Designing a CD Augmentation for Mobile Phones

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background

Interacting with CDs can be a very tangible and explorative experience. Digital music collections on the other hand provide all the glory of additional services and metadata.


design proposals

Our aim is to combines the opportunities of digital music collections with the tangibility of physical CDs. We intend to develop an augmentation for CDs that is shown on a mobile phone's display and makes digital services accessible.

In the first user study we determined the most important basic functions to control music playback. To explore the design space we conducted a second user study and handed paper sheets with printed phones to 10 participants. Participants' task was to draw UI sketches for the augmentation shown on the phone's display.
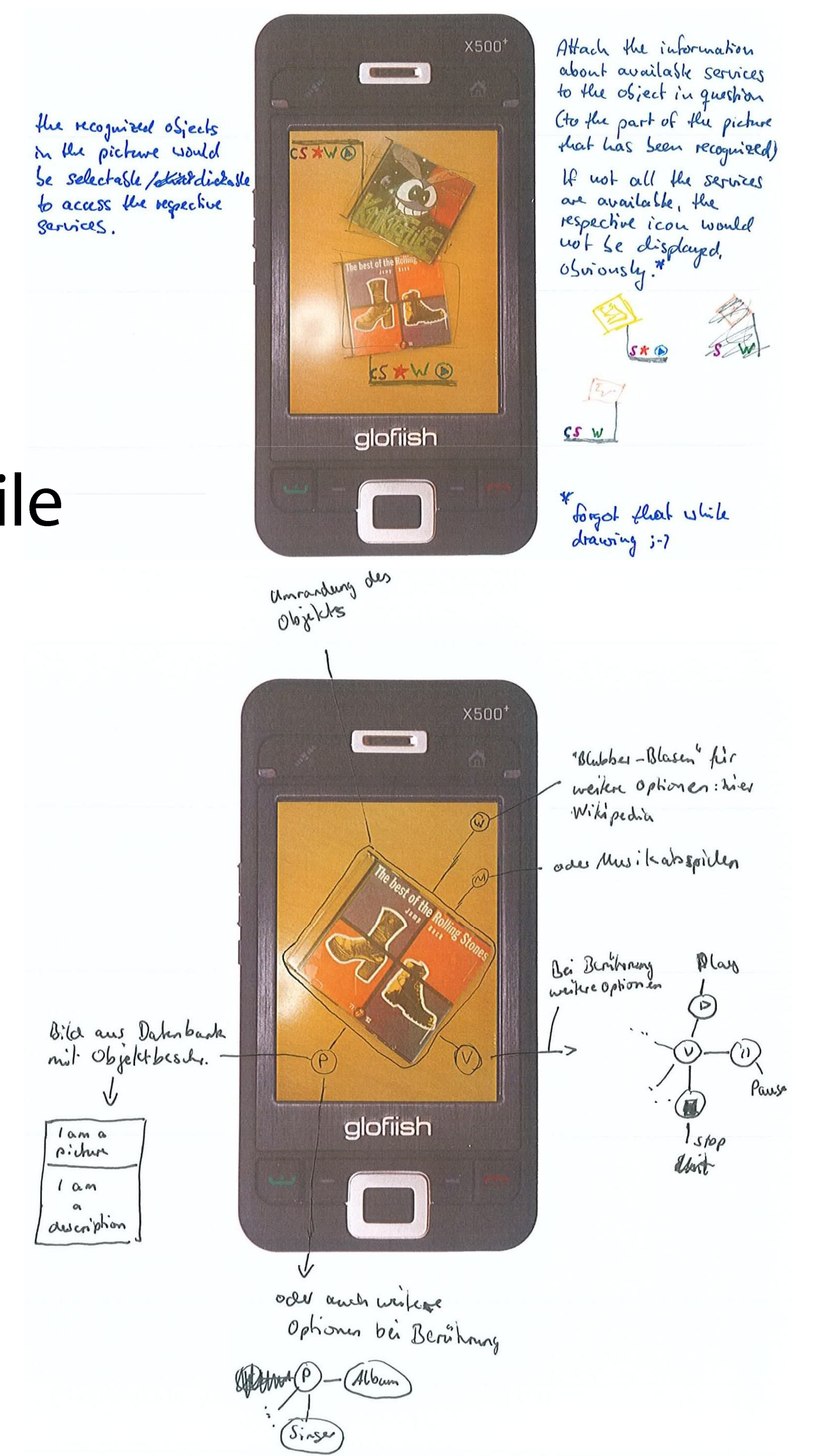
developed prototypes

