TECHNISCHE UNIVERSITÄT DRESDEN

Department of Computer Science Institute for System Architecture, Chair for Computer Networks

Application Development for Mobile and Ubiquitous Computing

Task 6: Location-Aware Scheduler Final Presentation

Group 6
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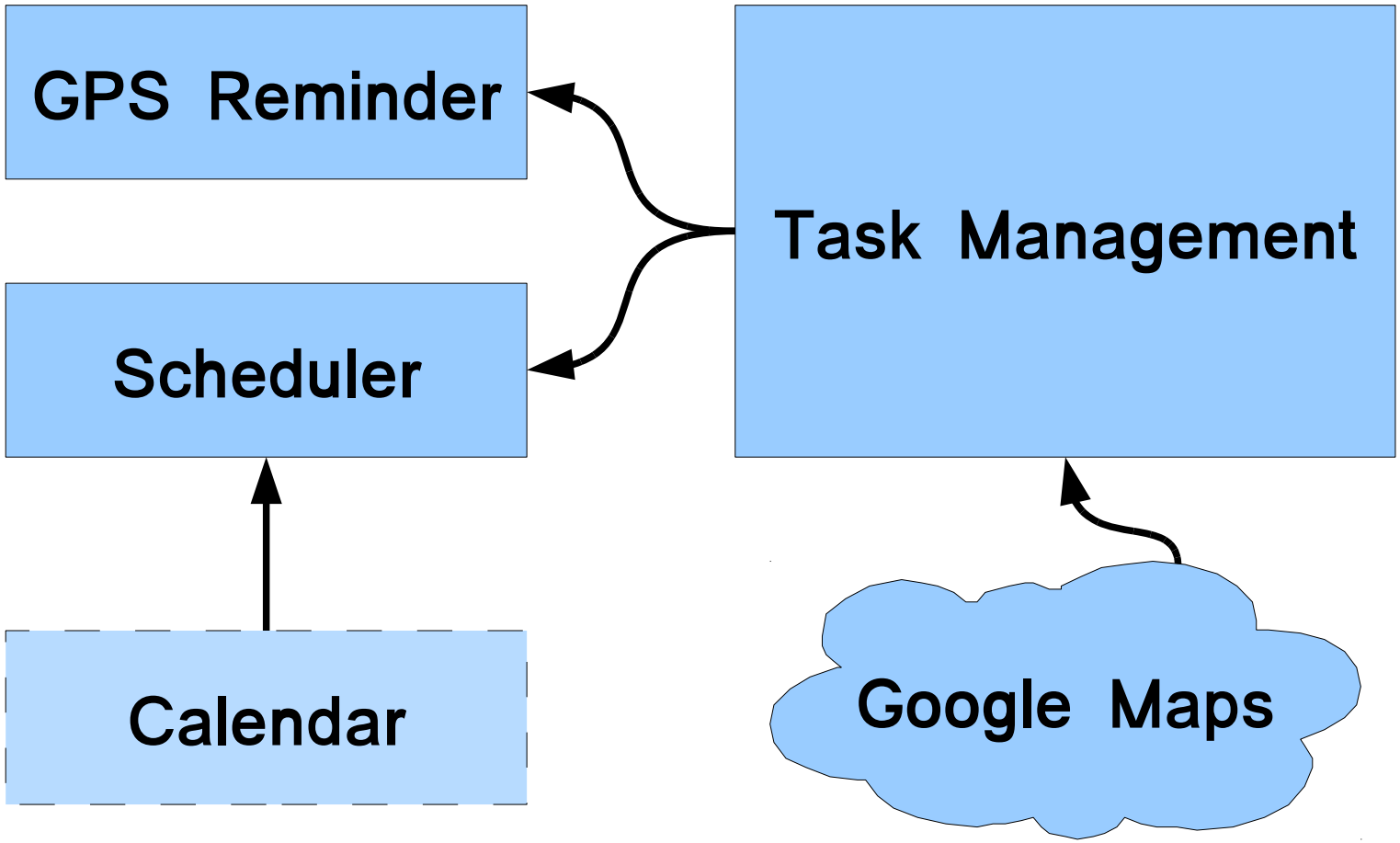
Application Scenario

- A student's life typically is full of tasks to do
- Using your time is essential

  → your smartphone can help you to schedule your tasks
  - Fit all the tasks in your regular schedule
  - location-based approach
  - Phone can remember you which task might be desirable to do now

Concept


GPS Reminder
Scheduler
Calendar
Task Management
Google Maps

Technologies

- Android 2.2 (2.1 not fully supported)
- Use GPS/WIFI to determine position
- Use of Internet connection

