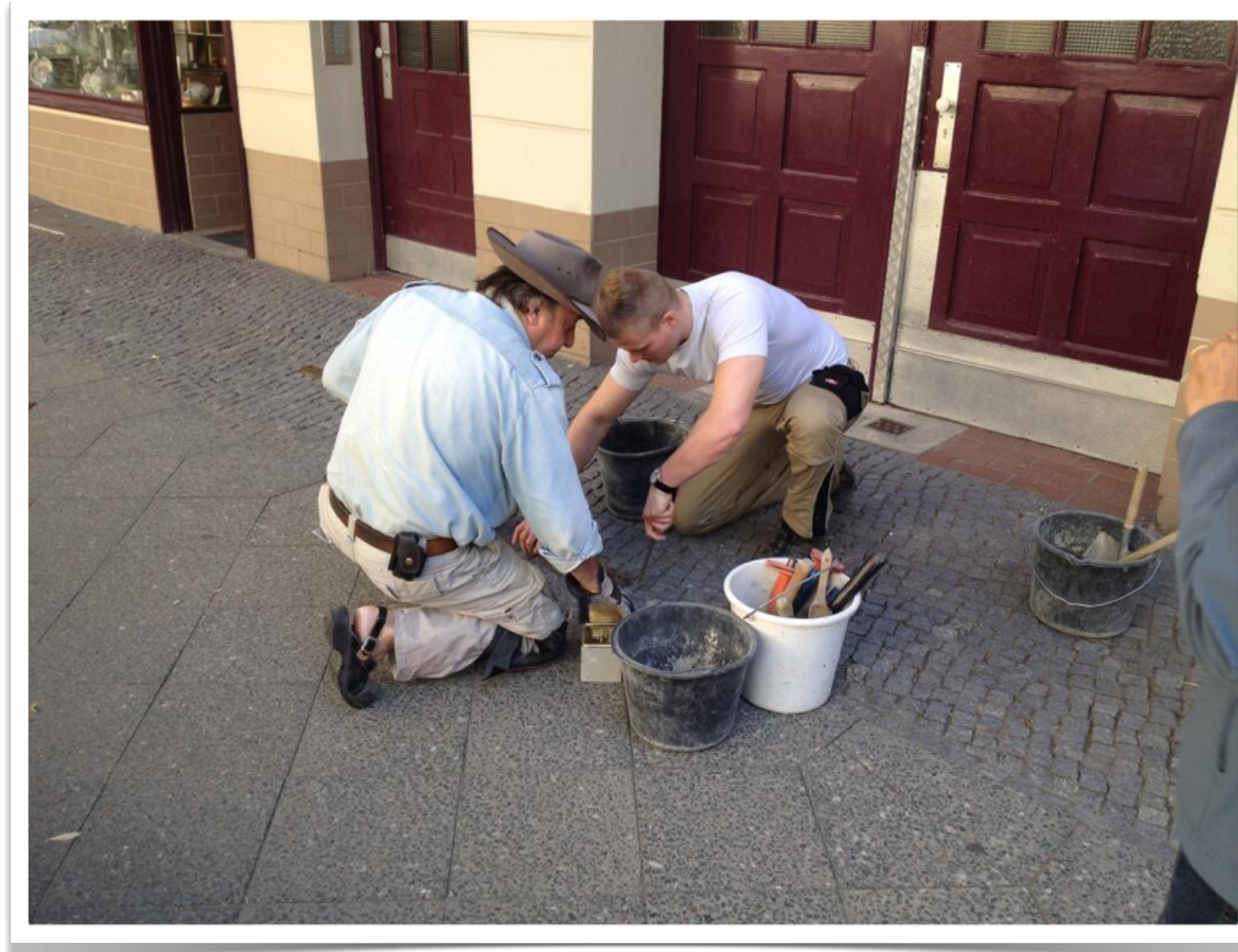


Macoun

MapKit Clustering Techniken

@claushoefe

Stolpersteine

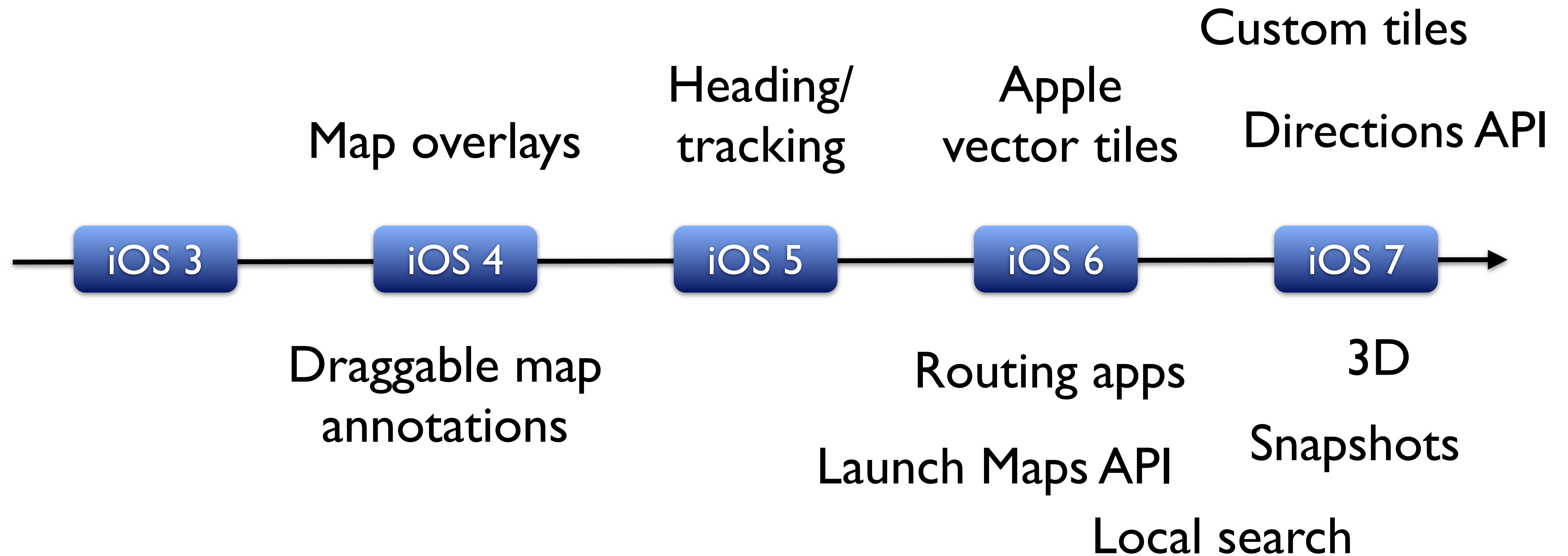


