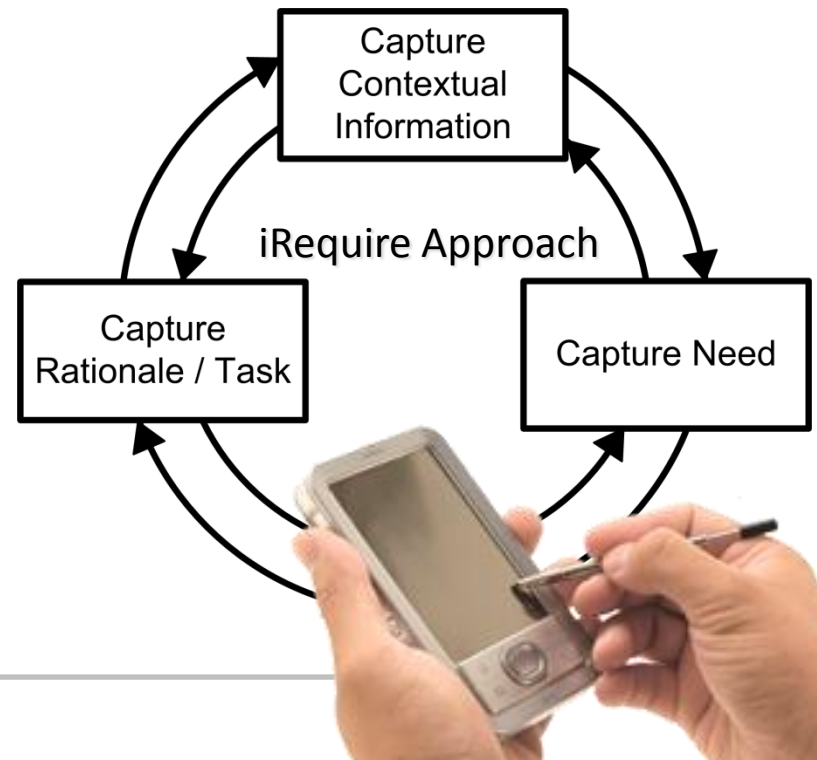# Requirements Engineering II

Mobile RE Tools and RE Crowdsourcing
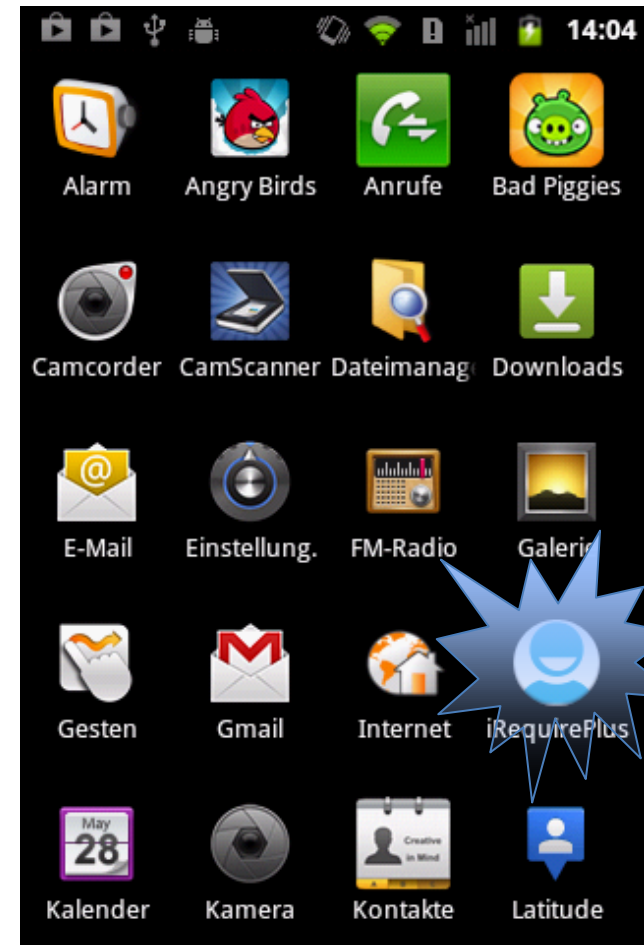
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Nicolas Hoby

In situ End-User RE with iRequire

- Vision: Mobile requirements elicitation tools enable end-users of future software to blog their needs in situ

- Provide basic blogging features

- Provide guidance and support

- Support different ways of requirements documentation

- Turn every mobile device into an RE tool

- Allow involvement of a large number of end-users

Capture Contextual Information

iRequire Approach

Capture Rationale / Task

Capture Need

The iRequirePlus Tool

- iRequirePlus is currently available for Android smartphones running Android 2.3.3+ (Gingerbread)

- iRequirePlus is one of many applications installed on end-users' mobile devices

iRequirePlus Download

- Google Play Store

  - https://play.google.com/store/apps/details?id=ch.uzh.ifi.rerg.irequireplus&feature=search_result#?t=W251bGwsMSwyLDEsImNoLnV6aC5pZmkucmVyZy5pcmVxdWlyZXBsdXMiXQ..

  - Or search for „iRequirePlus"

weQuire

- Requirements visualization and communication
    - Collect requirements created with mobile application
    - Modify or move requirements
    - Share, rate and discuss with others

- Create requirements without mobile tool
    - Unfortunately, so far only Android is supported

weQuire – Browse requirements

weQuire – Edit requirements

weQuire – Rate and discuss

weQuire

- http://jira.mons-consulting.com/wequire/

- An account is needed to create requirements and leave comments
  - Registration via iRequirePlus or on weQuire
  - Currently no cookies

Your task

Requirements elicitation and negotiation

1. Assume you are a "Cowboy Coder" who wants to get new ideas for apps you could develop. For the next 2 weeks you document ideas (**min. 10**) on new apps using the iRequire tool. With this tool you document your ideas unobtrusively, anytime and anywhere. Alternatively you can also use a paper and pencil based approach to document your ideas in situ. You are focusing on ideas to support public transport (e.g., "I would like to have an app, which tells me when I actually have to leave the bus") and everyday shopping activities (e.g., "I would like to have an app, which gives me more information on the products I buy in terms of sustainability"). However, all other app ideas are welcome as well. Those of you who use iRequire will find their ideas in the weQuire platform. The others need to enter them there manually.

2. In a next step all your colleagues (**not only those from your team**) are requested to vote for your ideas. Further they can comment on your ideas. All members of a team (but the shaper) also act as stakeholders for the two other topics.

3. As a team you identify the best ideas your team members had (top 5).

Come up with many innovative ideas for apps ☺

What are your findings?

Present the findings of your group

Guiding questions:

- How many ideas did you get? Did you get a prioritized list of ideas?

- What kind of "needs" did you get? Ideas for apps, Goals? Functional requirements?
  Non-functional requirements?

- How do you assess the quality of the gathered ideas (i.e. are ideas complete, unambiguous, understandable, etc.)?

- What were your experiences with the iRequirePlus/weQuire tools? What did you like / dislike? What could be improved?

- In what situations would you apply it? Why?

Bugfixing

- If you notice any bugs in iRequirePlus or weQuire, don't hesitate to report

- In particular:
  - Crashes (!!!)
  - Layout issues
  - Missing/wrong functionality
  - Performance issues

- Contact
  - nhoby@access.uzh.ch
  - Please report your browser (weQuire) or your phone and Android version (iRequirePlus) when reporting bugs

- Both tools are under active development - we apologize for any inconvenience

Questions

If you have any question, please send a message to
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Norbert Seyff (seyff@ifi.uzh.ch)