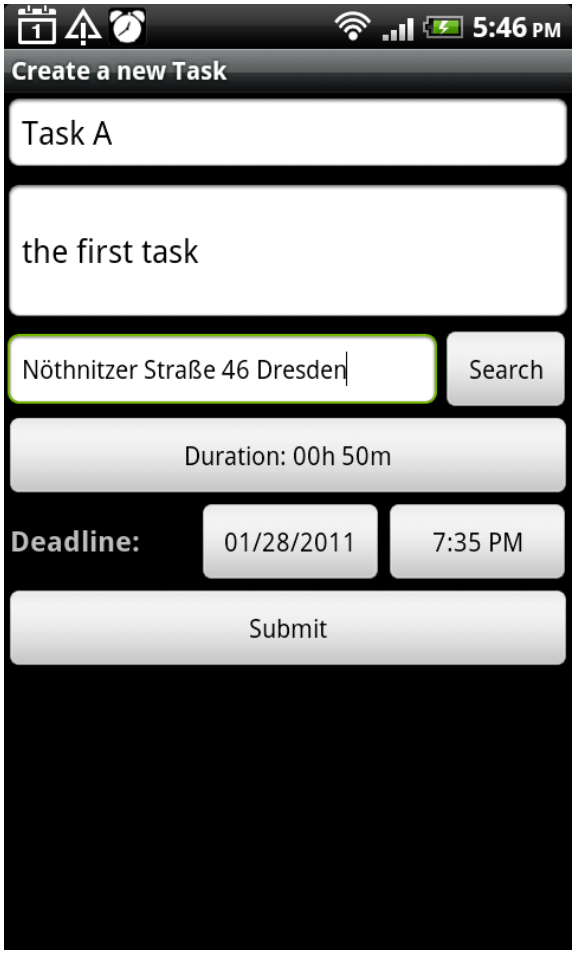
for GeoCoding,
fetching map images
and synchronization
with your Google Calendar

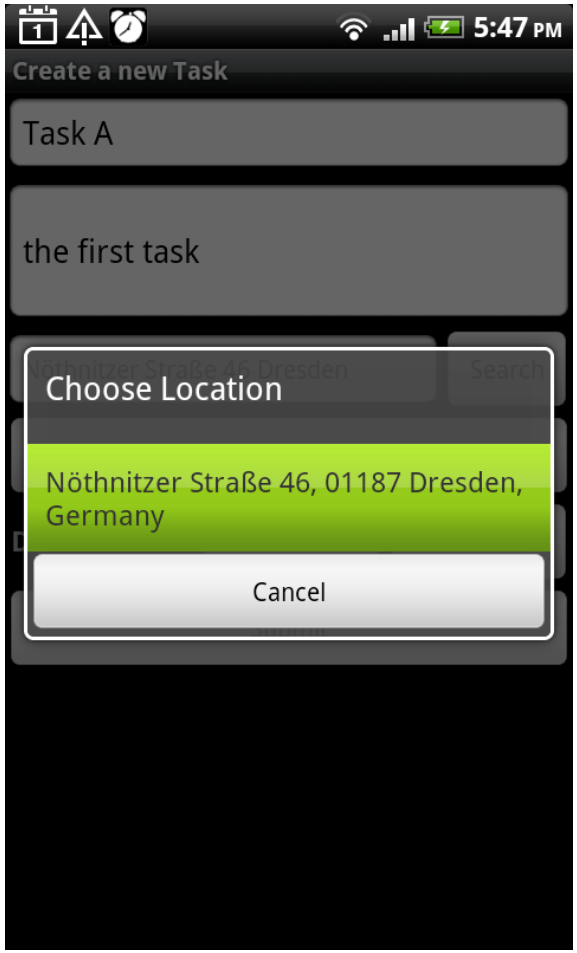
Workflow (1)

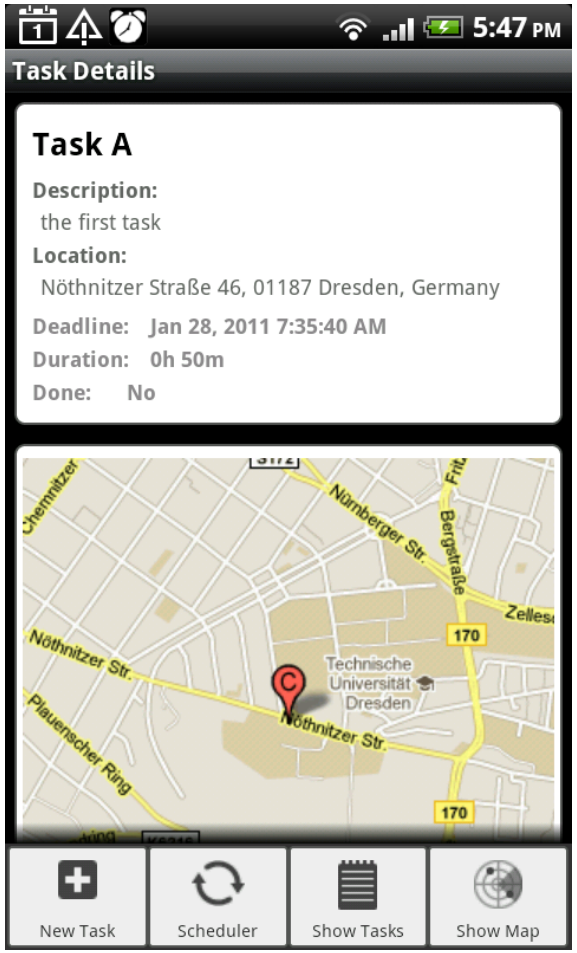
- No tasks defined, only upcoming events in the schedule