Ablauf

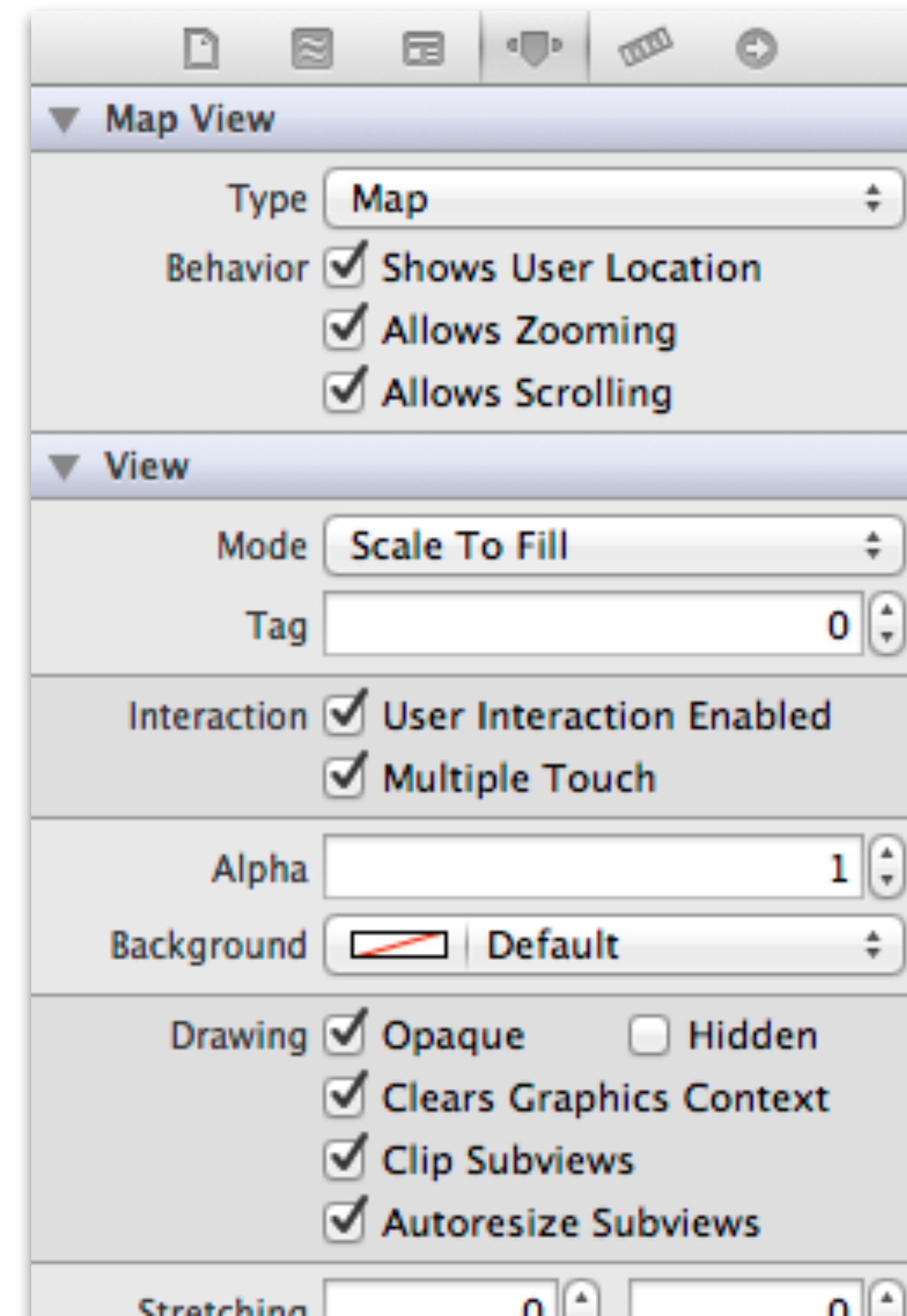
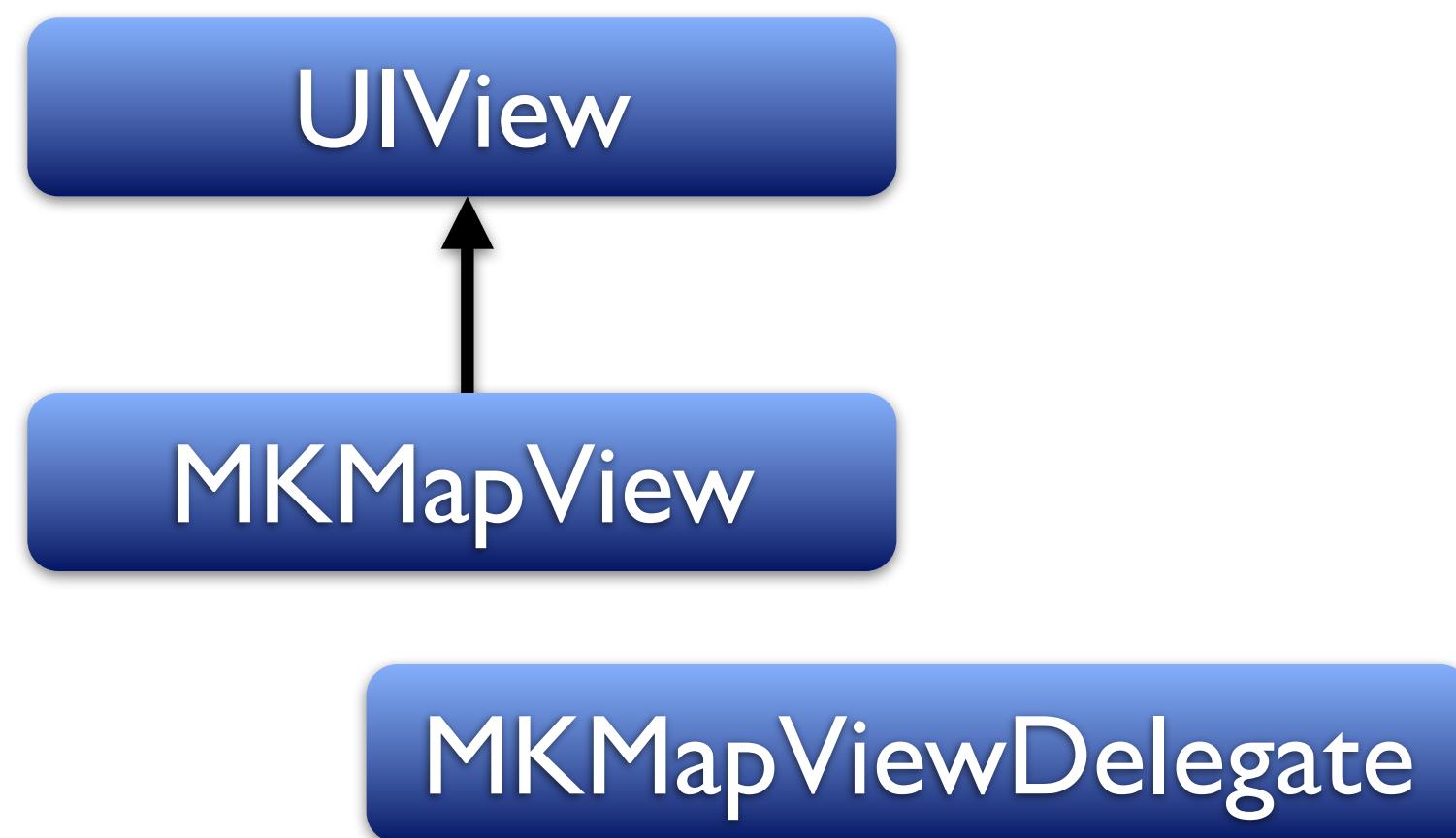
- Einführung MapKit
- Clustering
- iOS 7, Animationen
- Fragen

