Mobile Software Engineering for Accessible Apps

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FH JOANNEUM
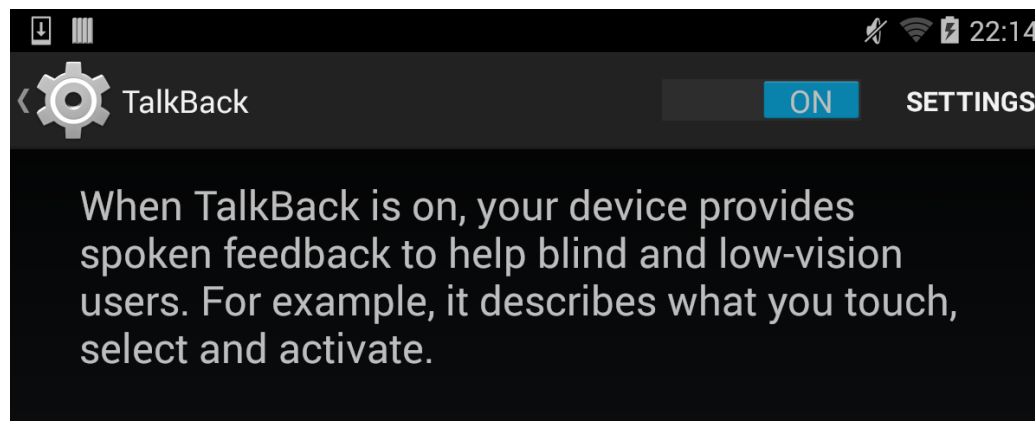
PONS project

