



Application Development for Mobile and Ubiquitous Computing

Don't Forget Your Toothbrush!

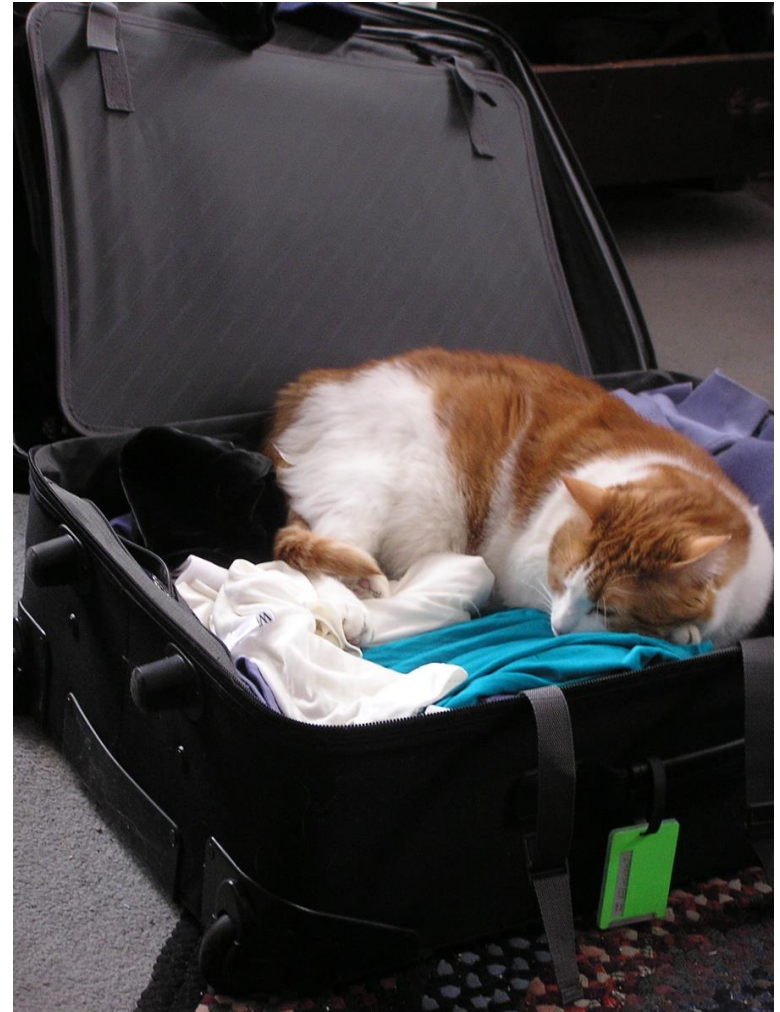
Final Presentation

GroupNo. 7

Team: Robert Morawa, Eva Morawietz

Don't Forget Your Toothbrush

- luggage checklist
- user input:
 - destination, travel time
 - mean of transportation
 - activities
 - participants (kids, pets)
- automatically creates checklist with required items
- location-based reminders
- custom entries



Don't Forget Your Toothbrush

TRIP TO SWISS

TRAVEL DESTINATION

Basel CH






TRAVEL TIME

From 30/01/2015

To 03/02/2015

OTHER INFORMATION

How do you travel?

Next →

Don't Forget Your Toothbrush

TRIP TO SWISS

TRAVEL DESTINATION






TRAVEL TIME

From

To

OTHER INFORMATION

How do you travel?