Einführung MapKit

MapKit



MKMapView



Daten und Visualisierung



Annotations anzeigen

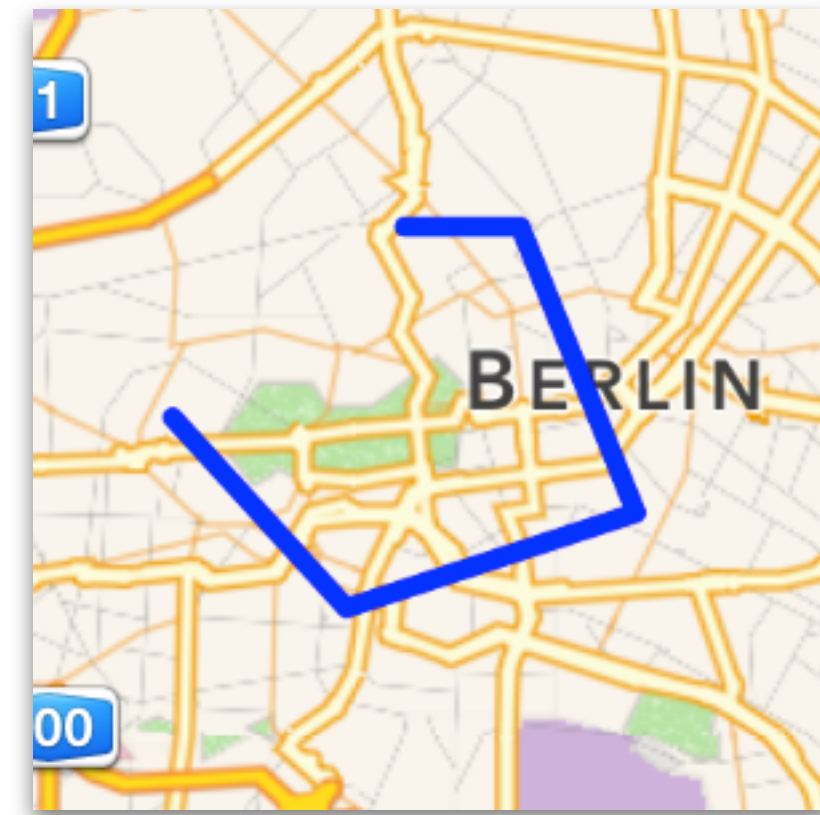
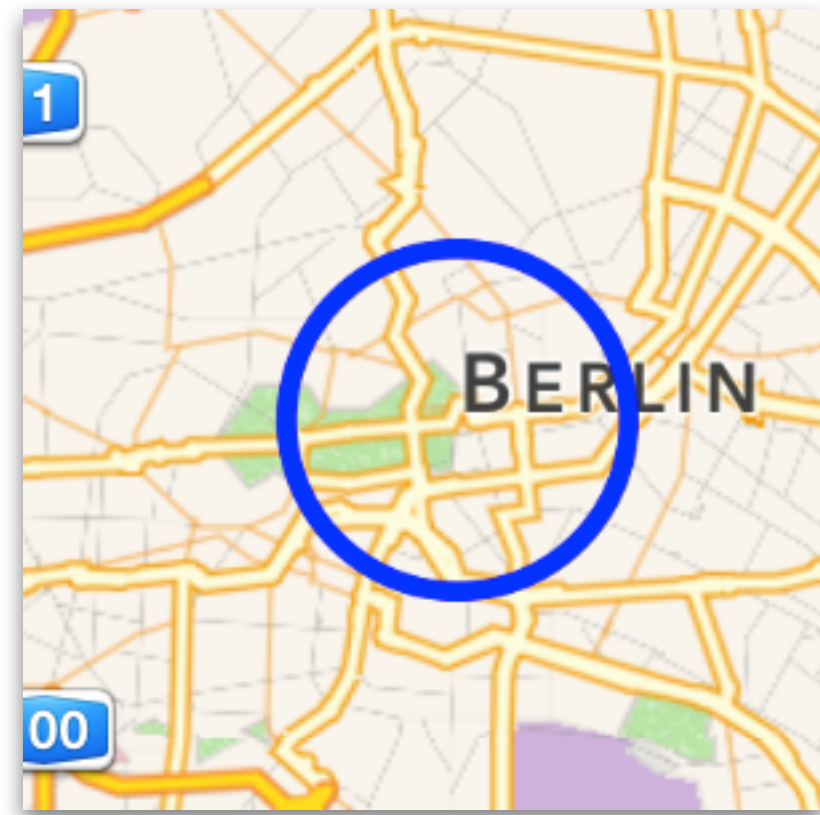
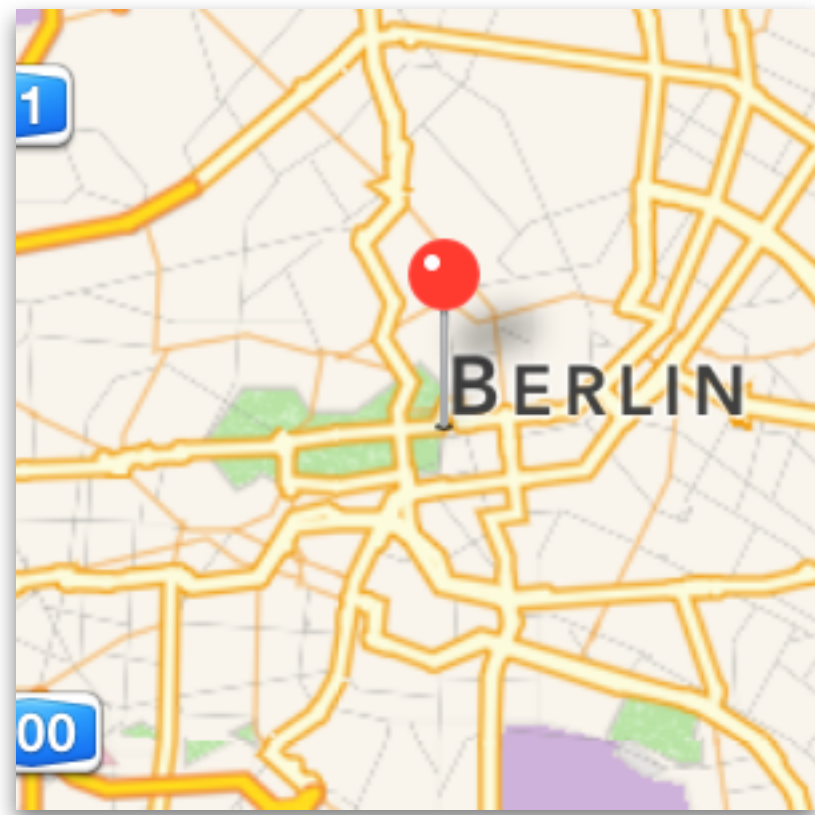
MKMapView