Workflow (2)

- Lets add a new task:

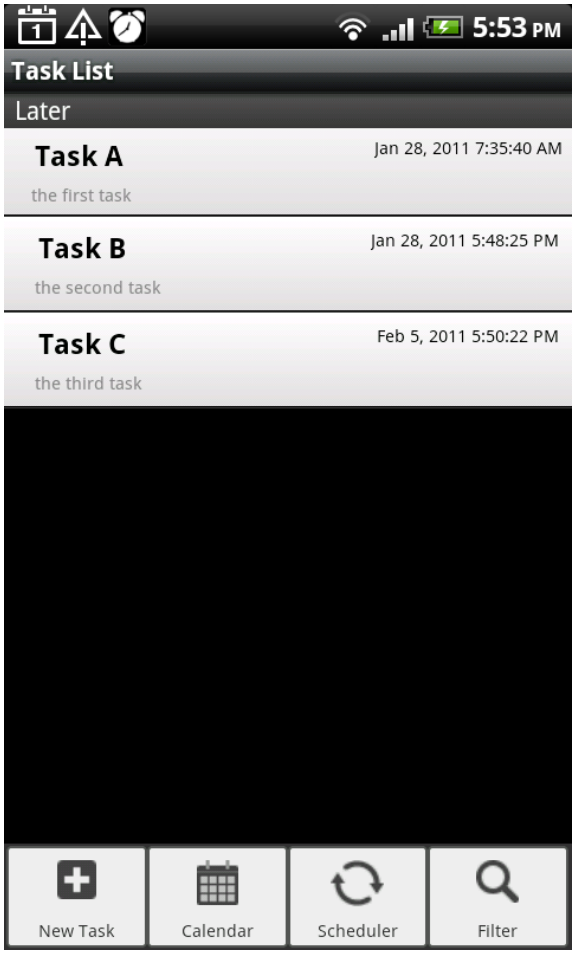


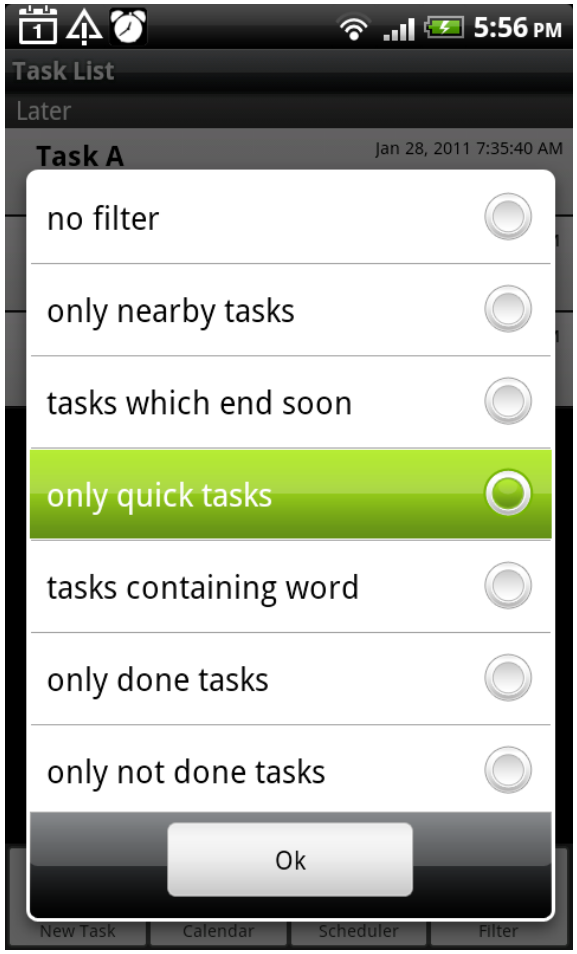


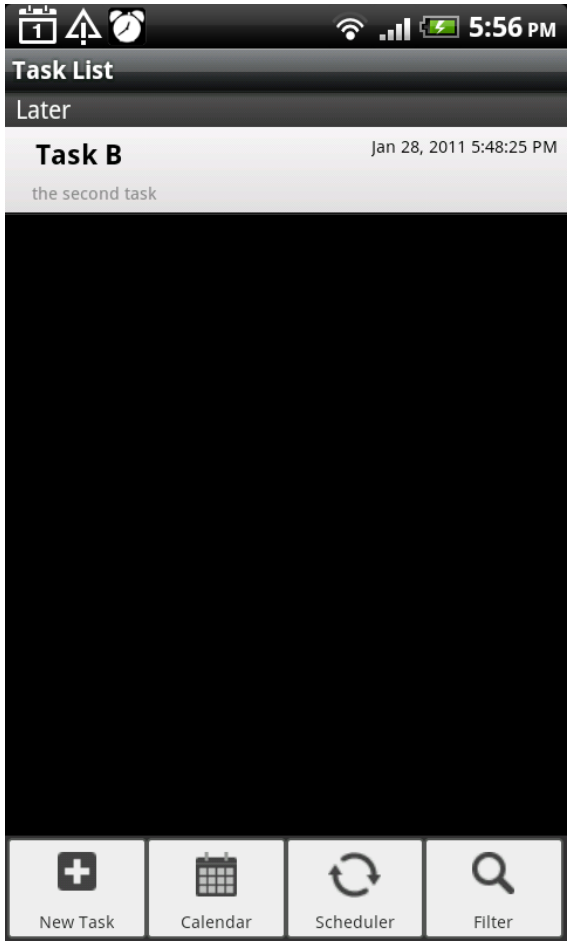


Workflow (3)