Next →

Jan 01 2014

Feb 02 2015

Mar 03 2016

Cancel OK

Don't Forget Your Toothbrush

TRIP TO SWISS

TRAVEL DESTINATION

Basel CH






TRAVEL TIME

From 30/01/2015

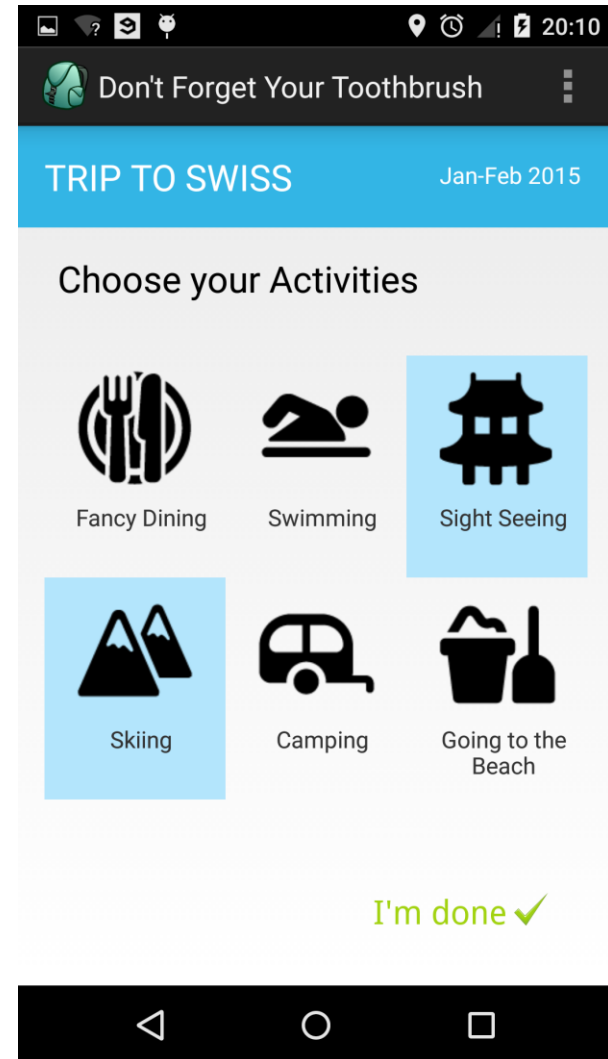
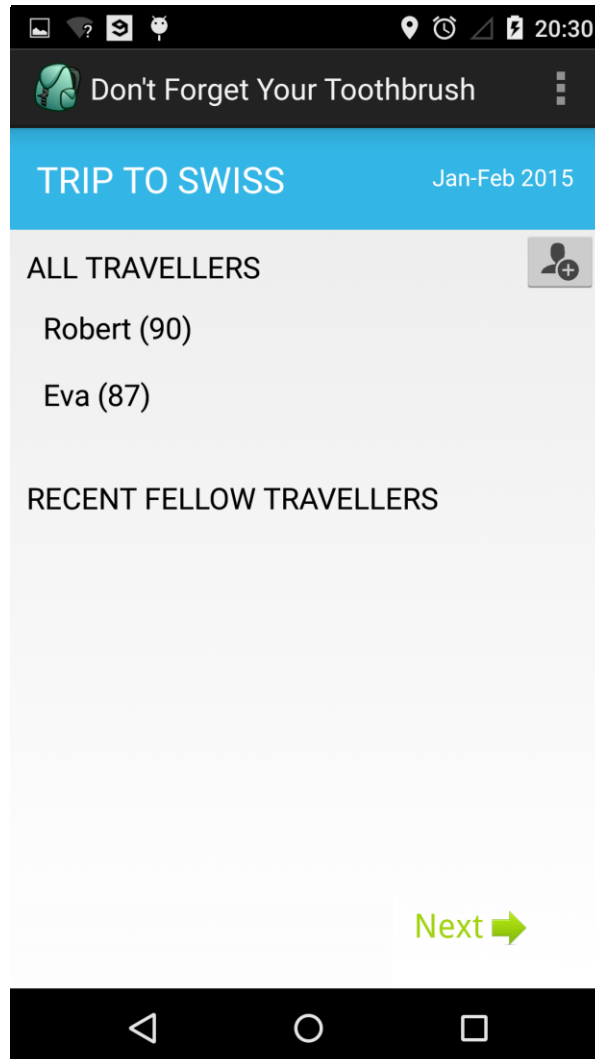
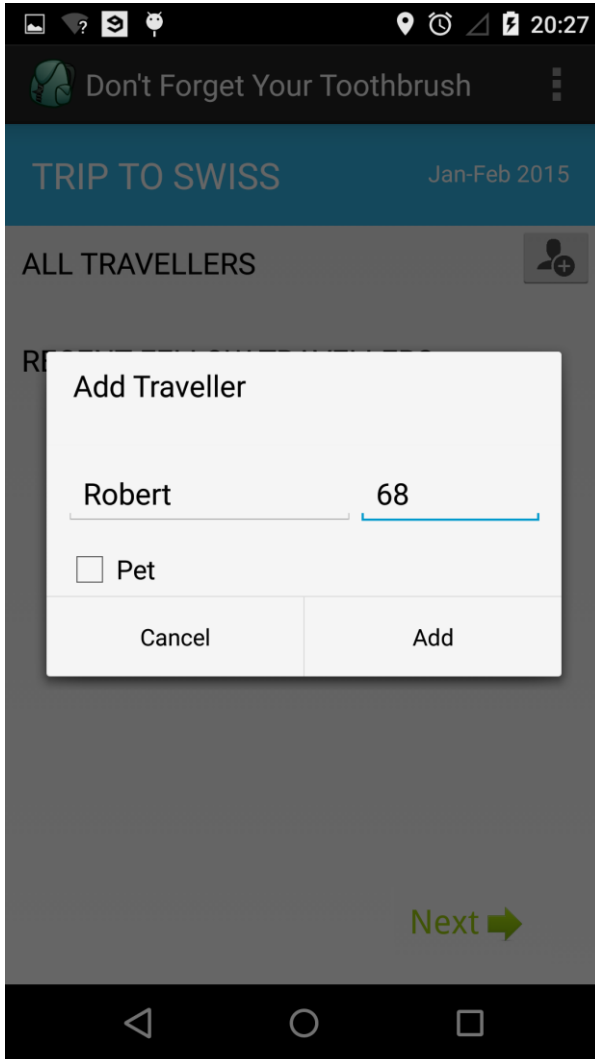
To 03/02/2015