- (void)addAnnotation:(id < MKAnnotation >)annotation
- (void)addAnnotations:(NSArray *)annotations

MKMapViewDelegate

- (MKAnnotationView *)mapView:(MKMapView *)mapView viewForAnnotation:(id < MKAnnotation >)annotation

Standard Annotations/Overlays



Merkator-Projektion



Koordinatensysteme

- Geografische Koordinaten:

`MKCoordinateRegion, CLLocationCoordinate2D, MKCoordinateSpan`

- Merkator-Projektions Koordinaten:

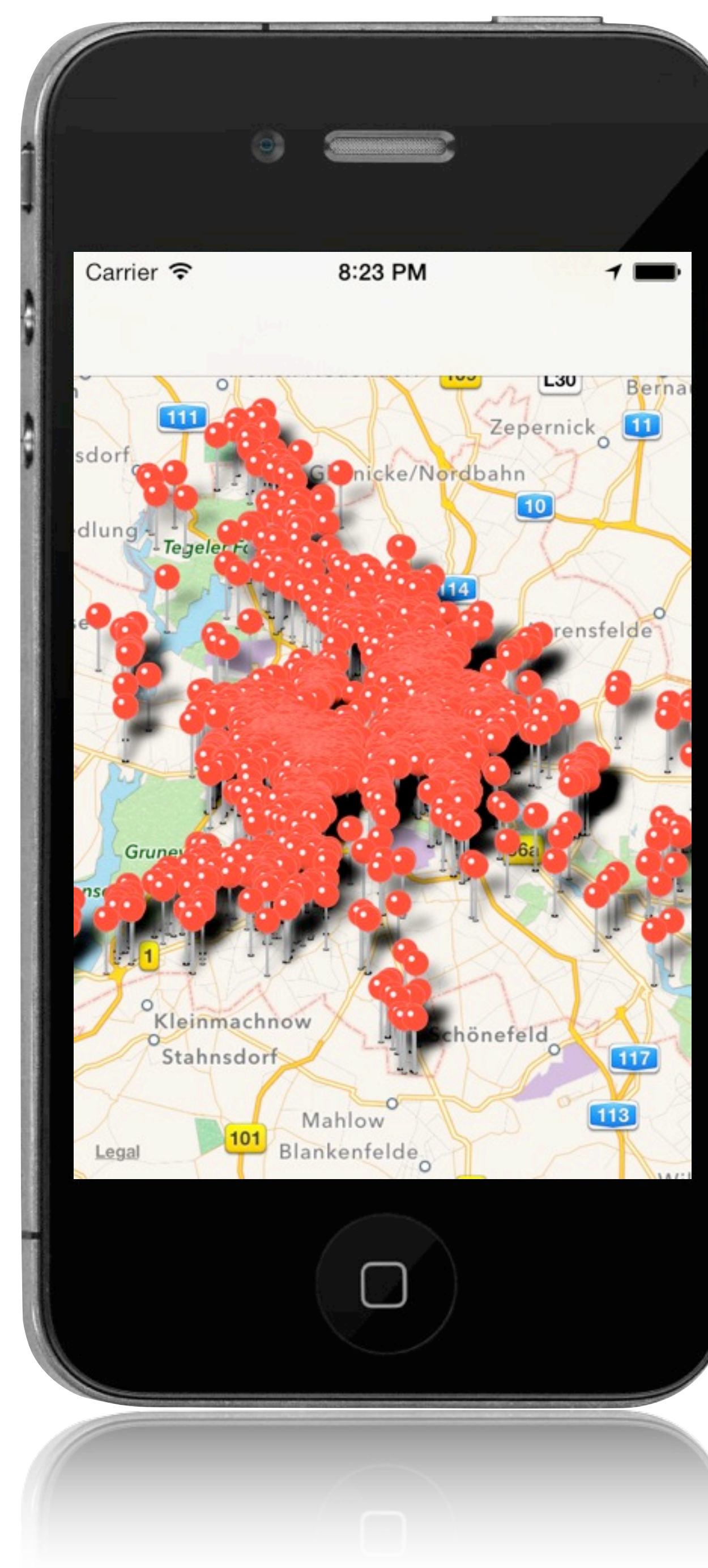
`MKMapRect, MKMapPoint, MKMapSize`

- UIView Koordinaten:

