

Application Development for Mobile and Ubiquitous Computing



Location Reminders Final Presentation

Group 10

Dresden, 29.01.2016

Idea and App Features

- Better task management
 - lot of things to do
 - create todo-reminders
 - attach location or type of POI to reminders
- automatic POI suggestions
- receive notifications if you are near defined location



Reminders

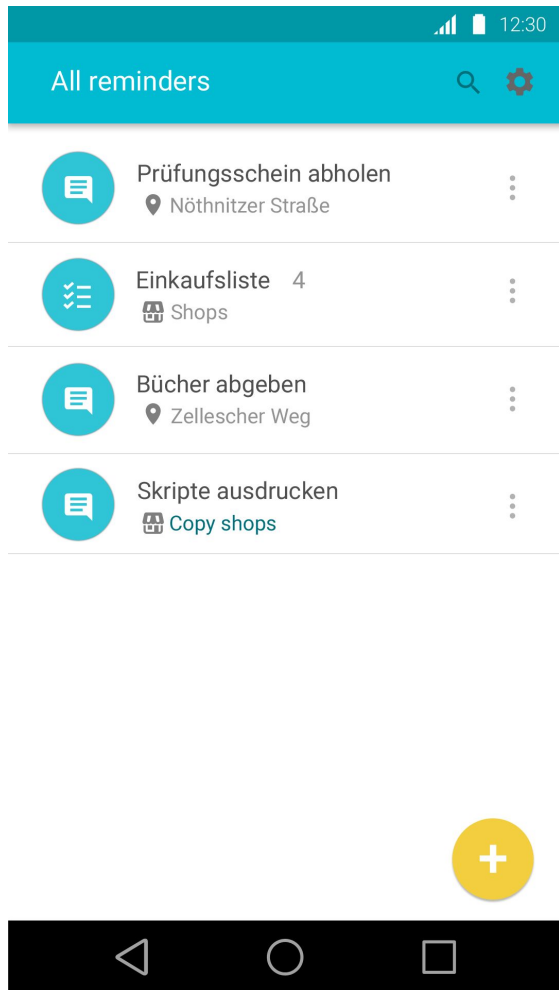
- manage, show details
- mark as **completed**
- show **active** and **completed** reminders