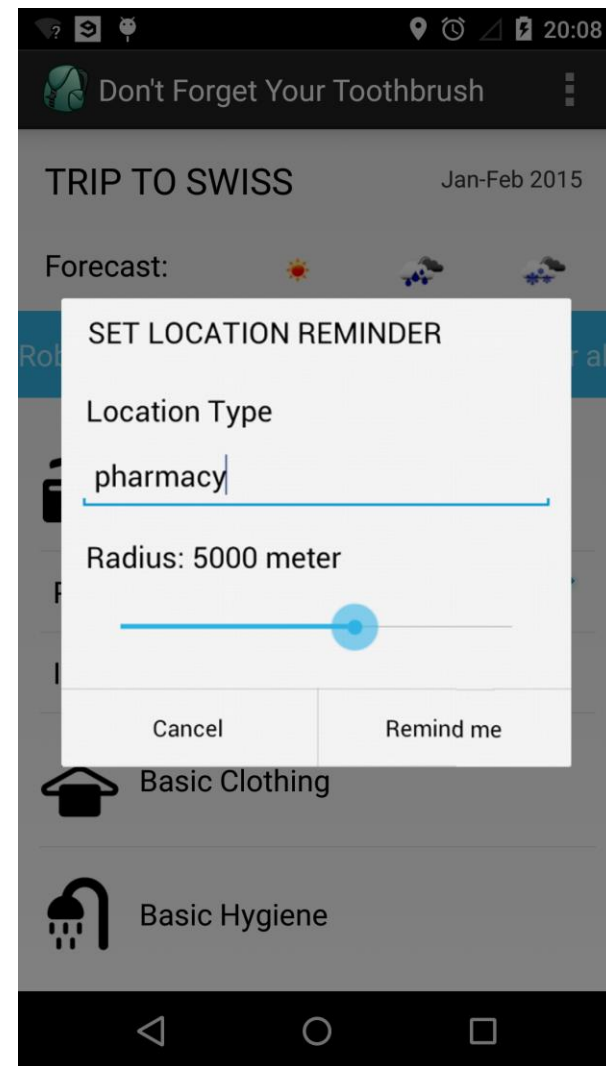
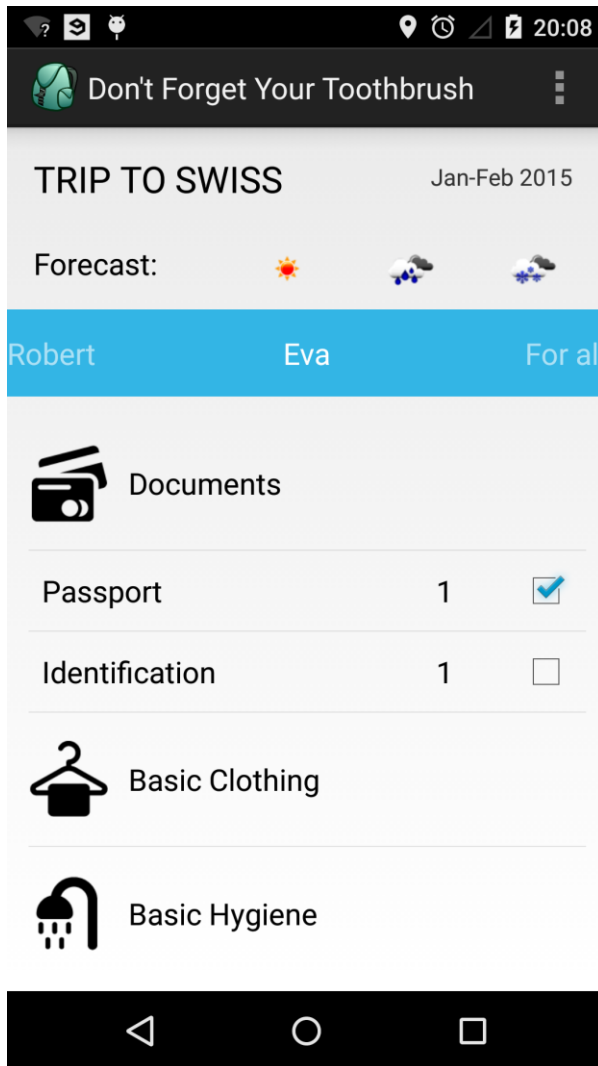
OTHER INFORMATION