- After adding 3 new tasks

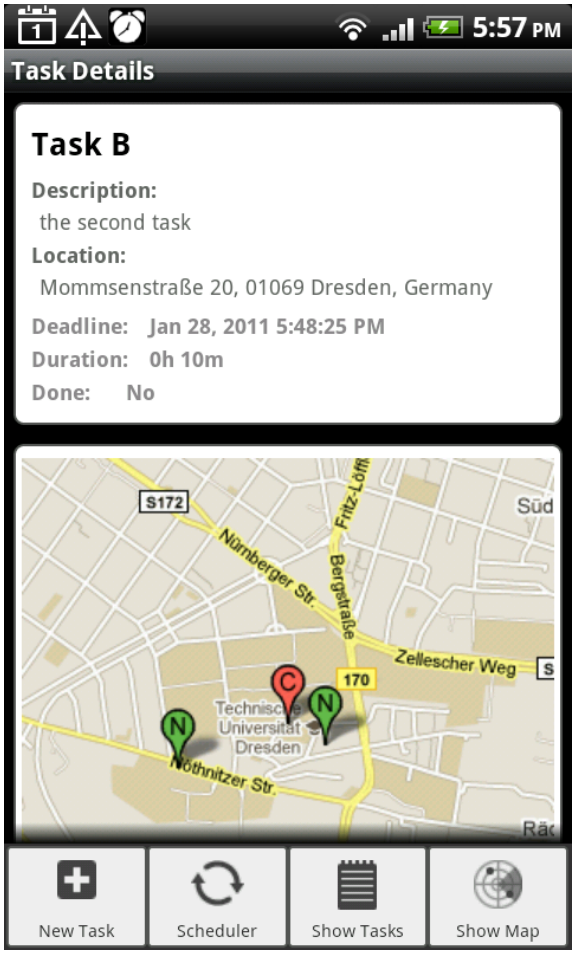


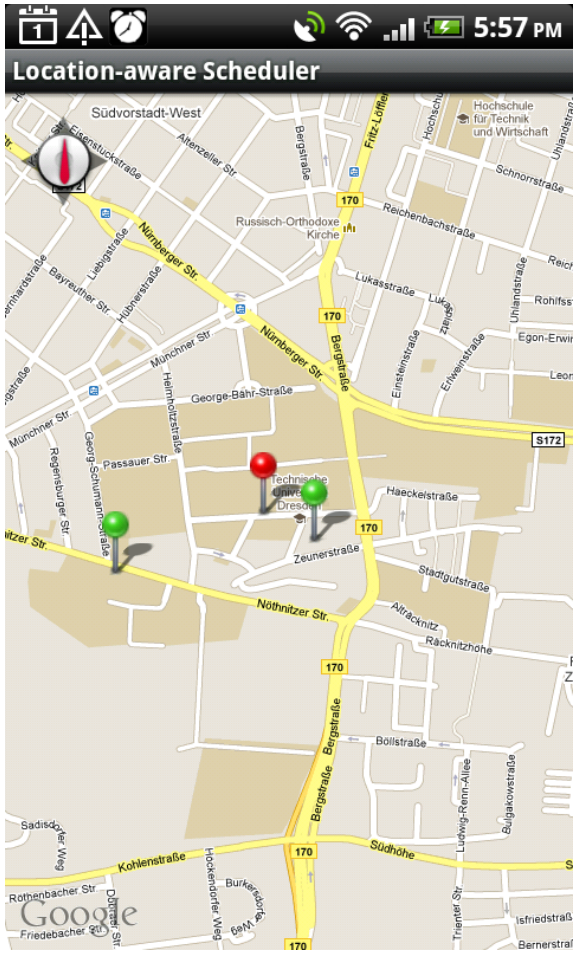


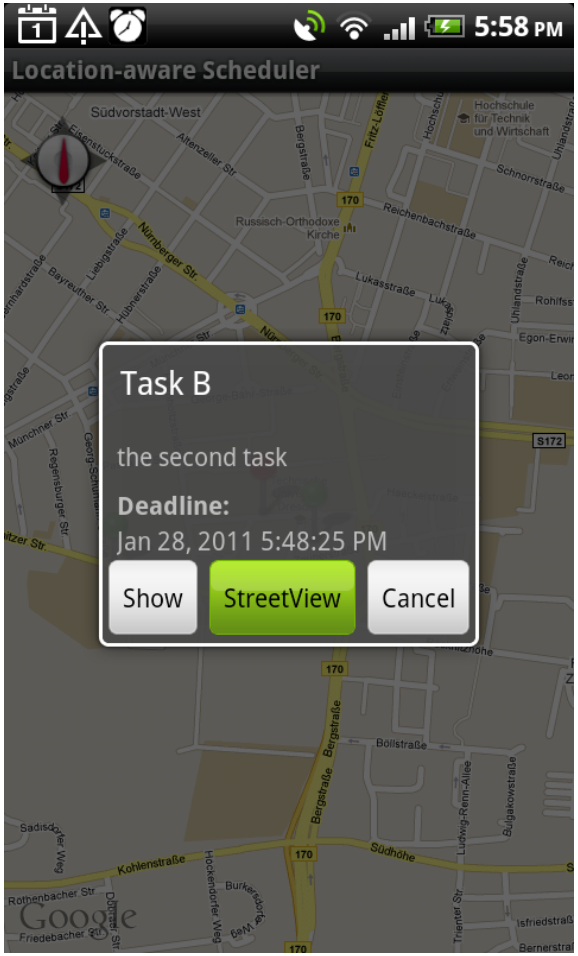