`CGRect, CGPoint, CGSize`

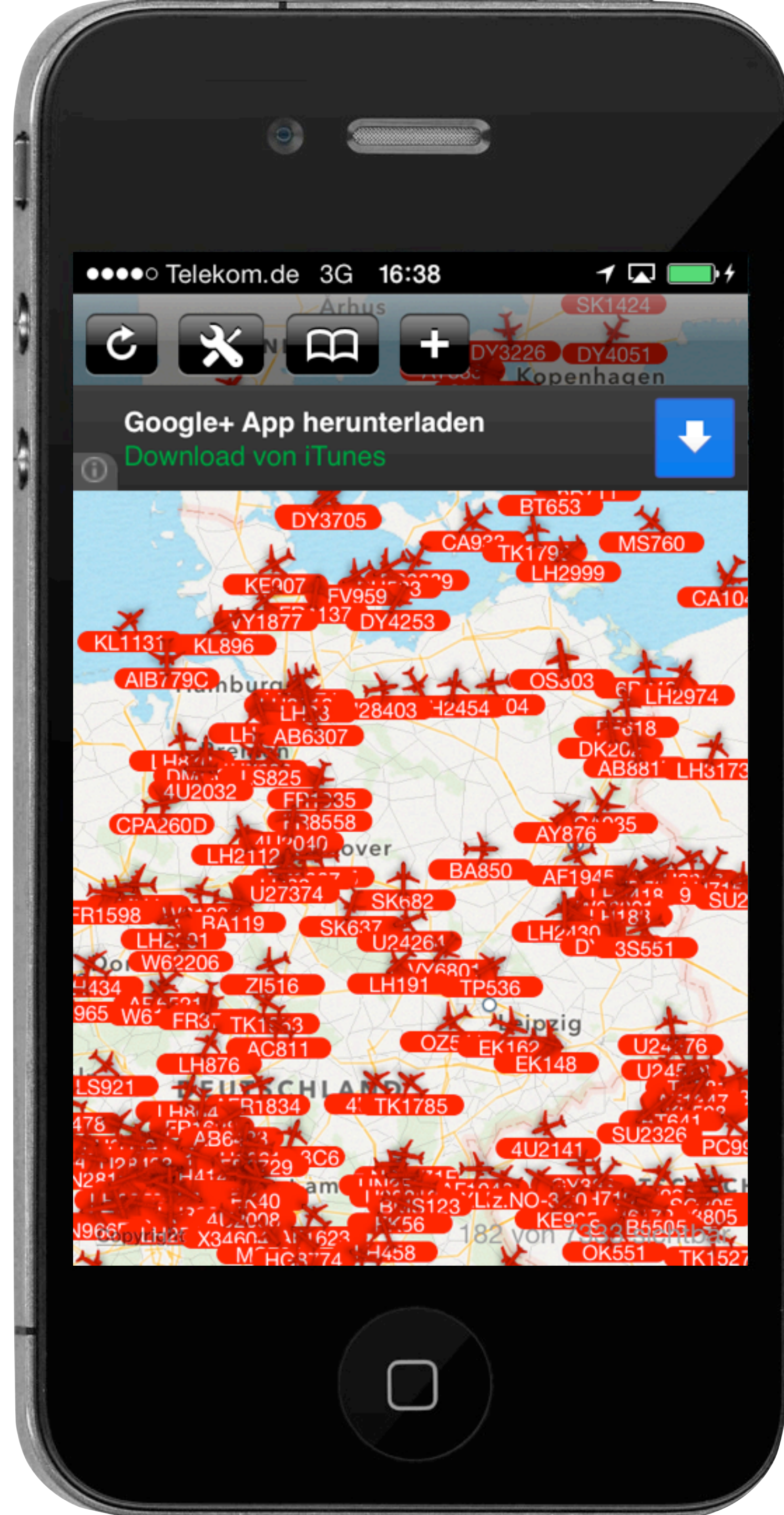
Demo

Demo