How do you travel?

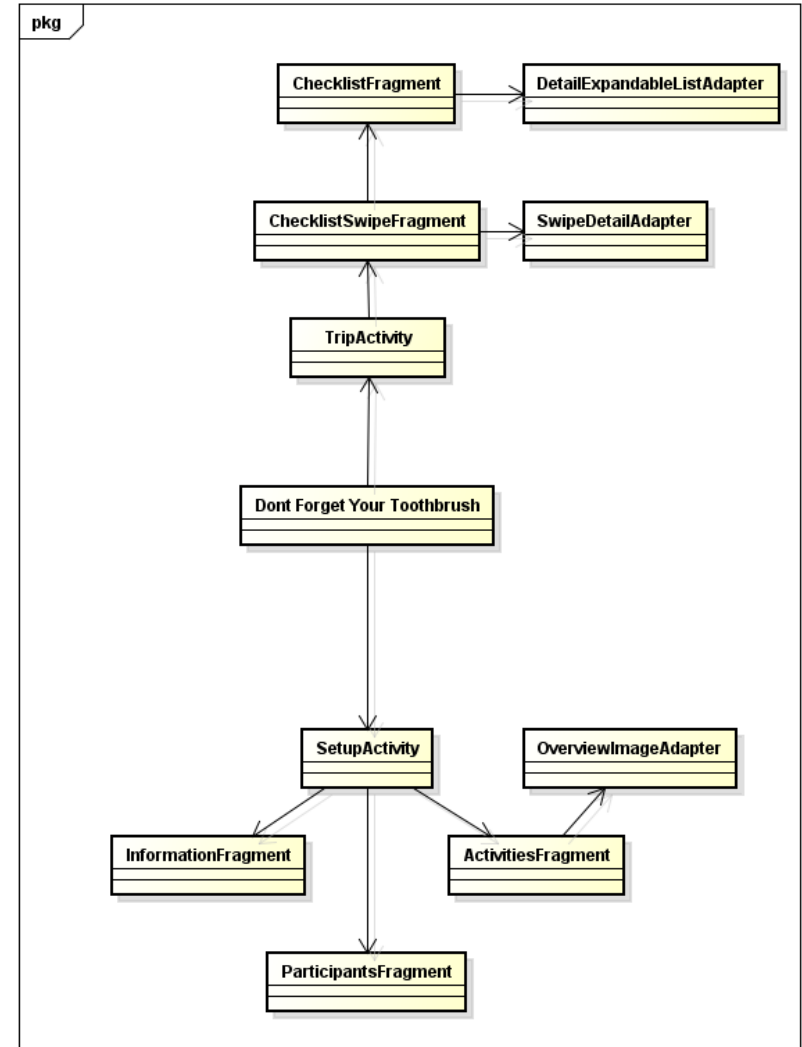

 
 
 
 

