TECHNISCHE UNIVERSITÄT DRESDEN

Application Development for Mobile and Ubiquitous Computing

QR Profiler

First Presentation

Presentation Group 1
Ashrafur Rahman
Mumtahin Hasan Shafi

DRESDEN concept
Exzellenz aus Wissenschaft und Kultur

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QR code (abbreviated from Quick Response Code) is the trademark for a type of matrix barcode first designed for the automotive industry in Japan.

A QR code consists of black squares arranged in a square grid on a white background, which can be read by an imaging device such as a camera.

The required data are then extracted from patterns that are present in both horizontal and vertical components of the image.

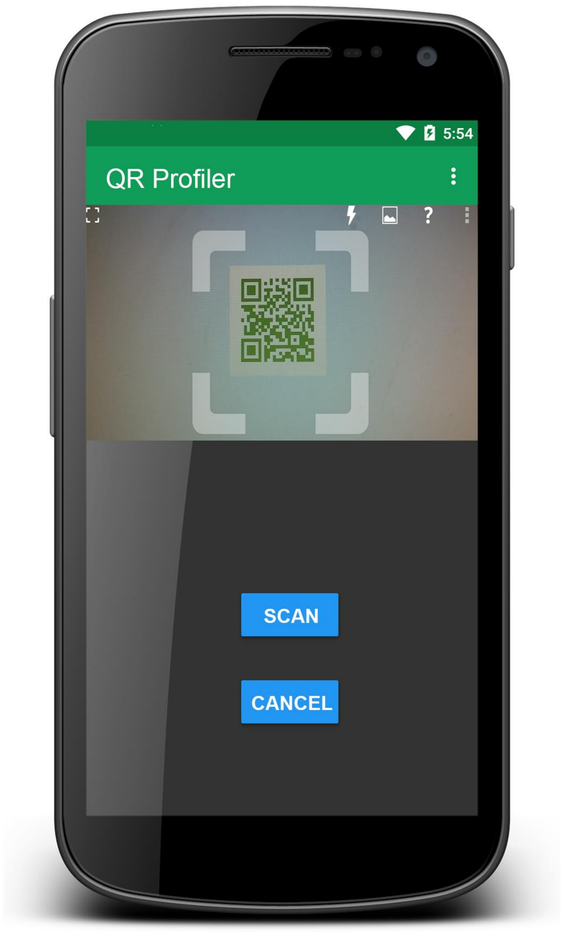
Application Idea

Imagine as you reach library, class room or some public places, the phone volumes automatically decrease. Once you are at home, it turns on WiFi and connect to your home WiFi. These are just a few scenarios for our situation based profiler.

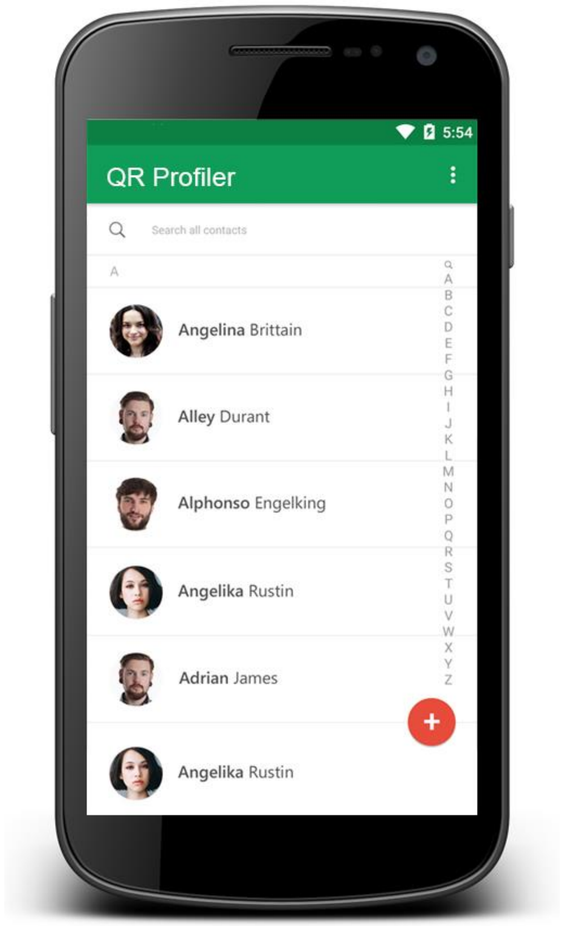
QR Profiler lets you change volume, wireless and other phone settings quickly and easily. Simply scan and forget!