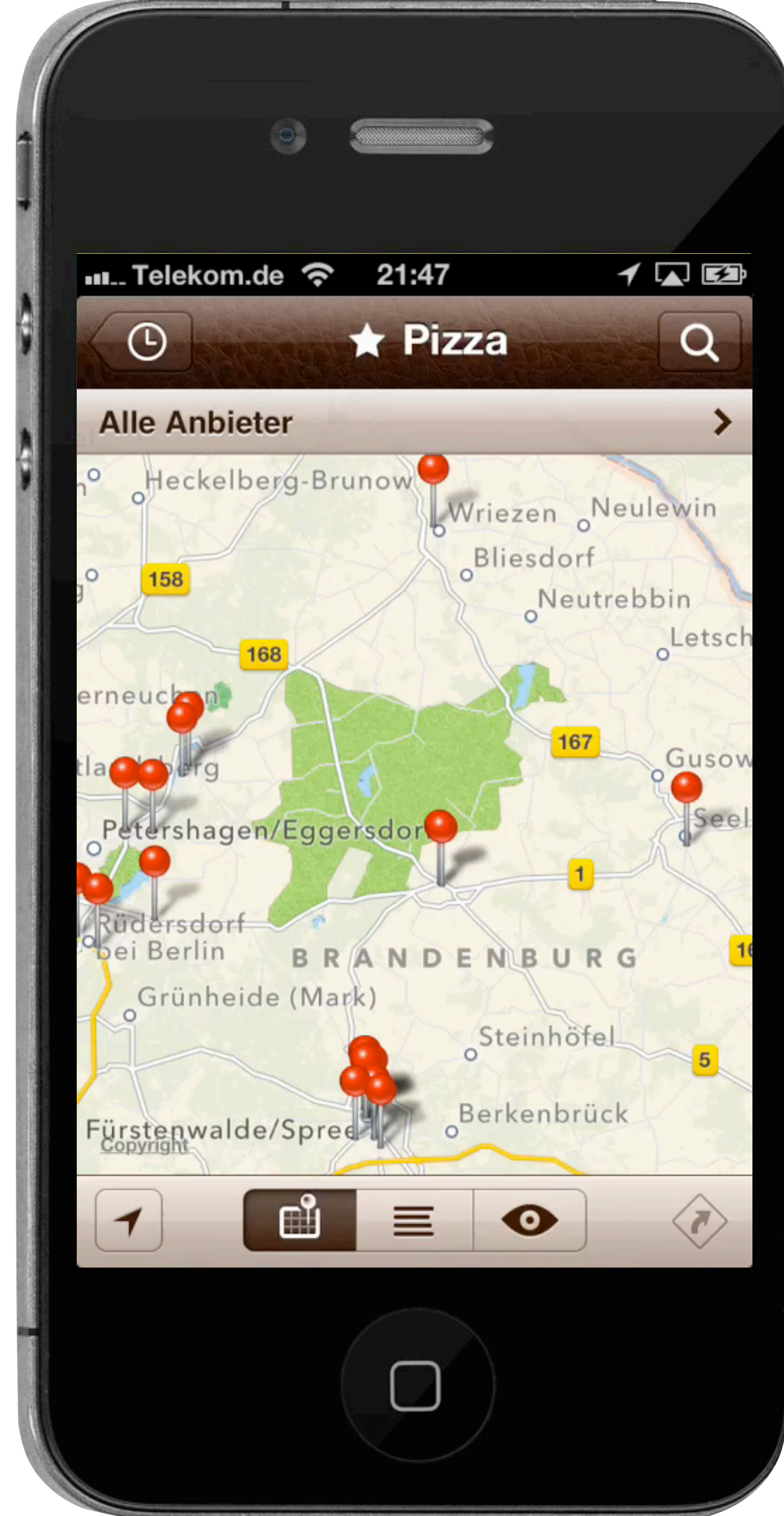


Clustering

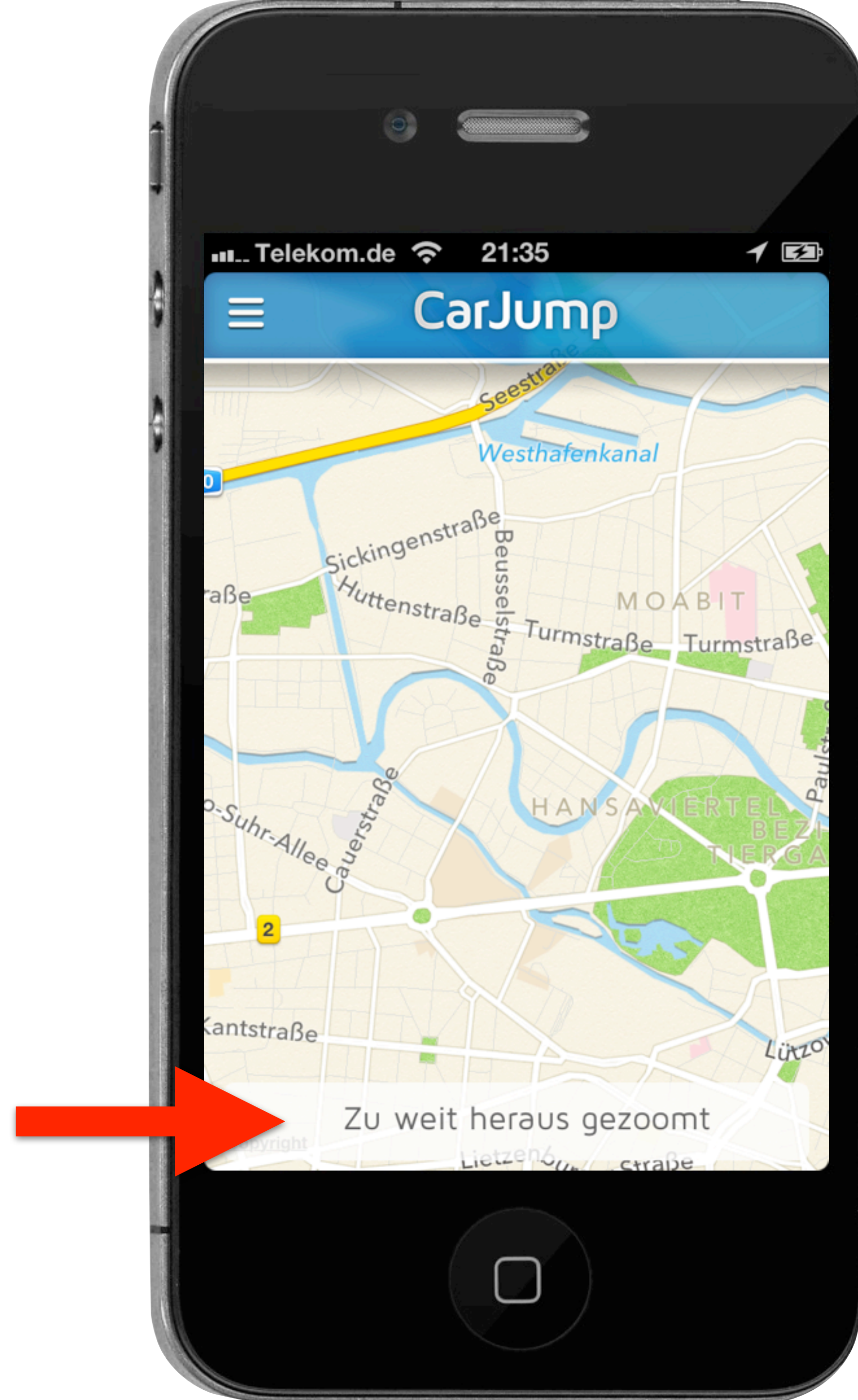
PlaneFinder



Wohin?

