

Project Information



Crumbs, Places and Augmented reality in Social Networks

The CRUMBS project aims to create a platform to organize information in a social network based on users interacting with their physical environments while wandering around. This idea means that users will consume rich multimedia social content “stuck” in different places by using their mobile phones as a mixer between the real world captured by the mobile camera and the (crumbs) social content provided by CRUMBS users.

Main focus

The idea of the CRUMBS project is based on the fact that everyday people leave traces of their activities everywhere they go. CRUMBS Mobile Social Platform proposes a new way of organizing users’ generated content by applying not only the traditional information time-sorting-based approach but also providing a geo-spatial logic and a social-perspective in the way that community information is presented.

Users will see their surrounding environ-

ment overlapped by enriched social media content through the use of their mobile phones, in which they have the new developed Mobile Application. It incorporates both the Augmented Reality Engine, which will mix this enriched social media content with the real world images captured by the camera, and the Social CRUMBS services.

Approach

CRUMBS will provide mobile users with a technology that is a major breakthrough in a way social content (e.g. photos, videos, notes, reminders, songs, recommendations, etc.) is displayed on their mobile devices as they wander around. Augmented Reality cutting-edge technology will be used so that the virtual community content is overlapped with the real world image that users see through their mobile camera.

The CRUMBS project will overcome current Mobile Social Network drawbacks such as:

THE INTANGIBLE CULTURE NEEDS
MORE REALISM



CRUMBS

Project ID: CP7-003

Start Date: 1 July 2010

Closure date: November 2013

Partners:

Disruptive Concepts Sp. z o.o., Poland

Metaio, Germany

Polidea, Poland

Rigel Mobile Service Provider, S.A., Spain

Sampas, Turkey

Technische Universität München, Germany

Telefónica I+D, Spain

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Project Website

www.celticplus.eu/projects/celtic-projects/call7/CRUMBS/crums-default.asp



- ◆ The excess of non-classified social content. This means that it is quite difficult to retrieve information in an accurate way to feed high value added services. The CRUMBS platform will contextualize users' content in a spatial, time and social-perspective to make easy queries and retrieve the right content for enhancing powerful presentations.
- ◆ The limited information time-sorting approach. A new geo-spatial information paradigm will allow mobile users to consume multimedia social content (CRUMBS) while roaming.
- ◆ The unattractive mobile presentation. Using Augmented Reality, very rich multimedia content will be mixed with the real world images captured by the mobile camera. Multimedia objects shown will be personalized for every user according to the social-perspective and user profile.
- ◆ The lack of connection between traditional Telco and IT services. In order to boost Mobile Social Services, the CRUMBS platform will use both traditional Telcos' services like SMS, calls, video-calls, and interactive Internet services.

Main results

The main expected outcomes of this project will be to deliver a set of innovative services that will be spatial, social and time (context) aware as well as personalized.

About Celtic

Celtic is a European research and development programme, designed to strengthen Europe's competitiveness in telecommunications through short and medium term collaborative R&D projects. Celtic is currently the only European R&D programme fully dedicated to end-to-end telecommunication solutions.

Timeframe: 8 years, from 2004 to 2011

Clusterbudget: in the range of 1 billion euro, shared between governments and private participants

Those services, eventually, will demonstrate the CRUMBS concept.

An Augmented Reality Engine will be developed and it will mix rich multimedia social content (objects) with the real world images captured by the mobile camera. This engine will be added to a new developed Mobile Application that will also incorporate the Social CRUMBS services.

All these results will be tested in a real world scenario in which both touristic and cultural information will be provided by a tourist bureau or a city council. Users will be able to access this content and gener-

ate geositioned multimedia information while they wander through the city. User experience will improve with the amount of information crumbs scattered in certain area. Feedback will be collected in order to improve the platform and evaluate users reaction towards it with the aim of assessing its feasibility.

Impact

The CRUMBS platform will have a big impact on eBusiness, eTourism and eGovernment scenarios where new and innovative mobile services might occur, thus leading to different relationships either between users or between users and entities.

The number of people using their mobile phones to access social networking sites such as Face-

Worldwide Mobile Social Network Users, 2007-2012 (millions)

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|-----------|------------|------------|------------|------------|------------|
| Mobile phone subscribers* | 3,078 | 3,417 | 3,697 | 3,894 | 4,150 | 4,275 |
| Mobile internet users | 406 | 490 | 596 | 757 | 982 | 1,228 |
| Mobile social network users** | 82 | 147 | 243 | 369 | 554 | 803 |
| Mobile social network users % of mobile phone subscribers | 2.7% | 4.3% | 6.6% | 9.5% | 13.3% | 18.8% |

Note: *data for 2007-2010 from European Information Technology Observatory (EITO), March 2007; **registered users (identified by their mobile number) who create, edit and view personal content using their phone

Source: eMarketer, April 2008

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www.eMarketer.com

Figure 1: Social Network Estimated Evolution between 2007 and 2012

ate geositioned multimedia information while they wander through the city. User experience will improve with the amount of information crumbs scattered in

book, MySpace or Bebo has increased this year, according to new research. eMarketer forecasts that over 800 million people worldwide will be participating in a social network via their mobile phones by 2012, up from 82 million in 2007 (See Figure 1). Location-based mobile social networking revenues will reach \$3.3 billion by 2013. By 2012, it is expected roughly 18 percent of mobile users worldwide, the equivalent to 950 million users, to be accessing at least one social networking site via their mobile device.

Along with the growing audience, marketers are drawn to mobile social networking because it creates a unique context in which to promote their goods and services. It goes beyond simply linking people with digital content by adding the immediacy of sharing with friends.

Participants: small, medium and large companies from telecommunications industry, universities, research institutes, and local authorities from all 35 Eureka countries.

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