Notifications

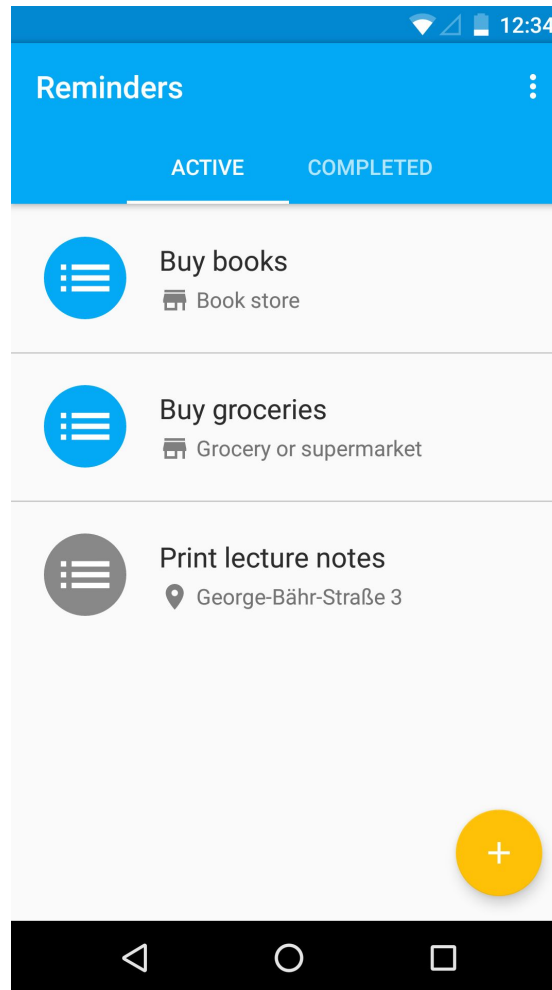
- **reminder control**

Settings

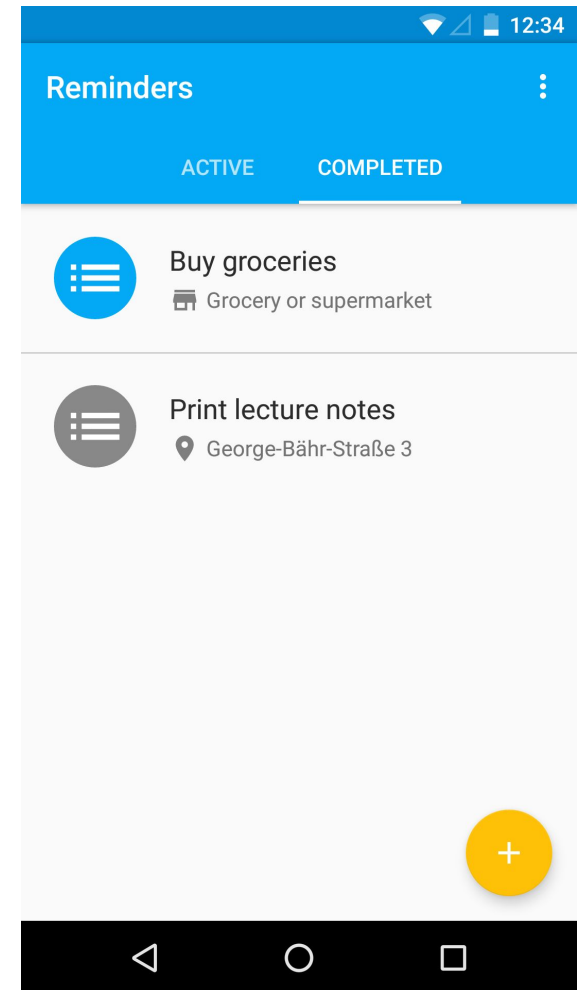
- **personalization**
 - frequency
 - accuracy
 - service control