Workflow (4)

- We have a closer look on this task

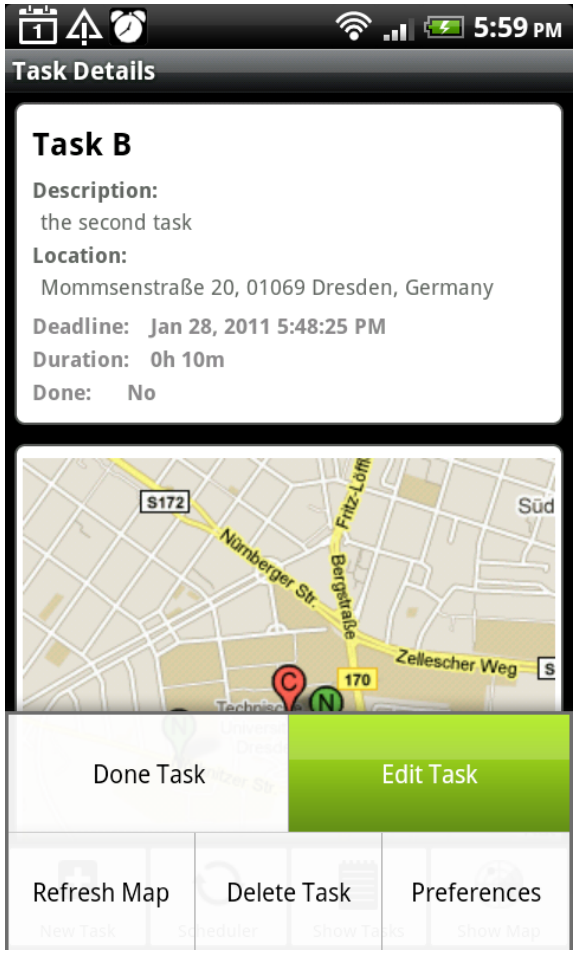


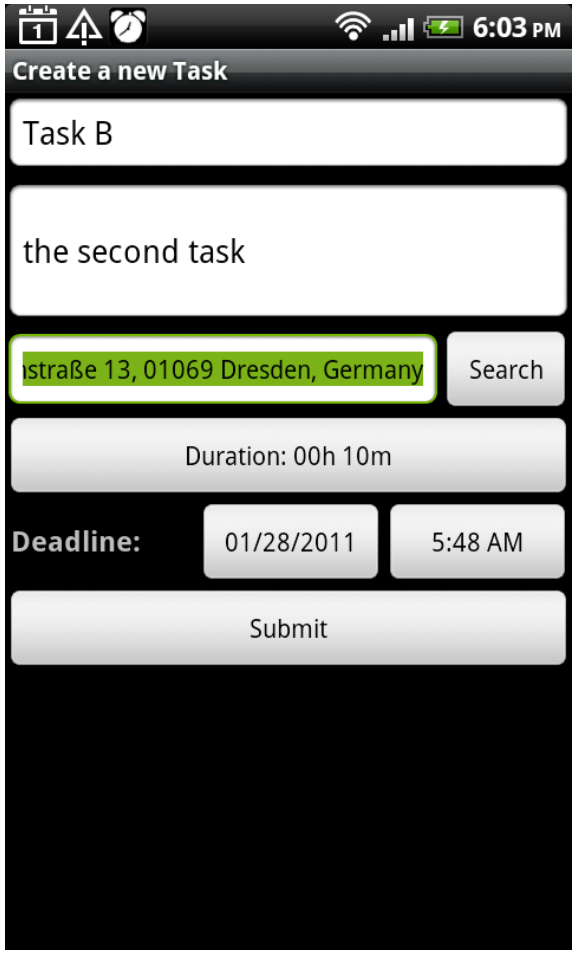




Workflow (5)