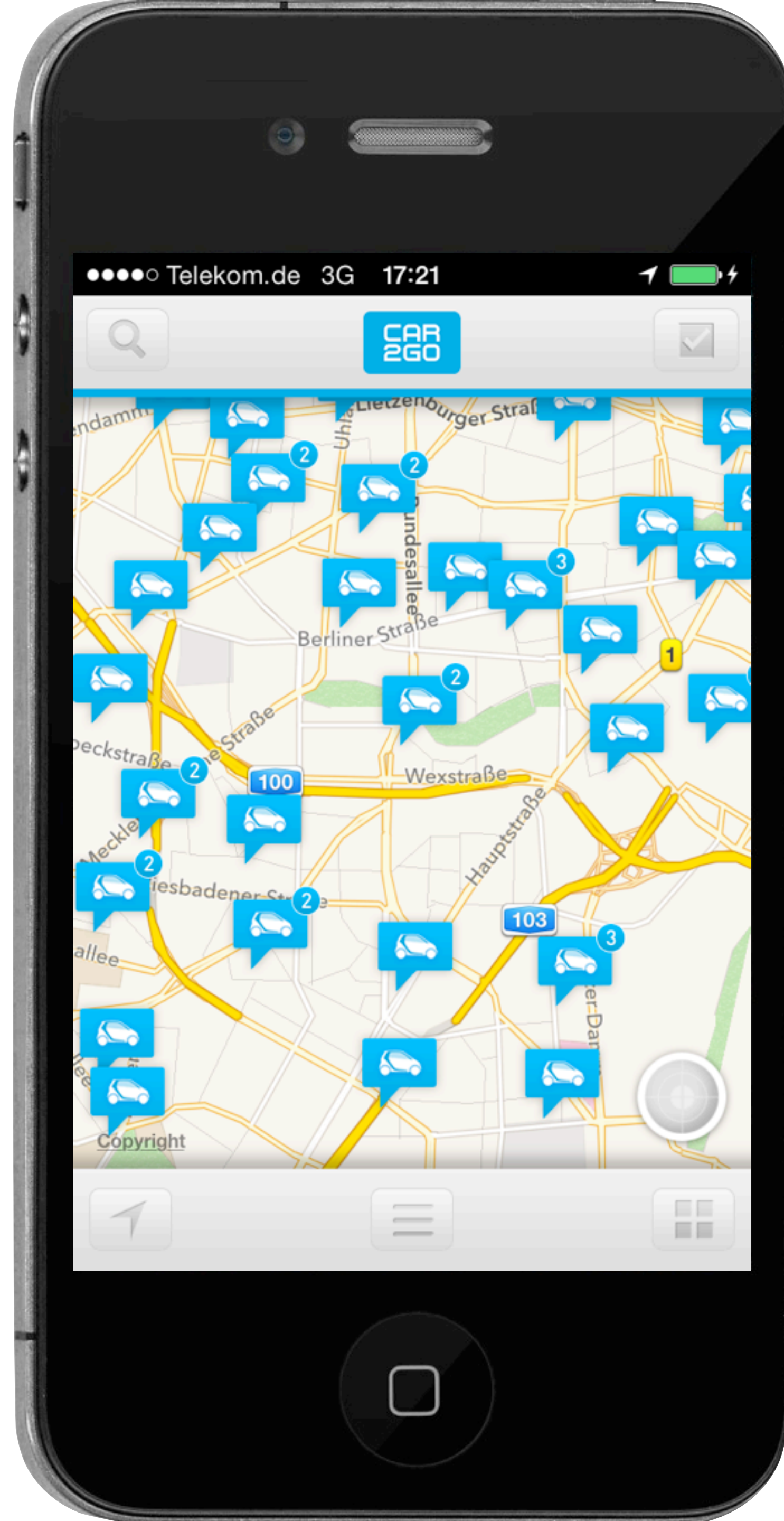


CarJump

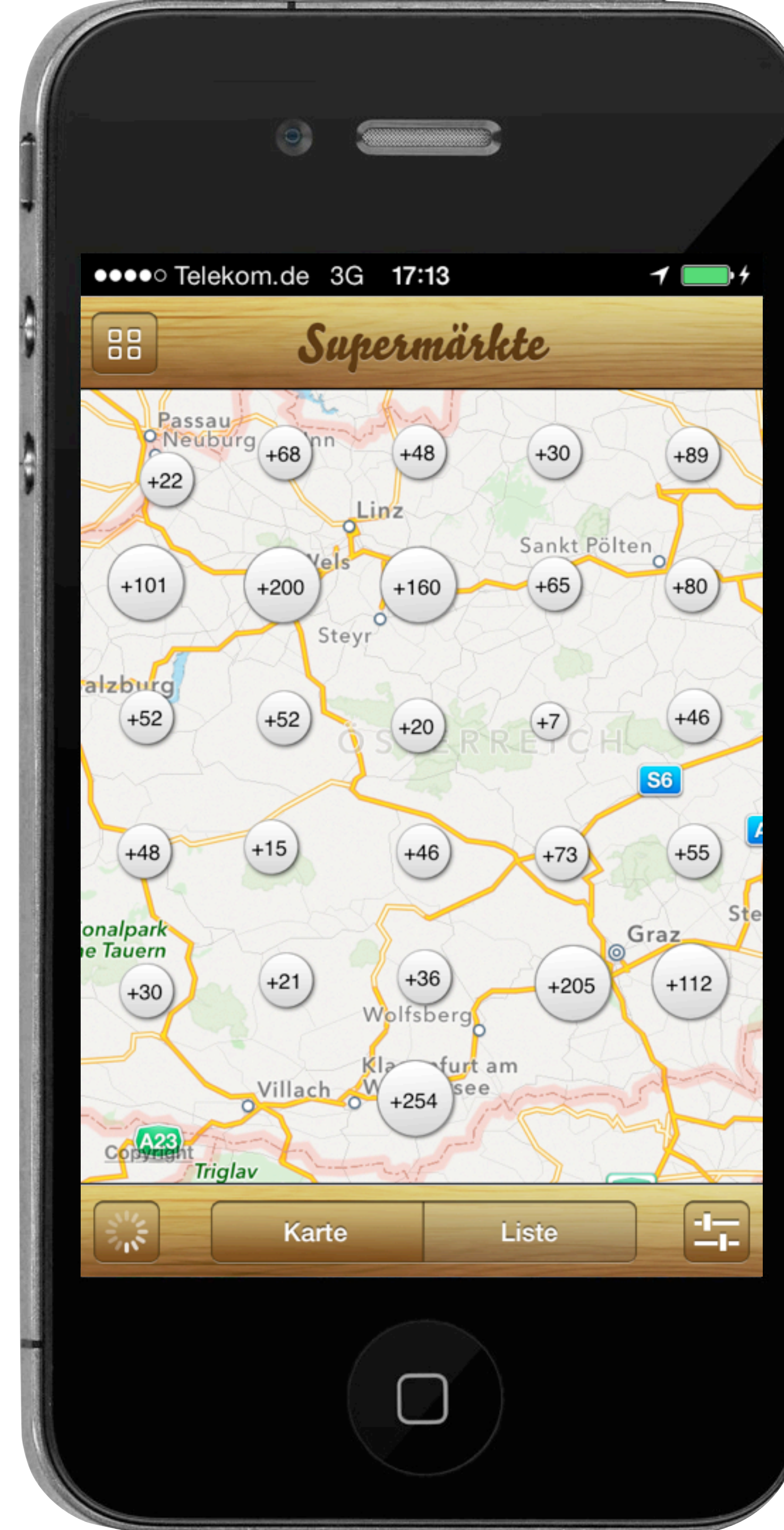