We revised the design sketches and derived four designs. Recognized CDs are highlighted by discoloring the background or by a rectangle around the CD. Playback controls and services are aligned to the CD, aligned to the phone's display or accessible on a second view after touching the CD. Services are presented with icons that can directly be used to access them. Prototypes of the four designs were implemented for Android phones using server based object recognition.
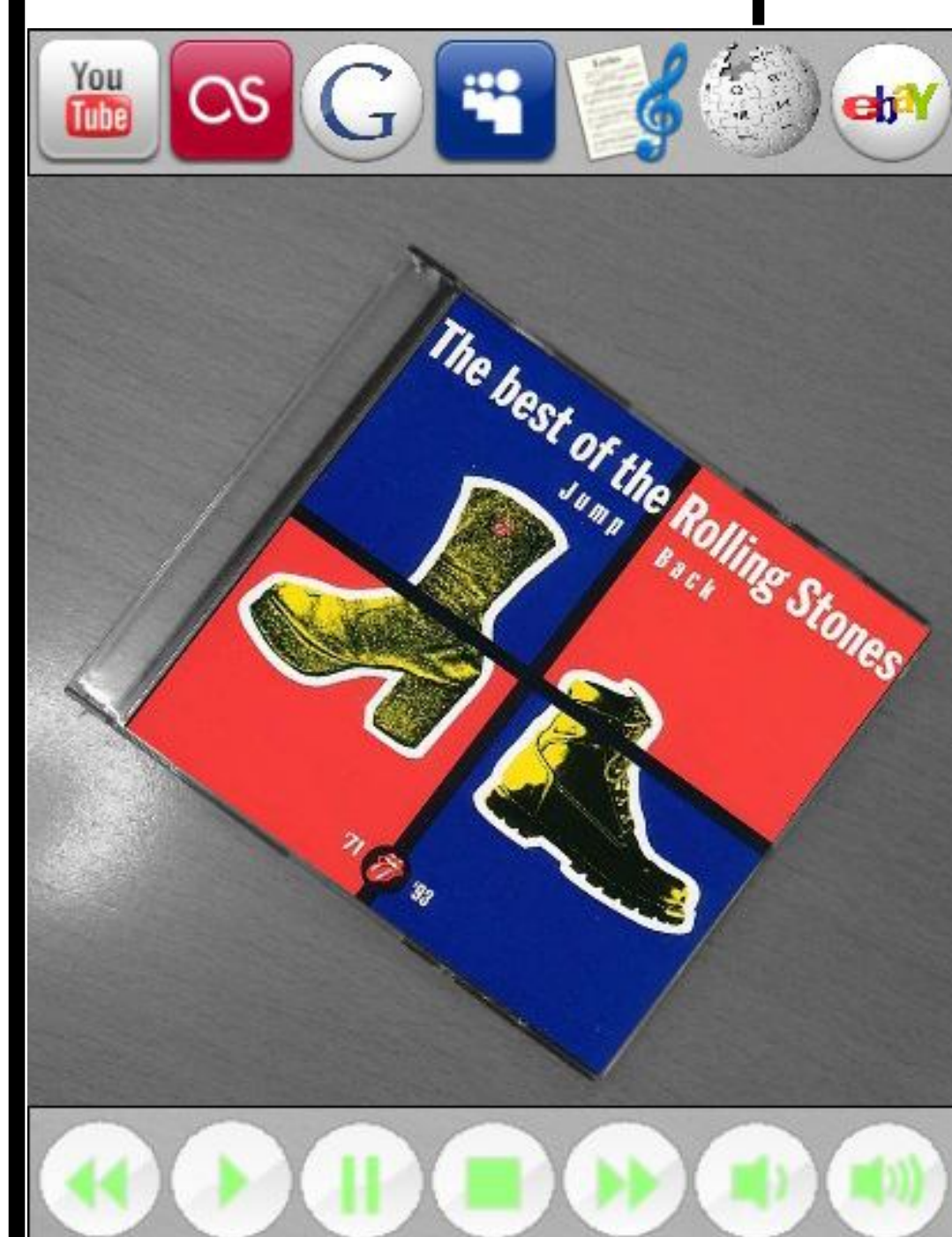
conclusion and future work

An augmentation for CDs using mobile phone has been developed based on two user studies. The result is four design prototypes.

The next step is formative evaluations of the designs to identify usability enhancements. Furthermore, the approaches should be compared in formal user studies. In parallel, we currently implement an algorithm that recognizes CDs on the phone.