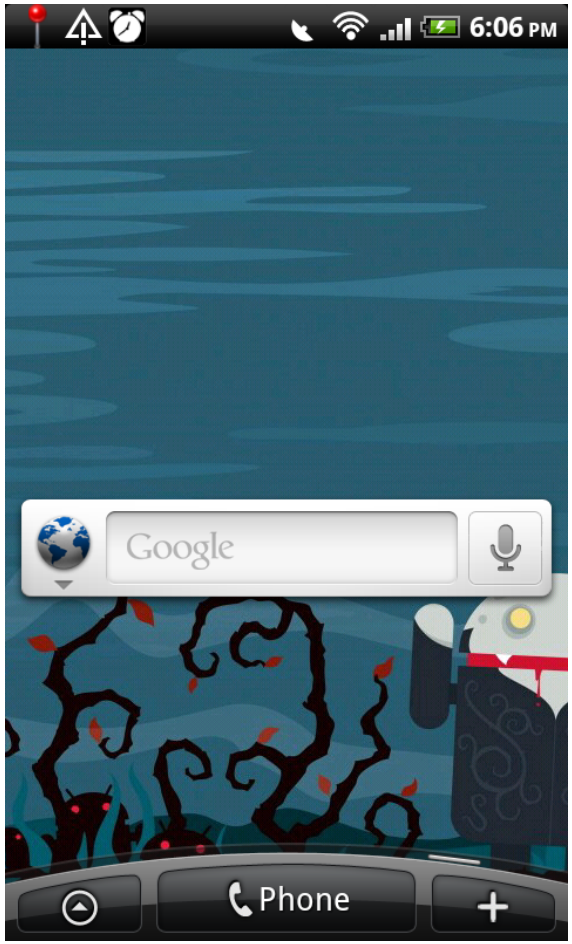
- Viewing the task in StreetView, we see the location is wrong





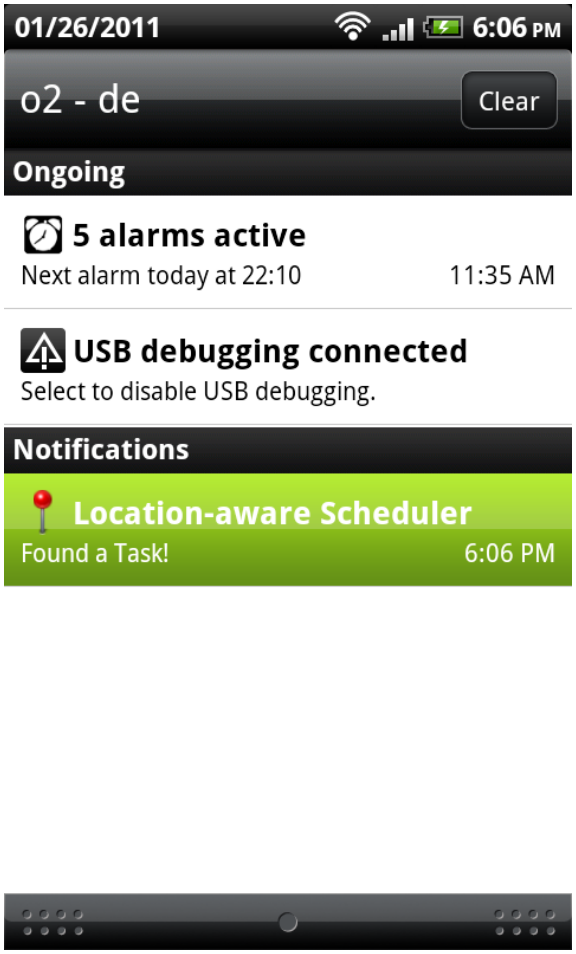
Workflow (6)

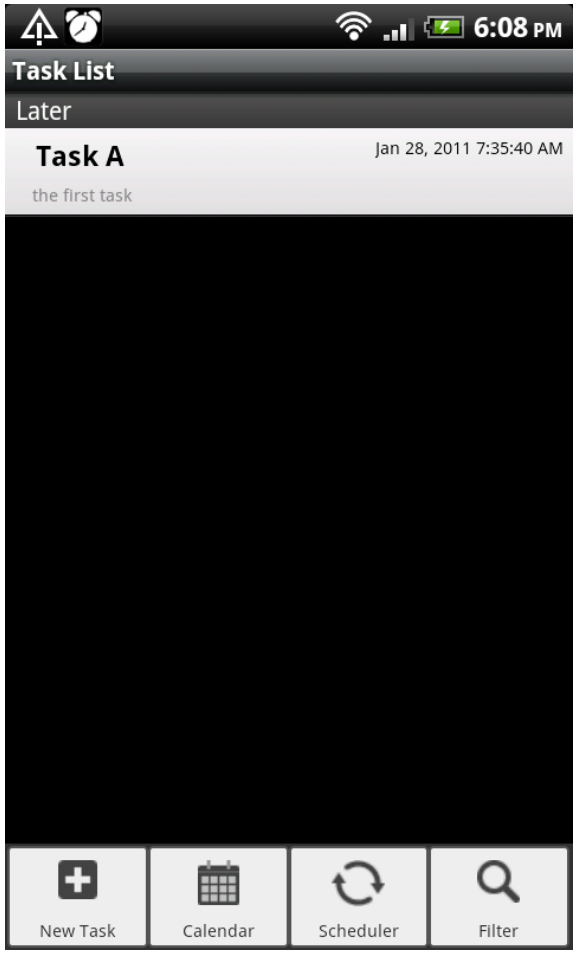
- Show schedule, decide to still have time, start to walk around