- difficulties handicapped people reaching bus or tram stations

- user guidance on foot

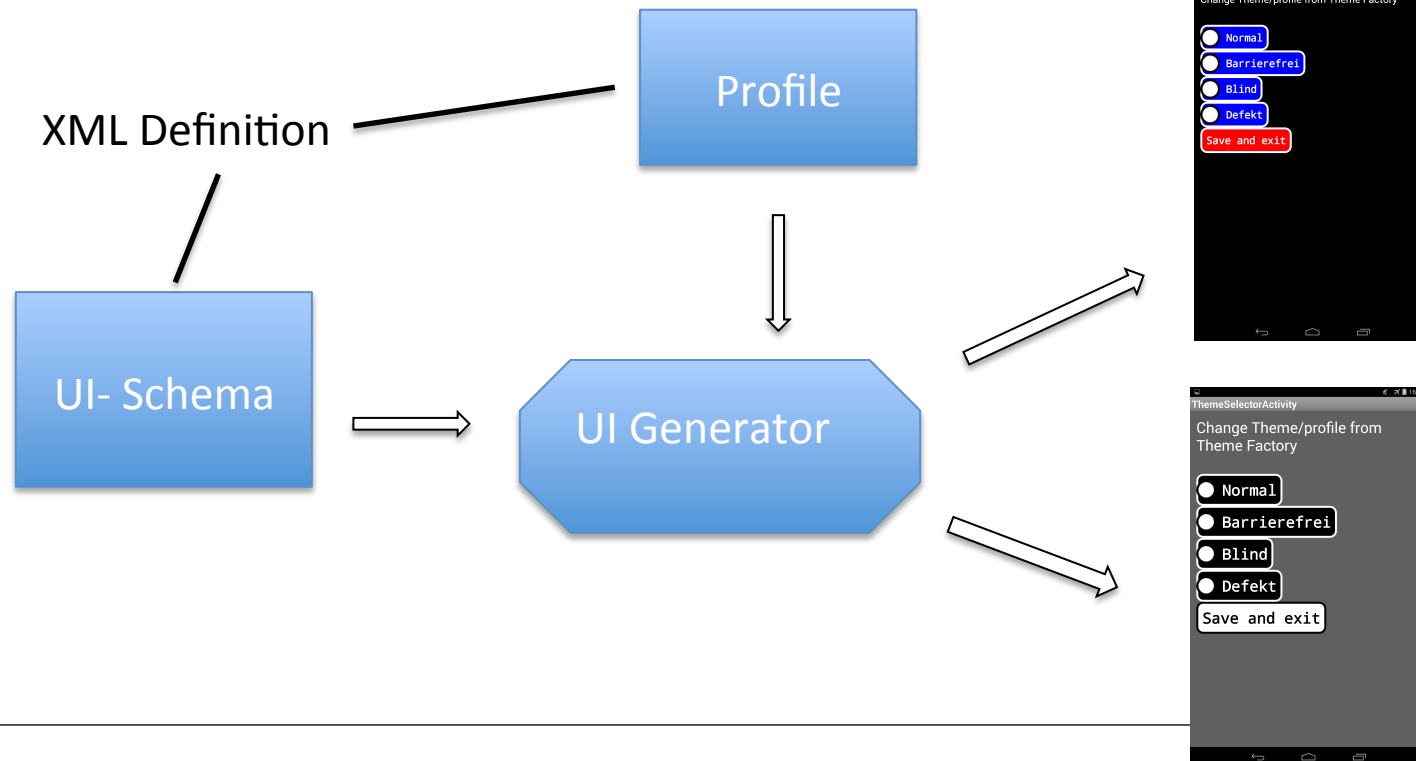- considering different needs

Initial Situation

- rare accessible apps

- high effort and costs
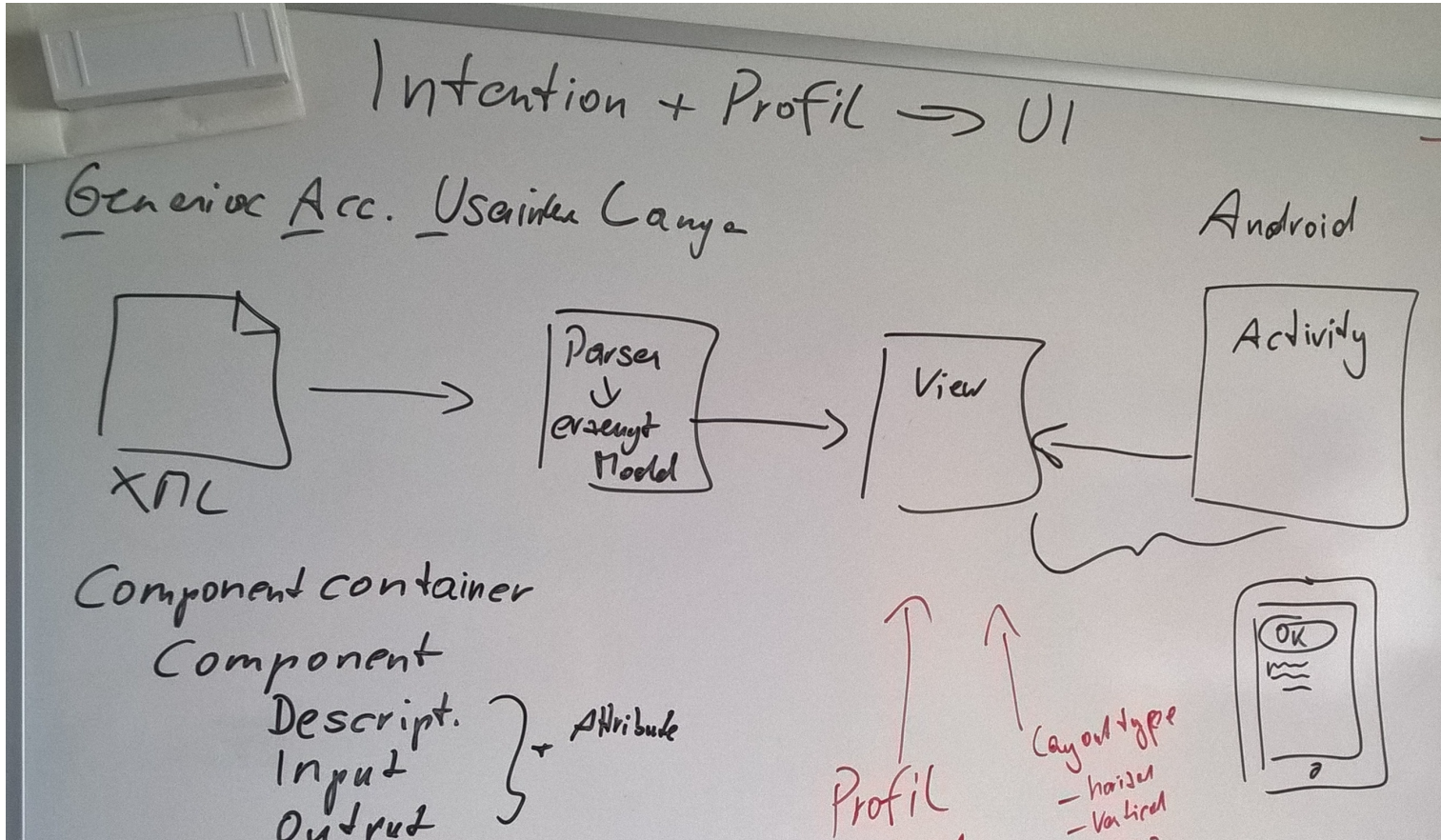
- available assistance like Google TalkBack

