futurelab

MobiMissions

MobiMissions is a location-based, social, mobile phone experience for young people aged 16-18. MobiMissions enables players to engage with their environment and community in new ways. Players can create Missions on their mobile phones, which they can then 'drop' in locations around the city, to be found, and responded to, by other players.

Partners

Steve Benford and team, Mixed Reality Lab, University of Nottingham
Futurelab

Technology

Nokia series 60 mobile phones
Placelab
Spring Framework
Hibernate
Equipz
Apache Tomcat
My SQL
J2ME
Web interface

Outline

MobiMissions takes advantage of the fact that the majority of teenagers in the UK own mobile phones, using them to communicate, send media files and source information. Using this almost ubiquitous device, users interact with their location and one another, using the mobile phone cellular network to identify location. As you move from place to place, your phone connects to different cells in the network. Some new phones can access the ID of the cell they are currently in, which can be used as a rough indication of location. MobiMissions explores possibilities opened up by this new technology for learning and interaction with places and people.

In MobiMissions, players create 'Missions' on their mobile phones. Missions consist of photographs and text and can be used to set a question or a challenge, make an observation, etc. When a player creates a Mission, they 'drop' it from their phone into their current cell. Players can search their current cell location at any time to discover any Missions in that cell. Players can respond to Missions they find, again using photographs and text. All Missions and their Responses can be seen on a website, where users can also leave comments for one another and rate the quality of each others' Missions and Responses. Players are awarded points for creating and responding to Missions, and for receiving high ratings.

The MobiMissions project was an idea from the University of Nottingham which is being adapted to develop a mobile phone experience for young people aged 16-18, using the prototype Hitchers application, previously developed by the University of Nottingham.

Research and Development Process

In order to develop an experience that was engaging for our target user group, we worked with a core group of young people to develop ideas for the final experience. A series of workshops were held with young people to explore ideas around mobile phones, location-based and collaborative games, and to generate possibilities and requirements for an initial concept.

This initial concept was further developed with students through low-tech prototyping sessions, in which small groups of young people created and responded to Missions using digital cameras, paper and PowerPoint presentations.

Key Findings

The key aims of the trials were to explore significant factors affecting young people's participation in a location-based, social, mobile phone experience, and identify future possibilities for using this technology to support learning. Key findings were:

Students during development workshop

Mission and Response on website

1 Local, social play

Players preferred playing with others at the same time and in the same place to playing on their own. Through reciprocal play, groups co-created the meaning of their Missions and Responses, and reinforced social ties.

2 Content of Missions

The majority of players felt it was more important to create 'interesting' Missions than to maximise points by creating and responding to as many Missions as possible.

3 Location of play

The majority of play took place at home, late at night, when players felt free from other commitments. Play took place in short episodes in a limited number of locations. Location was used opportunistically rather than strategically.

4 Conversational learning

MobiMissions has the potential to support learning conversations through the exchange of photographs in specific located contexts. Support for greater immediacy, longer duration, and multiple participants to conversations could further promote learning conversations.

5 Competition and motivation

Most players' goal was to create 'interesting' Missions. Points therefore did not provide sufficient feedback to assess progress against the goal of 'interest'. The game focused more on social feedback than a competitive game.

Future Possibilities

In workshops with young people, teachers, technologists and researchers, and drawing on findings from the trials, several avenues for future learning applications were generated, including:

Site-specific applications: What if MobiMissions was used as a way of interacting with location, content and other visitors in theme parks, museums and historical sites? People could access media and interact with previous and future visitors at historical battle sites, zoos, in cities' cultural quarters and national parks.

School: On field trips, exchanging Missions could link activities between those participating in trips to the same site over a series of visits. The discovery and exchange of located content could link schools more closely to their local communities, through the sharing of ideas and images.

Located social networks: A social map could be created, displaying players' favourite locations, and the intersections between friends' maps, and wider community maps. Intersections between geographical and social maps could perhaps stimulate greater communication within communities.

Games: Exploiting the located and mobile affordances of the technology, the cityscape can be transformed into a giant gameboard. Strategic and territorial games could be played as players lay claim to particular cells, leading players to new explorations of their surrounding areas.

This idea was submitted to Futurelab's Call for Ideas programme by Steve Benford, University of Nottingham.

For the full MobiMissions research and development report, see www.futurelab.org.uk/projects/mobimissions.

Contacts

Futurelab: Lyndsay Grant, lyndsay.grant@futurelab.org.uk

Futurelab
1 Canons Road
Harbourside
Bristol BS1 5UH
United Kingdom

tel: +44 (0)117 915 8200
fax: +44 (0)117 915 8201
e-mail: info@futurelab.org.uk
blog: flux.futurelab.org.uk
www.futurelab.org.uk

Registered charity 1113051