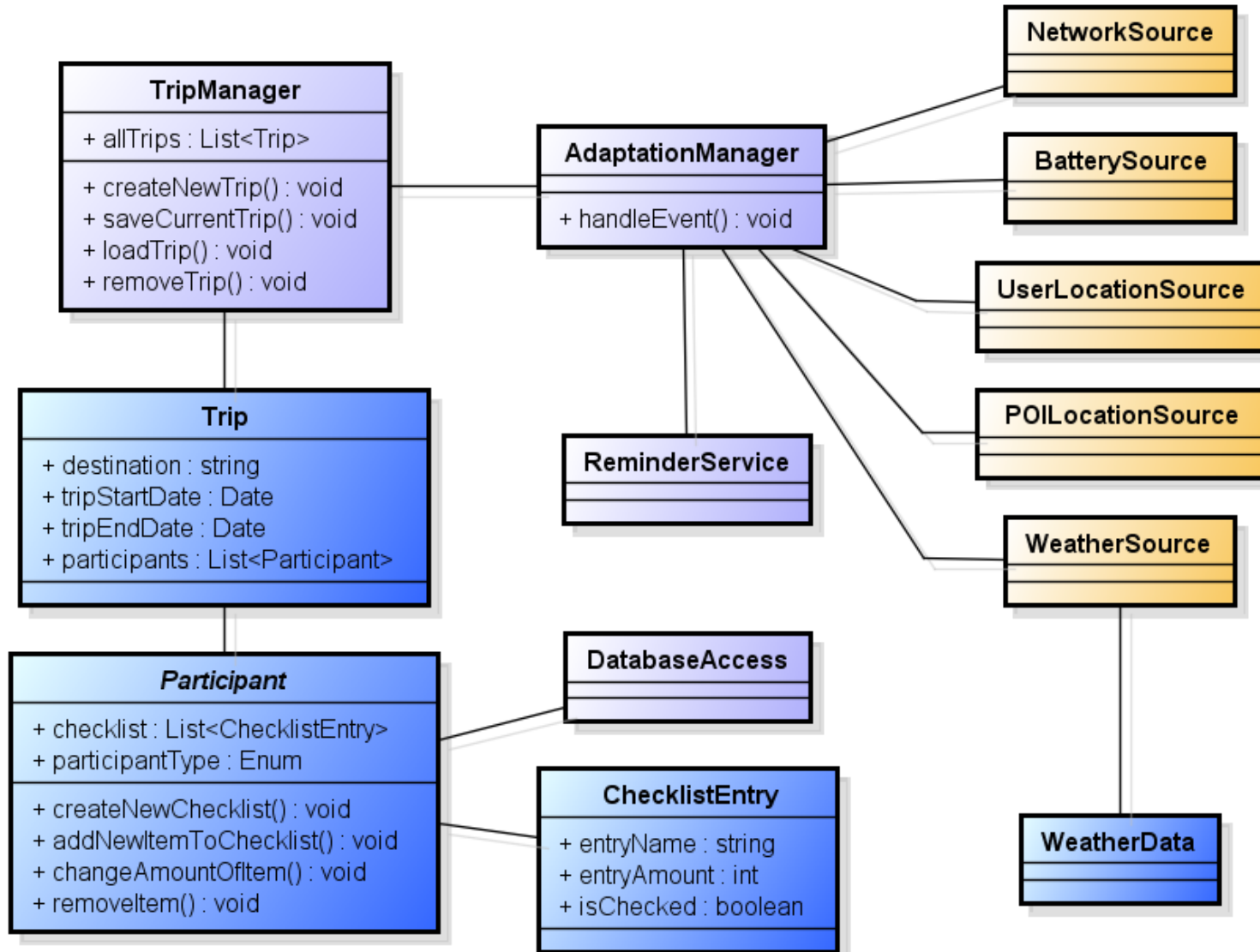
Next →





- largely fragment-based UI
- customized list and grid adapters
- navigation in TripActivity via swipe gestures (ViewPager)
- complex inputs via dialogs (reminder, participants)





Context	From	Via
connectivity state and strength	ConnectivityManager, TelephonyManager	BroadcastReceiver, PhoneStateListener
battery status	BatteryManager	BroadcastReceiver
user location	LocationManager	LocationListener for GPS and network provider
weather	openweathermap.org	openweathermap API
location of nearby POI	maps.googleapis.com	Google Places API
possible checklist items	SQLite database	sql asset helper library
user and trip information	user	direct input

- Usability
 - select individually needed information from database
 - divide information in organized, manageable parts
 - update checklist if e.g. weather has changed
 - inform user if reminder condition is met
 - offer support down to Android 4.0

- Connectivity Challenge
 - Server: reduced or no querying for POIs; store weather information
 - Location tracking: choose available location listener (GPS or network); inform user if no connection is available

- Battery Challenge
 - reduced (50%) or disabled (10%) POI querying; disabled (10%) location tracking

- learned a lot about Android and its components
- underestimated UI implementation
- app still in development:
 - basic functionality is implemented
 - to do: custom entries, real notifications for reminder