Approach

- automated User Interface development for different profiles

schema for simple position request

```
<ponsgencontainer>
    <ponsgencomp>
        <description type="text">Location</description>
    </ponsgencomp>
     <ponsgencomp>
         <action target="getPosition">get Position</action>
    </ponsgencomp>
    <ponsgencomp>
        <description type="text">Your actual Position<description>
        <output type="text" id="position"></output>
    </ponsgencomp>
  </ponsgencomp>
   ..
</ponsgencontainer>
```
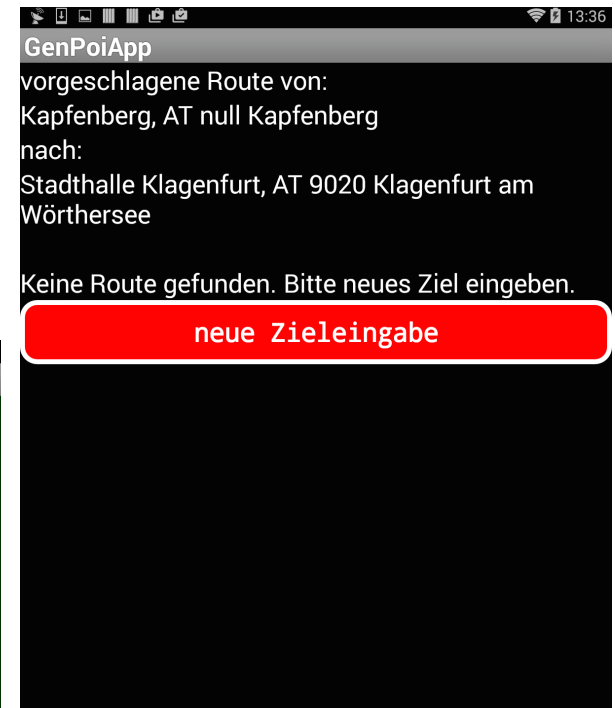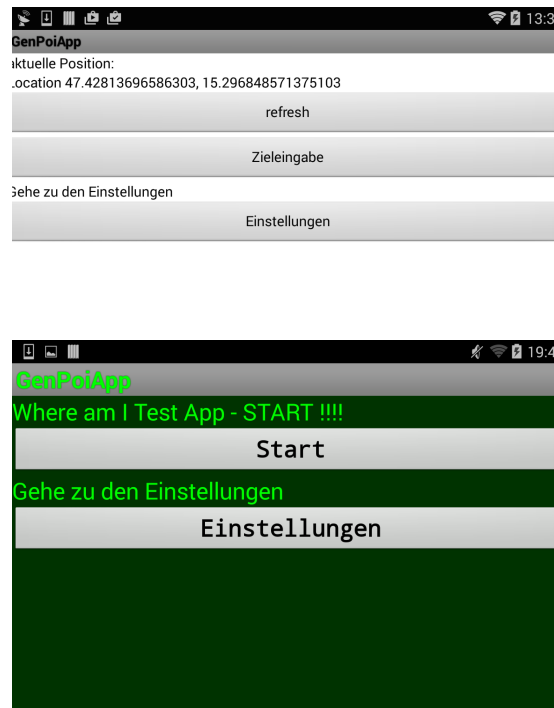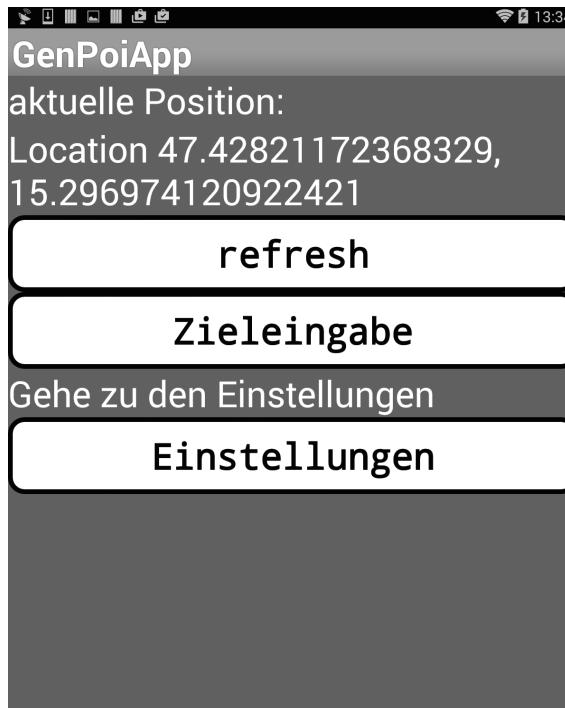
Method

User Interface

Accessible Apps

- high contrast

- minimum button size of 48dp

- easy possibilities for data
   input like datepicker

- right keyboard layout

- contentDesrciption for TalkBack

Pitfalls

- complexity of app interaction

- not suits all projects

- focus on navigation apps

Results

- schema for modelling an App

- high complexity -> focus on a special sub-set

Thank you for your attention.