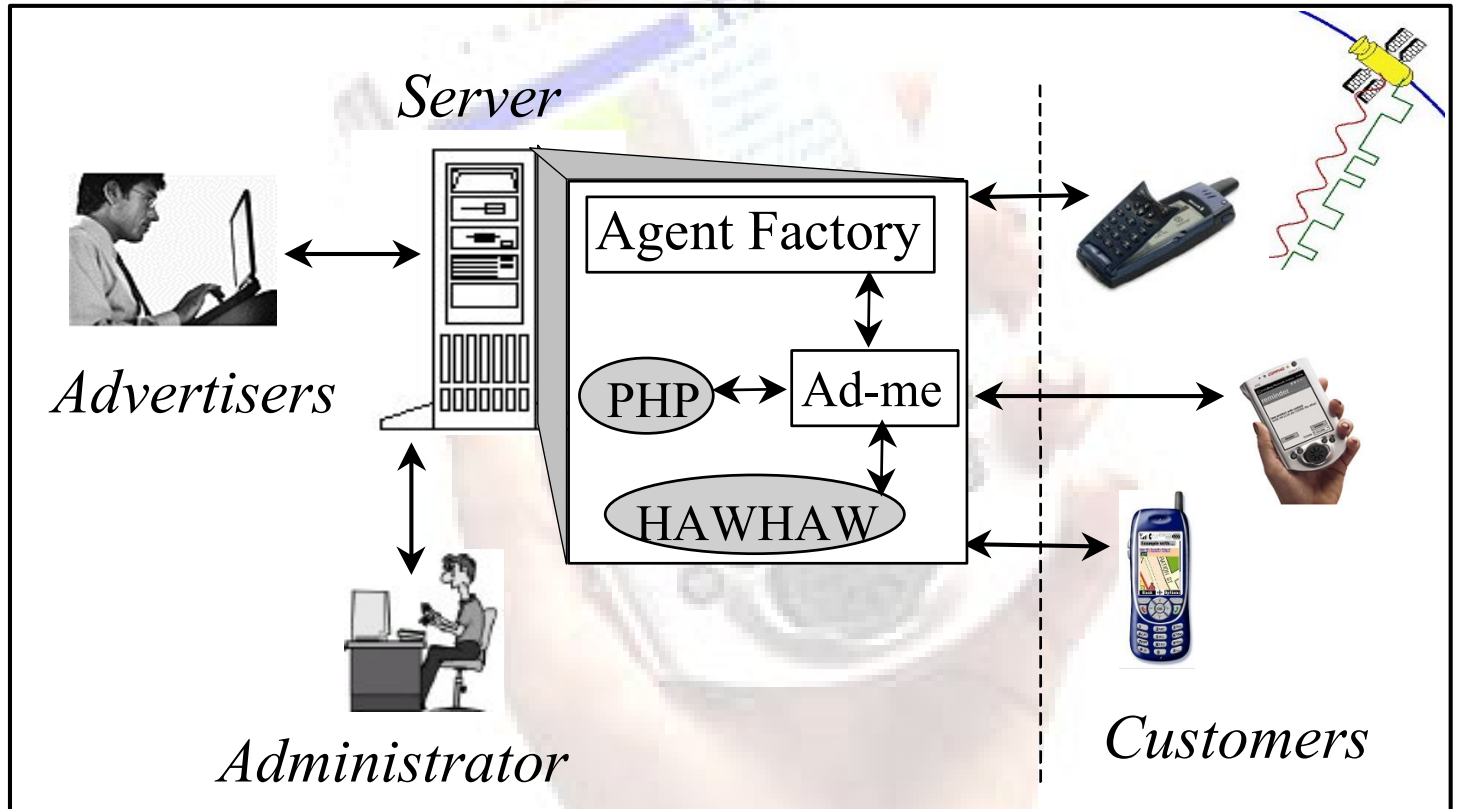Practice & Research in Intelligent Systems & Media
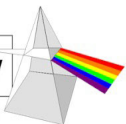
Requirements