Workflow (7)

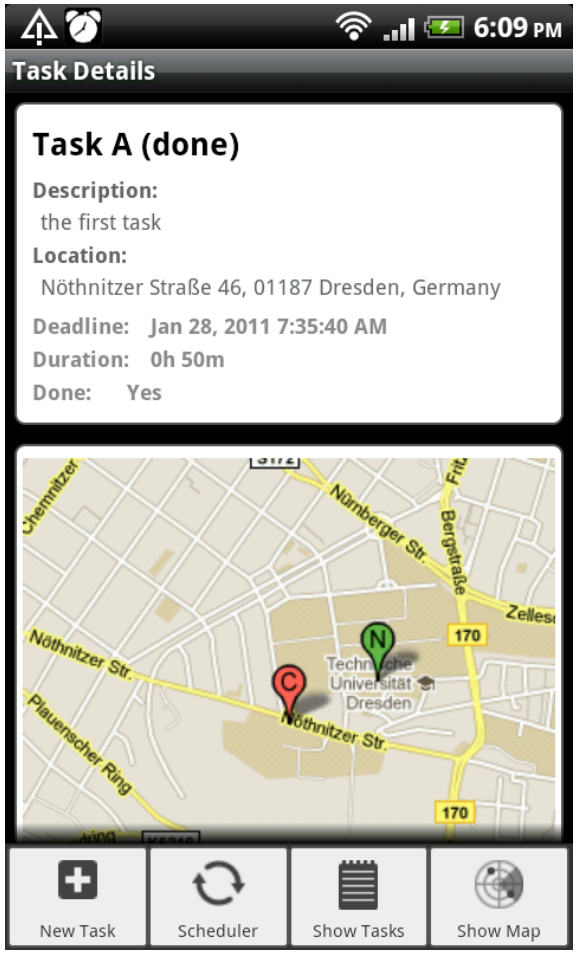
- Opening the notification

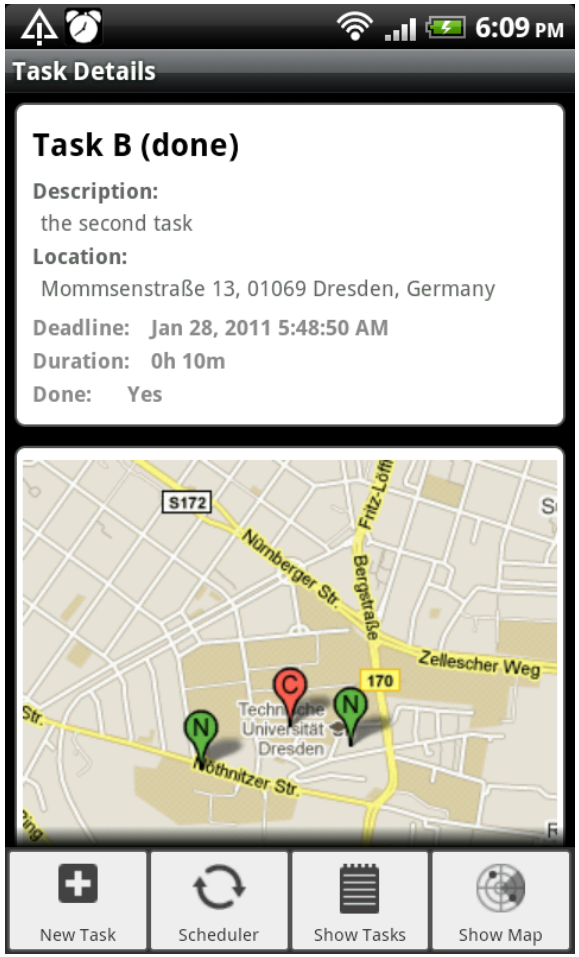




Workflow (8)

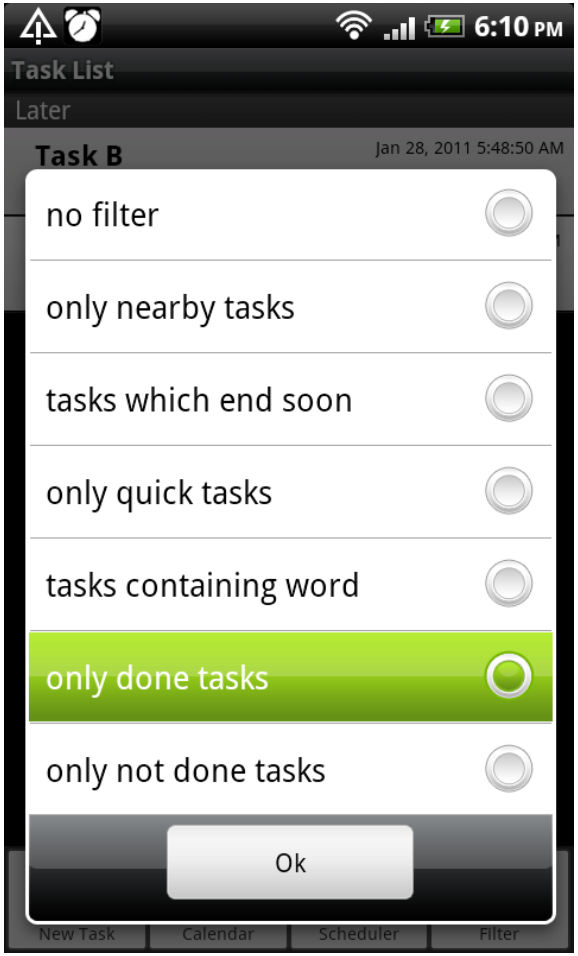
- Set the task as done, handle another task on the way