User can efficiently adjust a series of system settings at a time based on the arrival or departure of commonly visited locations.

Mockups

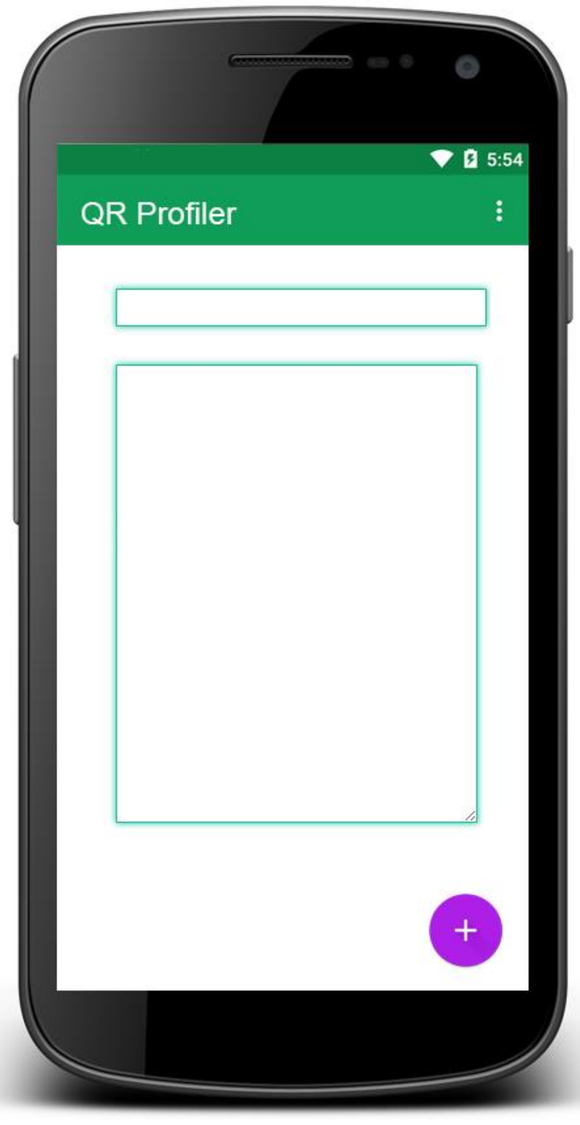


Profile Manager

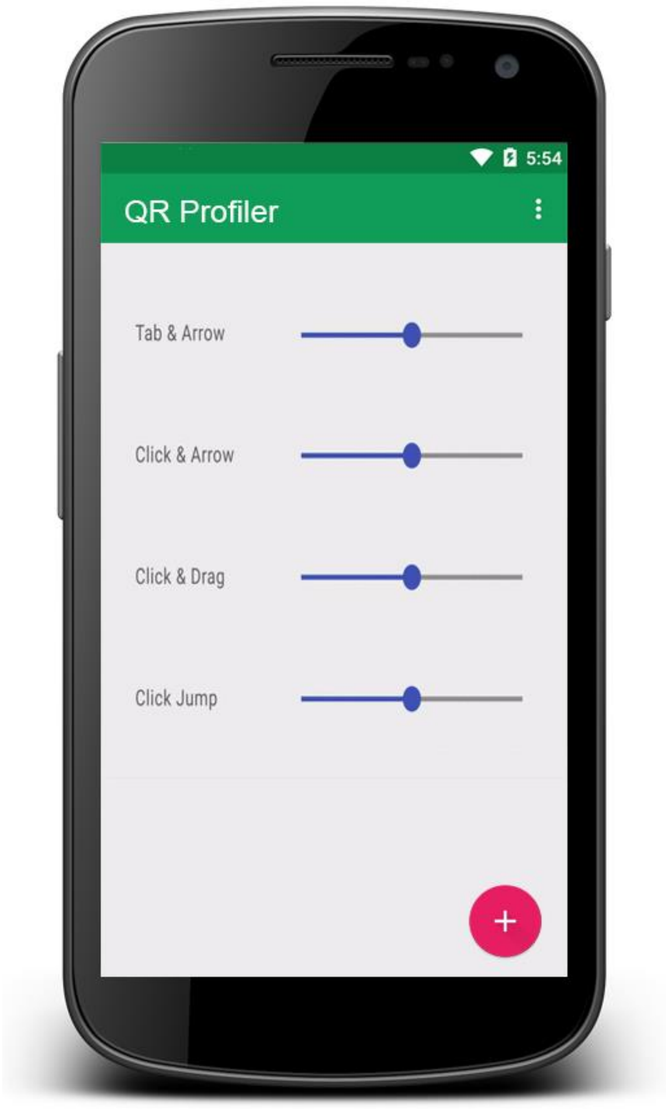


Contact Transfer

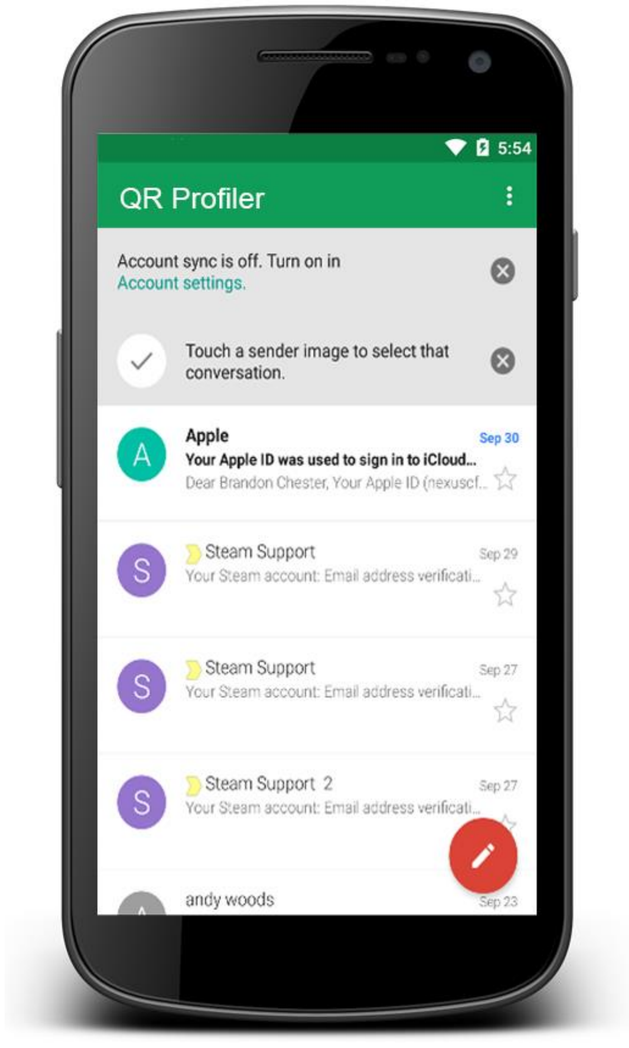
Mockups



Text / Clipboard Sharing

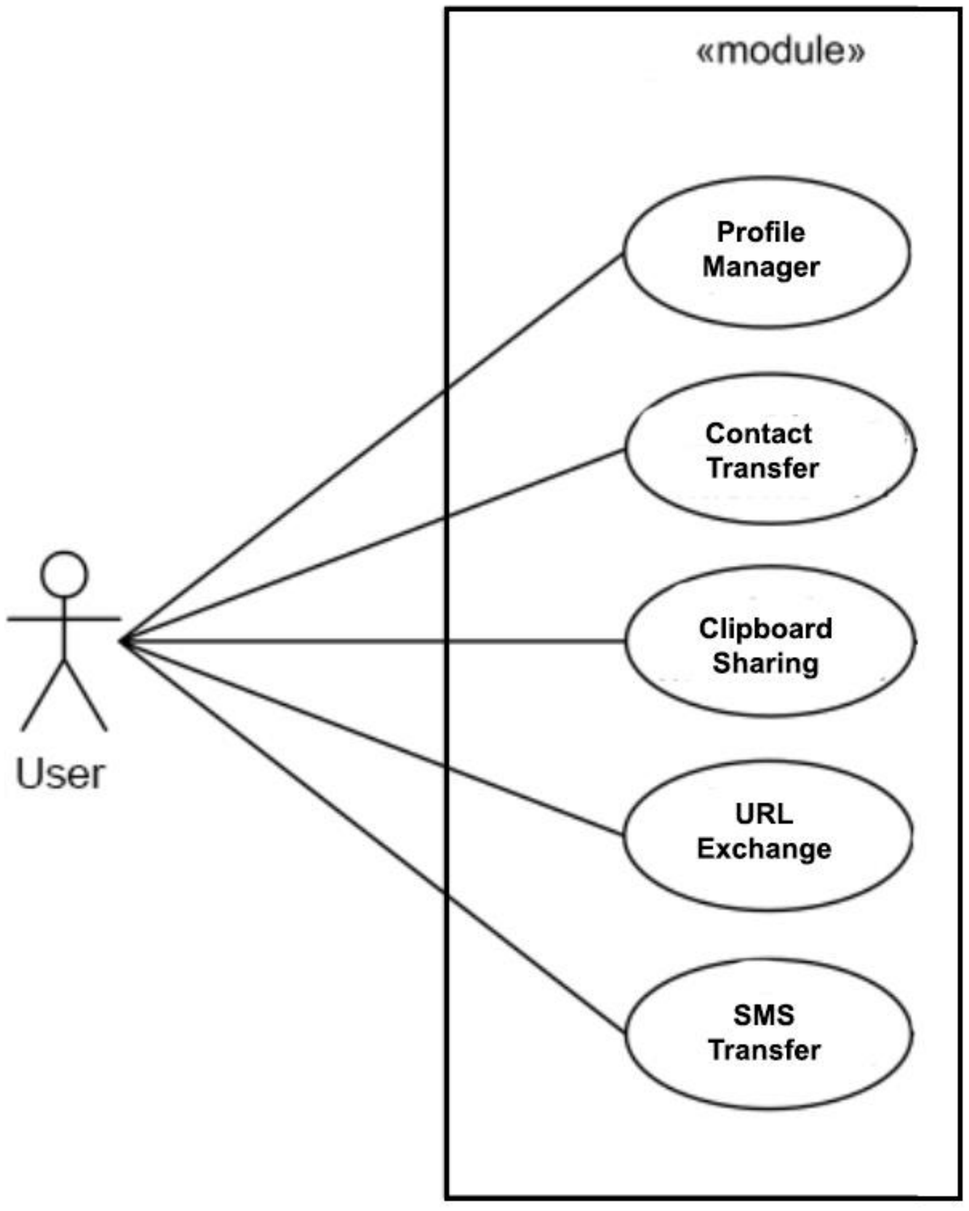


Settings Exchange



SMS Transfer

User Cases


«module»
Profile Manager
Contact Transfer
Clipboard Sharing
URL Exchange
SMS Transfer
User

Development:

- Android SDK
- Java SE
- Android Studio IDE

Resources:

- Shared Preferences
- SQLite Database
- Camera
- ZXing API
- Image Library

Usability Challenge

- Intuitive
- Easy to use
- Differentiate user tasks and roles

Connectivity Challenge

- Provide real time information in poor and unstable connection

Offline Challenge

- Works in offline mode
- Synchronize with backend
- Resolve conflicts due to concurrent changes

Work Plan

04.11.2016: First presentation

November

- Resource collection & Knowledge gathering
- Design application outline
- UI Design
- Start project prototyping
- Feature Implementation
- Completion

16.12.2016: Adaptation concept presentation

December

- Fine Tuning
- Testing

January

- Bug fixing
- Final output

27.01.2017: Final presentation

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Thank you for your attention