

Hyper Gloss Tourist Information

Project idea for the 4th call in the IST-Program of the EU, action line I.5.4. - Intelligent systems for improved tourism and travel services

Project idea: Throughout the city, in particular at places and buildings of interest for tourists, small markers (see figure 1) are attached. The markers can be read by means of a PDA equipped with a camera (personnel digitally assistant, e.g. Palm pilot, Pocket PC). In a few years even mobile phones of the new UMTS standard could be used. For every marker relevant information is displayed on the PDA. This information can be of different type, primarily text, in addition, pictures, videos or sound files. The information describes the "item" to which the marker is attached or gives other information of more indirect nature. After an appropriate selection e.g. the way to the next public toilet, to an inexpensive Italian restaurant or the best connection by means of public transportation will be displayed. The type of the represented information can be context sensitive: e.g. if the description of a way was requested, then the next acquired marker will be interpreted as a way point ("go now to the next traffic light ...") whereas during in the "normal mode" the marker would perhaps display information about the historical meaning of the building the marker is attached to.



Fig. 1: Example of the structure of the marker for the identification of Internet information. The marker identifies any computer on the Internet and documents on this computer.

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There are different versions conceivable, how the information is stored. In a first, technically less demanding version, the information is stored on the PDA. The visitors of the city can borrow a PDA at the local tourist information or prior to their visit load the appropriate information from the Internet on to their own PDA. Apart from the official tourist information e.g. publishing houses (for a fee) or private individuals offer appropriate information. In a technically more complex version the PDA (or the UMTS mobile telephone) is connected directly with the Internet and timely information can be represented. In a further version the users of the system can add their own information to the system, e.g. the evaluation of a visited restaurant.



Fig. 2: PDA with camera (Handspring Visor and Eyemodule)

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Possible members of the project group:

- Institute of Industrial Engineering and Ergonomics, Aachen University of Technology
- Aachen Tourist Service
- Similar institutions of (European) cities of high touristic interest
- Relevant publishing house

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Background information:

Aim and focus of the action line "I.5.4. Intelligent systems for improved tourism and travel services": To enable tourists, citizens on the move and tourism service providers in Europe to take advantage of the development of "ambient intelligence" environments for improving tourism and travel services.

The call focuses, among others, on innovative electronic assistant systems for tourists and citizens on the move integrating both state-of-the-art mobile multimedia information and positioning services as well as advances in dynamically customisable interfaces for providing ubiquitous, proactive interaction with relevant information and services. The new systems should integrate advances in dynamically customisable interfaces (e.g. considering user profile and interaction, actual timing and position, device in use) and support innovative business models together with the adaptation, re-use and integration of existing processes, services and dispersed information. They should adopt open distributed architectures, support interoperability, scalability, quality assurance and be based on widely accepted protocols. Validation and evaluation methodologies should be addressed in providing new solutions and facilitating dissemination of best practices and exploitation of results.