Entertainment on Rails

Arjan Lugthart
Rotterdam University / Hogeschool Rotterdam
Rotterdam, The Netherlands
+31 (0) 6 42 72 85 01
arjanlugthart@gmail.com

Niek van Wingerden
Rotterdam University / Hogeschool Rotterdam
Rotterdam, The Netherlands
+31 (0) 6 48 22 24 81
niekvanwingerden@gmail.com

ABSTRACT
This paper contains a description of our concept “Entertainment on Rails”. We describe what the concept is, the use for the users and how the interaction works.

Entertainment on Rails is a conceptual interface for a mobile application that lets people who travel by train communicate with each other by small messages (microblogging). While the communication and social aspect of the application is the main focus it also offers a route planner feature.

General Terms
Design, Experimentation

Keywords
Mobile, entertainment, communication, travel, route planner, social, microblogging.

1. INTRODUCTION
1.1 Problem & context
As part of our education and our minor Interaction & Visual Interface Design we received a design question to create a new concept interface for a mobile device. After some initial research we decided to create a concept for people that travel a lot, in particular people who travel by train.

People who travel by train are usually not looking for chit-chat, instead they listen to music, read a book or a free newspaper. People tend to look with a different view to their stay in the train, they see it as something that has to be done, and wait till they arrive at their destination.

The target audience is people that travel by train at least two times a week. The track they travel could be the same (home-work) or different every time. It could be students or businessmen with interest for new technology, social contact (messaging) and/or culture.

The users use the application in the train. The context is the train with the people in it and the environment outside of the train. In our concept we try to help people kill time by socializing with other people and create a relation between messaging and the direct environment the train is driving through.

1.2 Argumentation
The goal of the application is to add value to the train trip by giving people entertainment through socializing with other people and getting information about the cities they pass by. The first step to achieve this goal is by getting the attention of the target group. That is why we use a number of technologies to integrate the train into our concept. Bluetooth technology gives a direct connection between your mobile device and Bluetooth enabled screens in the train. These screens include global information where every single device can tune into and provide it with additional user specific content (microblogging). Or it can show route specific information like the location of the train and what station it will stop next. This enlarged the experience. Other aspects to improve the experience are usefulness, usability, attractiveness, findability, accessibility and credibility [1].

The usability starts by installing the application. There are two ways to download the application, to click on the url given by the Bluetooth invitation or the user can send a simple sms with a keyword to a number and the application will download itself to the users phone. To make sure that users find these possibilities they should be promoted on posters at the station and posters and screens in the train (findability).

To improve the usability we use natural affordances of interaction elements and interaction patterns for the recognition of the action behind it [2]. The layout of the screen is vertical and the information is shown in a list view. We choose to develop for Apples iPhone 3G, because this phone gives us best possibilities for rich interaction (at this moment) with the use of GPS, multitouch and Gestures. These types of input create an interface that is fun and easy to use. This means that the interface should be optimized (size of elements, margins, look) for a touch screen.

Through the use of animation we tried to create a rich type of feedback. We used animation to explain the interface is receiving an order, preparing the order, doing the order and finishing the order or invite for a new order [3].

And last but not least we created a design with rich visual effects that should attract the user. In the interface there is visual link between the blogging part and routing part of the application. In the footer area are menu-options like show messages, home or write a message. Only functionality that is relevant. This is a common mobile design principle.

The main part of the screen shows the visual representation of the route of the train and the last posted messages. The route will show all the stations where the train stops and highlight stations where the user has to change tracks. This will help the user...
orientate and gives the user more information about the track he is crossing. More information about cities is available at the closest station (the environment the user is crossing at the moment) or destination.

Through the messages on the main screen the user can follow the latest discussions or respond to any message. For more messages the user can switch to an overview where all messages are shown. If the user wants to view all the messages he or she can click in the footer area on the designated icon. In this screen the user writes his messages, replies to other messages or follows discussions.

Blogging is sharing personal messages. That is why the user can add extra value to his message by choosing one of the following options: he is ‘saying’, ‘thinking’, ‘wanting’, ‘loving’, ‘hating’, ‘asking’ something as he or she sends a message or a reply. This gives users a better way to express themselves and will lead to more interesting discussions.

1.3 Design elements
In this section we explain a few elements of our concept with corresponding visuals.

![Figure 1: The main page.](image)

Figure 1 is the visual of the main screen. As you can see this is a combination of information about the route the user is traveling and a dashboard with the last posted messages by the community. The train information contains the most relevant details like your current position and your destination with estimated arrival time. Between your current position and your destination the first three stops are shown. This is for the orientation of the user. The user can click on a station for extra information about a city he’s crossing. By clicking on a station the notepaper on top of the screen will animate over the screen and show information about the city.

The messages on the right of the screen are constantly updated when new messages are post. They will fade in and after two minutes (or if there are more then two other new messages) they will fade out. This is working quite the same as Growl on Mac OS X. If the user wants to see more messages or send a message he can click on the chat bubble at the right bottom of the interface. The number on the icon indicates the number of new messages.

![Figure 2: Overview of last messages.](image)

When the user clicks on the message bubble icon, the route information fades out, the messages scale and extra messages fade in. The number icon at the right bottom of a message indicates the number of reactions on this message. By clicking on a message the user can look at the reactions and reply on a message (see figure 4). The footer bar shows two options: an option to show the main screen (the train icon with the estimated time until arrival) and an option to write a message (chat bubble with add icon). By clicking on this send icon the messages animate out of the screen. And the send message box appears (see figure 3).
Figure 3 shows the option to send a message. At the top of the screen is the message box with a pull down menu with the options ‘saying’, ‘thinking’, ‘wanting’, ‘loving’, ‘hating’, and ‘asking’. An input field for a short message and a send button.

Figure 4: Overview of last messages.

If the user clicks on a message in figure 1 or 2 the screen shown in figure 4 appears. The selected message expands and a pull down menu and input field are added. The other messages fade out to set the focus on the message and the reply options.

2. REFLECTION, CONCLUSION & POINTS OF IMPROVEMENT

The final result is an attractive style, with interaction especially designed for mobile use. An important thing in the design process is simplicity to use, the easy accessibility. All interface elements are designed for mobile and the context of use.

We have to do some more usability testing for optimization of the final interface. For the same reason we could look to the newest mobile design interaction patterns.

The theme of this application fits well into the mobile concept, using and interact on location. The ubicomp principles interaction with the environment of the phone, in this case the interaction with train and screens, adds a new dimension to the concept.

After some user-testing we could consider to expand the dating/networking principle.

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4. REFERENCES