- Context definition and utilization;
- Location management;
- User modelling (customers & advertisers);
- Correlating customer and advertiser profiles;
- Incorporating Geographical Information;
- Estimating the sales status of the application;
- Delivering the content with due consideration for the user's infrastructure capabilities and pricing model for the wireless service.
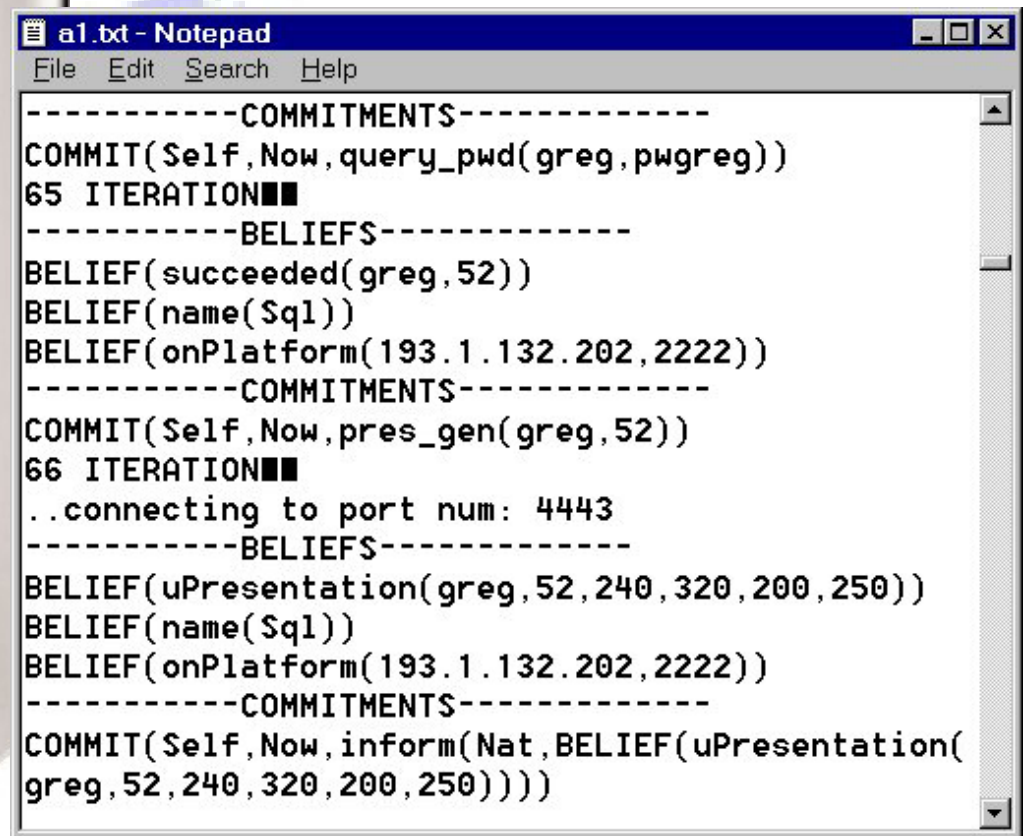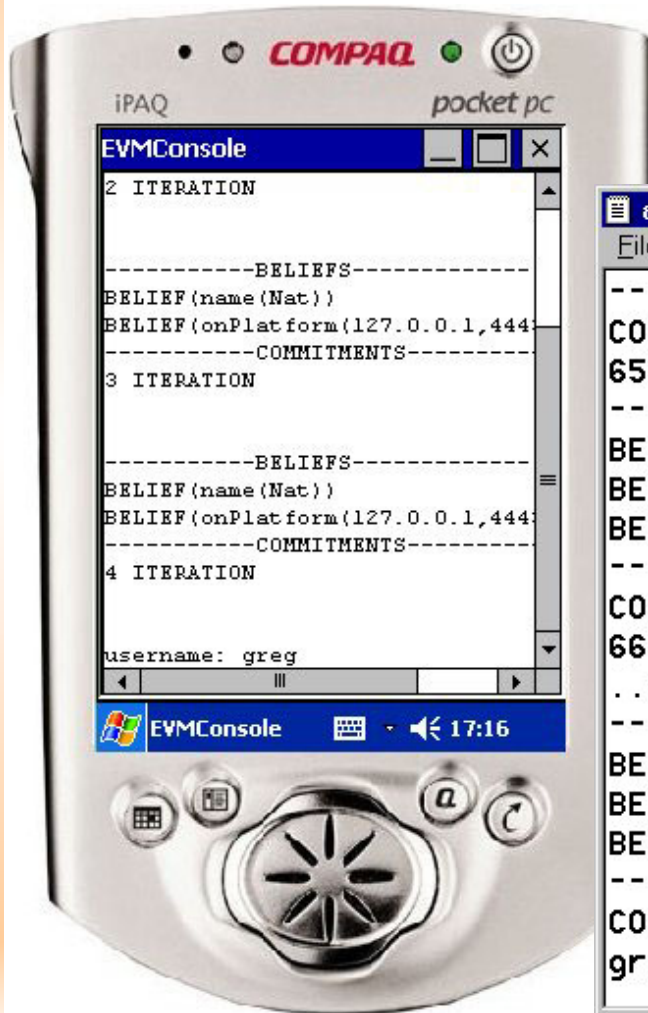
Proposed Approach

The *Ad-me* system:

- Adopts an agent-oriented (BDI) approach;

- Utilises the Agent Factory (AF) System: a distributed environment for the rapid prototyping of intelligent agents.

- Provides a backdrop of tourist information;

- Offers a context-sensitive advertising capability;

- Provides a simple and effective advert posting capability (push and pull technologies);

- Strives for maximum diffusion (can be hosted on any wireless device with network connection and JVM).

Overall Architecture

Server

Advertisers

Agent Factory

PHP ↔ Ad-me

HAWHAW

Administrator

Customers

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Demo

Demo (2)

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Demo (3)

Conclusions

- The context-sensitive advertising on wireless devices is emerging issue.

- Ad-me is targeting personalized and location-aware advertisement for cellular phones and PDAs.

- The BDI agent-oriented approach supports for real-time content retrieval, content presentation, user modeling and corelation of customer and advertiser profiles.

- The use of PHP facilitates interoperability ensuring the delivery of content to a rich diversity of devices.