A Framework for User-Tailored City Exploration

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EUD in mobile environments

Application domains

Focus on the city

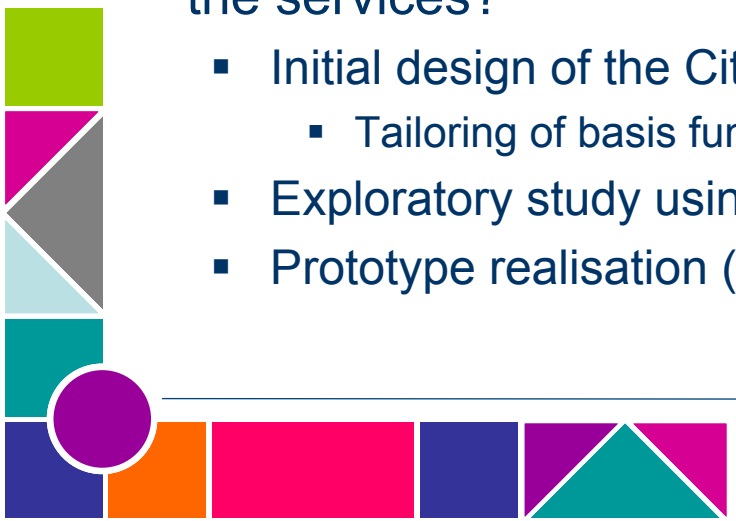
- Ambient Assisted Living
- Shopping
- Transportation
- Entertainment

City Exploration

+ User experience
+ Recommendations from earlier research
+ Limitations of current applications
+ Application to several domains

Research questions

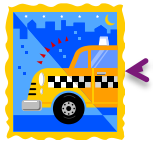
- What mobile services are relevant for City Exploration? How do user needs influence the configuration and composition of services?
  - Scenarios developed by us (researchers and students)
    - Novel research area, not well-understood by us
    - Novel approach, not understood by users
  - Evaluation and improvement through interviews of tourism professionals
- What mechanisms can be exploited to configure and compose the services?
  - Initial design of the City Explorer framework
    - Tailoring of basis functionality, content sharing and service composition
  - Exploratory study using a paper prototype
  - Prototype realisation (Android)



Stakeholders

create /share
service compositions

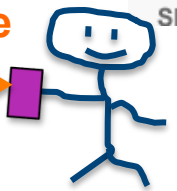
billett service.no
a ticketmaster company

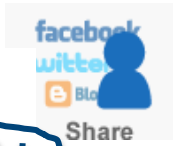


Create service building blocks

create / share
Pols and Tours

download / configure
create / share





download / update
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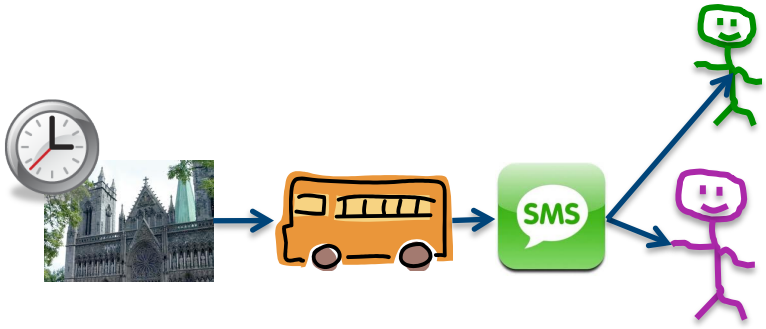
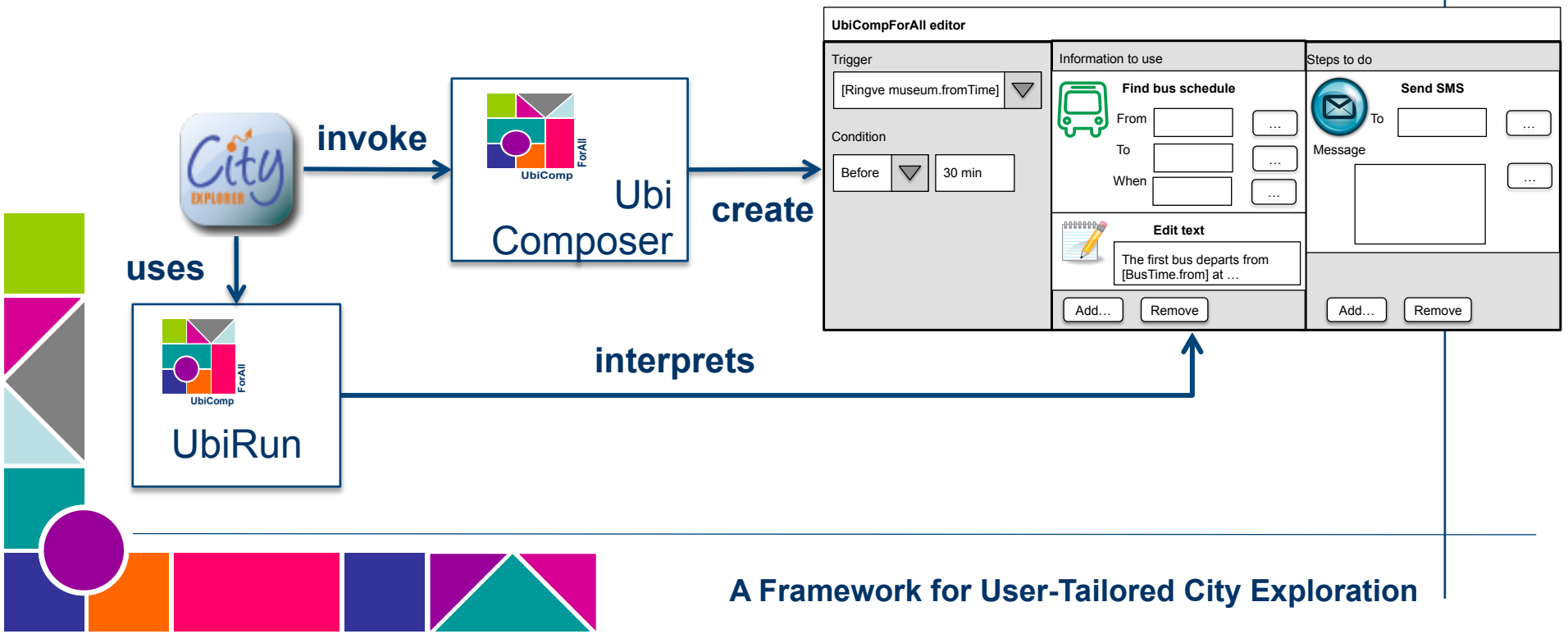
Tailoring vs. service composition

- Basic tailorable behaviour for city exploration
  - Select/create PoIs and Tours with/without schedules
  - Retrieval of services associated to sites
  - Navigation support
- Service composition support
  - Context-aware triggering of atomic or composed services
  - Integration with social computing sites
  - Collaboration support, e.g. sharing positions, setting up meeting points



Integration with generic tools

- City Explorer is both used for planning and exploration
  - Thus, both integrated with composition tool and composition MW
- Integration requires
  - Domain-specific and generic service building blocks, e.g. “get PoI opening hours”, “get bus time”
  - Application adaptors providing access to application data



Status and further work

- Android prototype of City Exploration (tailoring)
  - 1st prototype available; to be uploaded on Android market
  - User experimentation this summer
- EMF-based service composition tool
  - 1st prototype planned end of July

- Follow our work at www.ubicompforall.org