Project Description

Introduction

Companies and governments show a lot of interest in Radio Frequency Identification: chips without battery sending a unique identifying code through radio waves. Especially the tracking and tracing industry realises it can benefit from this technique. Companies and governments expect a lot from this technique. RFID will not just be attached to pallets and boxes but will expand to everyday objects from clothing and food to passports and medication. A lot of data is collected about these objects. This data will not just refer to the history of the objects itself but can be referred directly to the users of these objects. In this situation people's privacy will be in danger.

Organisations like CASPIAN (Consumers Against Supermarket Privacy Invasion And Numbering) come up with these dark scenarios. It's a way to create awareness but this way it's also putting RFID in the very negative context of 'Spy Chips'.

The end user has hardly any influence on what is done with the data. Great part of the negativity around RFID is created because of this. In order to create bright scenarios for RFID it's important to give end users influence on both infrastructure and content of the system. A similar development can be seen with the world wide web.

The data collected with RFID tagged objects results in objects carrying their own 'blog' about their history with them. Designers of RFID systems determine what kind of information is included. I want to enable end users to decide what content is added and what objects will be tagged.

Project

My graduation project at the European Media Master of Arts course at the Utrecht School of Arts will be an Open Story Tool. Users will be able to use a mobile device to associate multimedia narratives to objects carrying an RFID tag. Instead of the data companies associate to the EPC (Electronic Product Code) corresponding to the object, I want stories to be added by people that have emotional relationships to that object.

The mobility of the device would allow people to read other people's stories, and write their own, wherever they go. Instead of deciding what kind of content users are allowed to add I want to give them total freedom. The media files will be sent to and retrieved from a server on the network, while adhesive RFID tags that can be stuck on objects provide the user with the infrastructure.

At the graduation exposition I want to present a room full of objects, each carrying it's own story with an RFID tag. Carrying a mobile device embedded with an RFID reader visitors will be able to view the stories on screen by moving their mobile device close to the object. It would be great to emphasize the open structure of the system by allowing visitors to photograph their own pictures and then adding them to an object of their choice. This is what the concept is about but is unfortunately not realizable.

The objects will be every day objects with unexpected stories associated to them. I want to make people aware that every object has it's own story, different from what you may think about it.

To technically realise the mobile device I'm using an HP iPAQ with WiFi for the server connection and an RFID reader in the SD slot to connect with the RFID tags. Each of the objects in the room will get an RFID sticker tag. The software used will be Macromedia Flash for Pocket PC, most likely accompanied by the Red5 Open Source Flash Server.

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