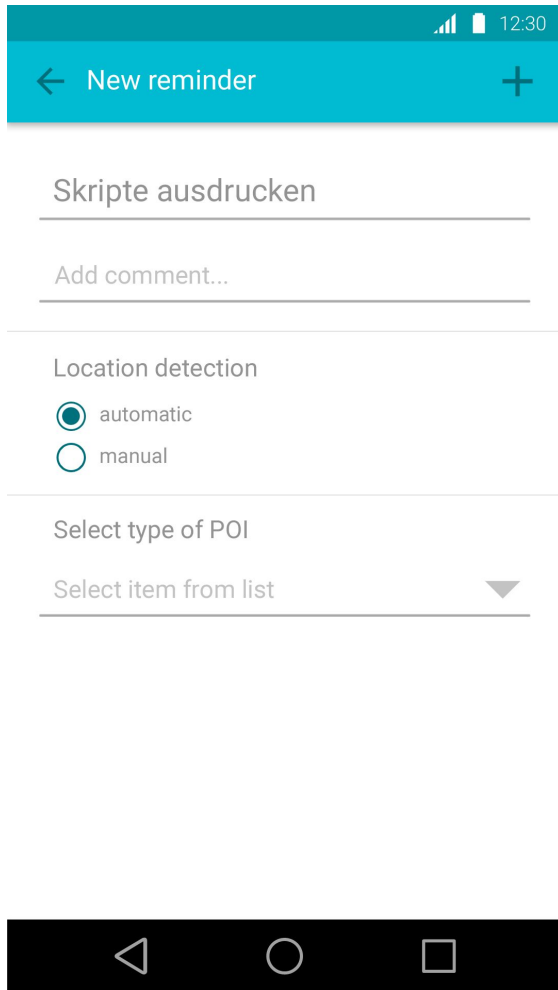


Mockup

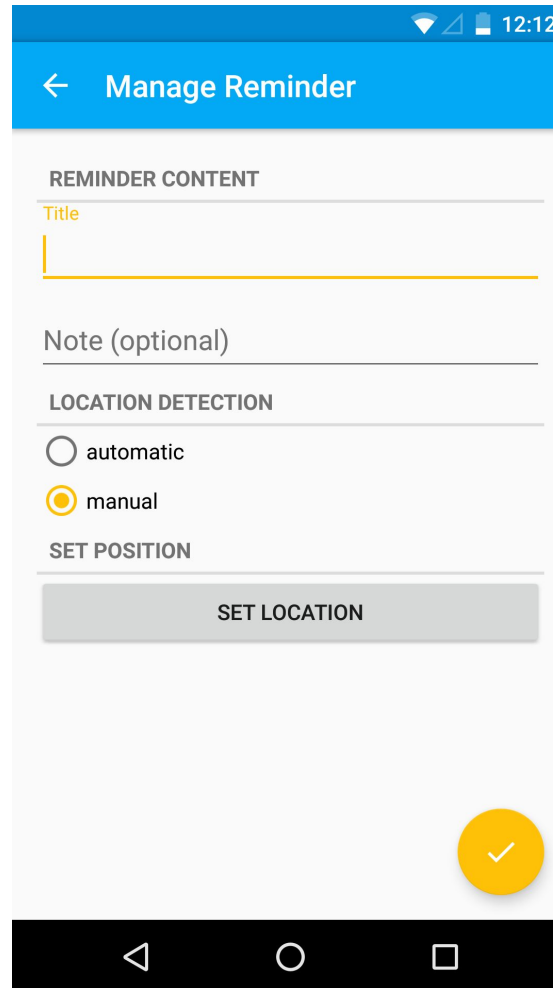


Tab layout for active and completed reminders

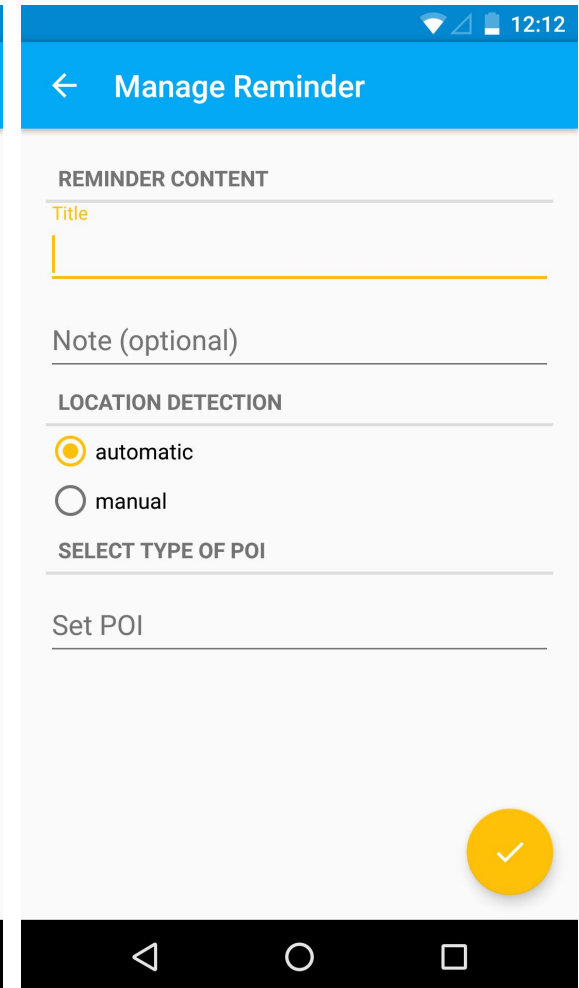


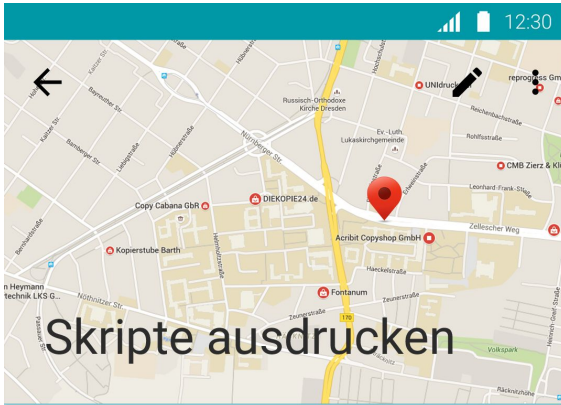


Mockup



Create new reminder





Locations near me



Acribit Copyshop GmbH
Zellescher Weg
Open now | 500m away

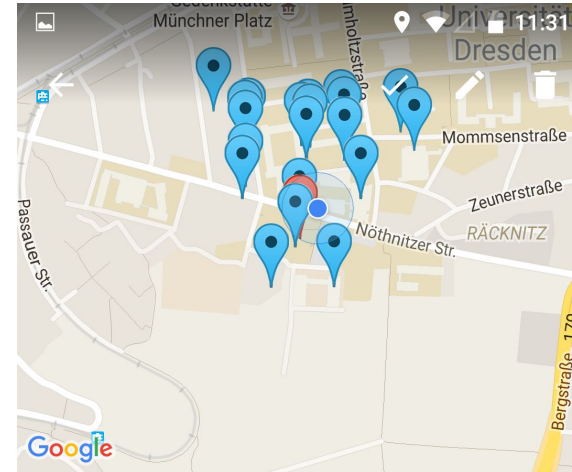
DIEKOPIE24
George-Bähr-Straße
Open now | 900m away

Fontanum
Mommsenstraße
Open now | 500m away


SHOW MORE





Mockup



Print lecture notes

 **Studentencafé Ascii**
18 m | Opened

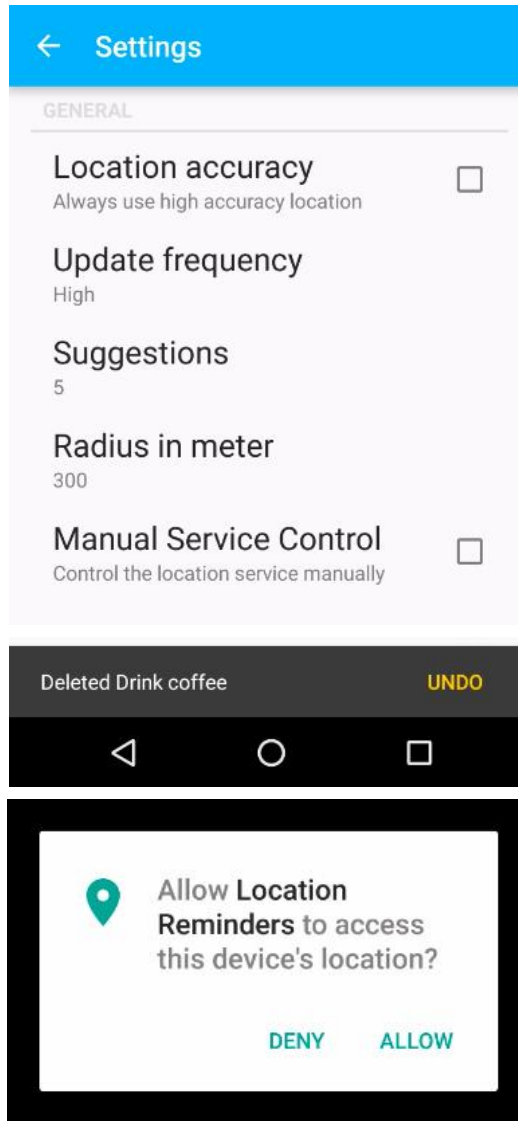
 **Technische Universität Dresden: Fa...**
31 m | Not Known

 **Technische Universität Dresden Ins...**
151 m | Not Known

 **USZ TU Dresden**



Detail view



Extended App Settings

- Radius for POI suggestion
- Manual Location Service Control

Updated Notification View

- Set notification completed

Android 6 Permissions

- Permissions request

Undo reminder removing

UI improvements

Demonstration

<https://goo.gl/07TdsE>



Offline Challenge - save reminders locally



Connectivity Challenge - use location data from multiple sources and local information when internet connection is lost



Energy Challenge - choose update frequency and location accuracy

- + Caching (POIs)
- + Filtering (radius, type)
- + Data transmission (frequency)

- Prefetching
 - no prefetching on reminder creation
- Filtering
 - no API response limiting

Experiences

- Experience with Google Maps/Places API
- Work with Android Services

Pitfalls

- Android Permissions model changes
- Notification-IDs

Thank you for your attention!