Mobile Applications in Context

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Content

- What is context
- Rules for mobile application design
- Application classification by “usage” context
- Top mobile applications 2010
- Assignment
“Any information that can be used to characterize the situation of an entity. An entity is a person, place, or object that is considered relevant to the interaction between a user and an application, including the user and applications themselves.”

[Dey, 2001]
Types of Context - Mobile

- **Context** with *capital C*: the understanding of circumstances
  - ... providing Context for better understanding what this moment in time means to me
  - Ex: *I understand why you did it – your were under pressure for such a long time*

- The present **location** or **physical context**
  - User’s: group, transportation mean, ...

- The present **device of access** – **media context**

- The present **state of mind** – **modal context**
  - User’s: goal, mood, experience, ...

[Fling, 2009]
Considering Context

- Who are your **users**? What do you know about them? What type of behavior can you assume or predict?
- **When** will they **interact**? At home, with plenty of time? At work, with short period of focus? During idle periods?
- **Where** are they? In a public or private space? Inside or outside? Day or night?
- What is **happening**? What are the circumstances in which they will best absorb the content you intend to present?
- **Why** will they use that app? What value will they gain from the content and service in that situation?
New Rules for Mobile App Design

- R1: Forget what you think you know
- R2: Believe what you see, not what you read
- R3: Constraints never come first
- R4: Focus on context, goals and needs
- R5: You can’t support everything
- R6: Don’t convert, create
- R7: Keep it simple.
Application Context – Utility Context

- *the appropriate type of application to present to the user*

- Utility Context
  - Short, task based scenarios
  - Minimalist presentation
  - Using the least amount of user input as possible
  - Give users at-a-glance information
  - Limited content to display
  - Examples: calculator, weather forecast, unit conversion, stocks, word clock.
Locale Context

- Application strongly linked to the location of the user
- Examples: the cafes near to me, or the pictures taken in positions near to me
Informative Context

- Provide information
- Examples: a news site, an online directory, a marketing site
- User should be able to mark content (e.g. pages or items) to access it later
- Predict what actions can be fired by reading the content (because of the mobile context).
Productivity Application Context

- Content and services that are heavily task-based and meant to increase users’ sense of efficiency
- Examples: managing contacts, messages, pictures
- Tend to be structured, presenting content in a hierarchical way (directories)
- Important to understand how users thinks out the task, for instance the sequence of the operations
- Focus on the top-priority item (for instance the inbox for email applications)
- Hardest application to get right.
Immersive Full-Screen Context

- Game playing, or virtual reality applications
- Are meant to consume user’s focus
- They fill the entire screen
- No trace of the device user interface to distract the user
- Used when user is idle.
Top-10 Mobile Applications: blog.getjar.com

- Best Java App: **WaveSecure Backup** (Productivity)
- Best Android App: **Lookout** (Productivity)
- Best Symbian App: **Nimbuzz** (Productivity)
- Best Windows Mobile App: **Opera Mini** (Productivity)
- Best Blackberry App: **Kayak** (Informative)
- Best iPhone App: **Tap Tap Revenge 3** (Immersive)
- 2010 Best App: **Layar** (Locale)
Assignment

- Consider your selected project
- Specify who is the typical user:
  - Type of phones that will use
  - Their goals and the needs
- List all the potentially relevant contextual conditions
  - Those influencing: the user, the application, the relations between the user and the application (Dey’s definition)
- Classify your project in some (possibly more than one) of the application context-based categories listed in the previous slides: utility, locale, informative, productivity, immersive.