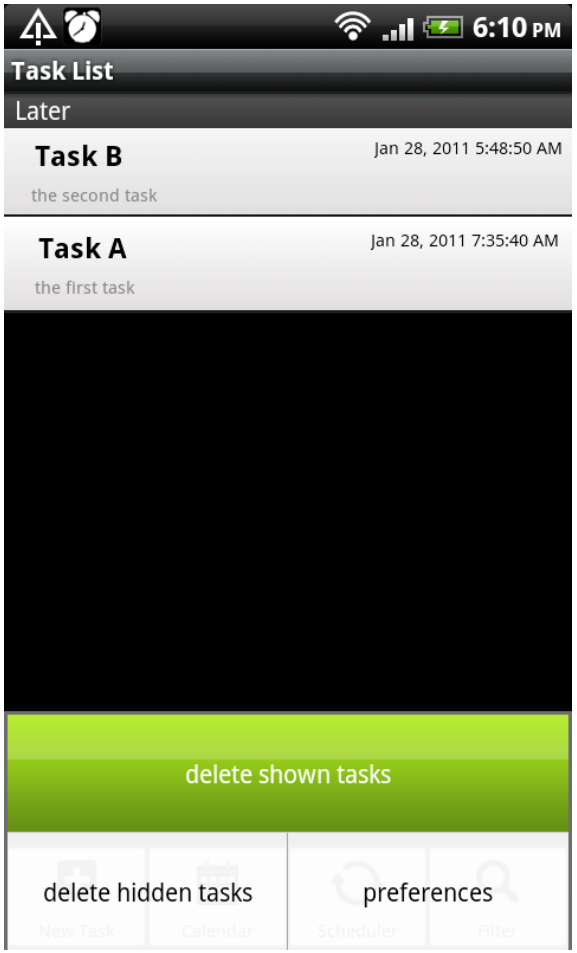


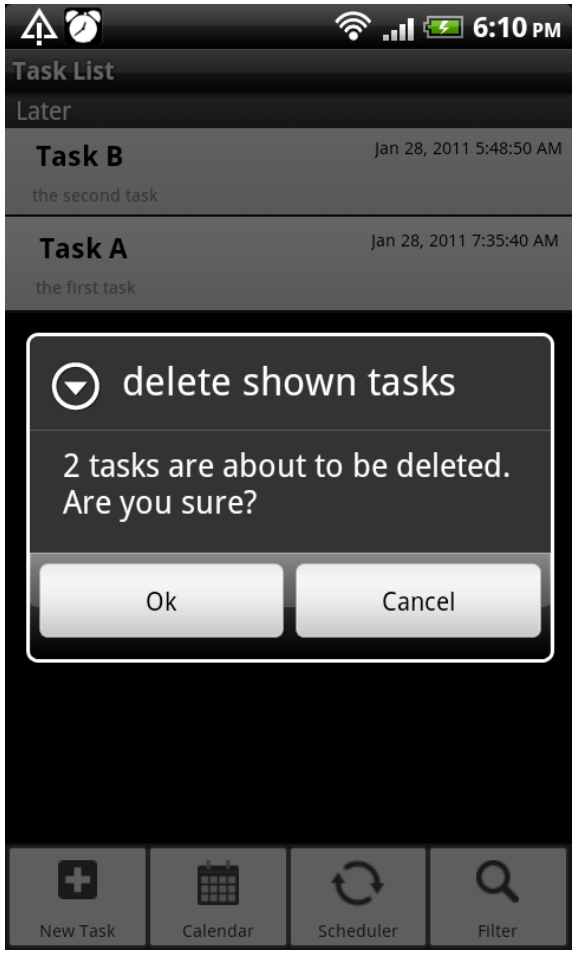


Workflow (9)

- Delete the finished tasks







Challenges

- User Interface
- Battery Life
  GPS service with user-defined intervals
- User Acceptance
  simple schedule
- Mobile connection issues
  caching of images
- Huge drawback: calendars very heterogeneous

Abilities/Limits

Abilities:

- Usable tool to handle tasks
- „alarm clock“ for a location (not time)
- Can help to manage the day
- Up to now available in 2 languages

Limits:

- No support for disconnected operations
- Not very advanced scheduling
- No routing between tasks
- Calendar access works only on a few devices

Experiences

- Think twice if you intend to access the internal Calendar
- It's very easy to support multiple languages/regions
- Arranging the menu-elements in a good order is important for user-experience
- Try to test on different devices as early as possible