Car2Go

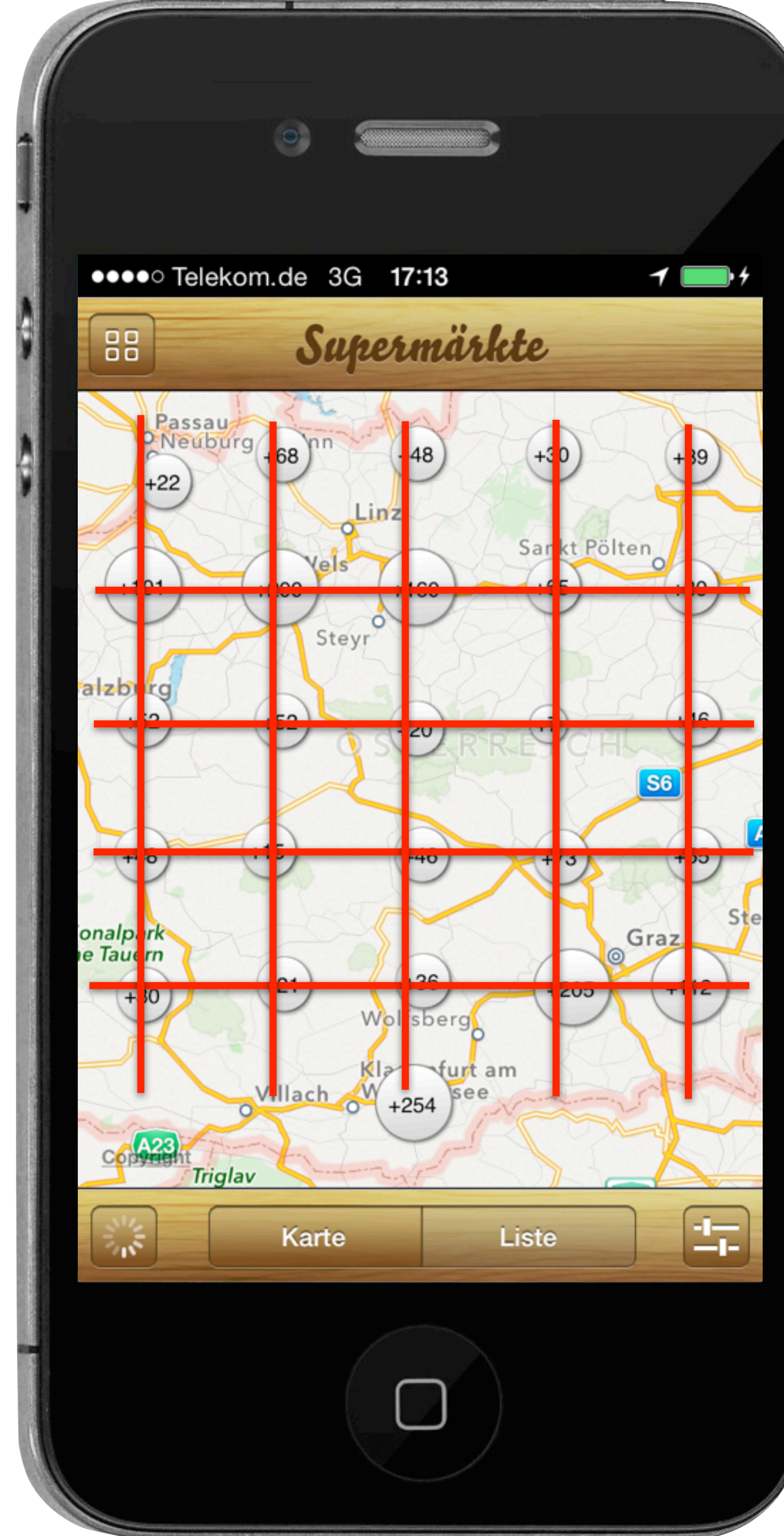
(OCMapView?)



Öffnungszeiten (Superpin)

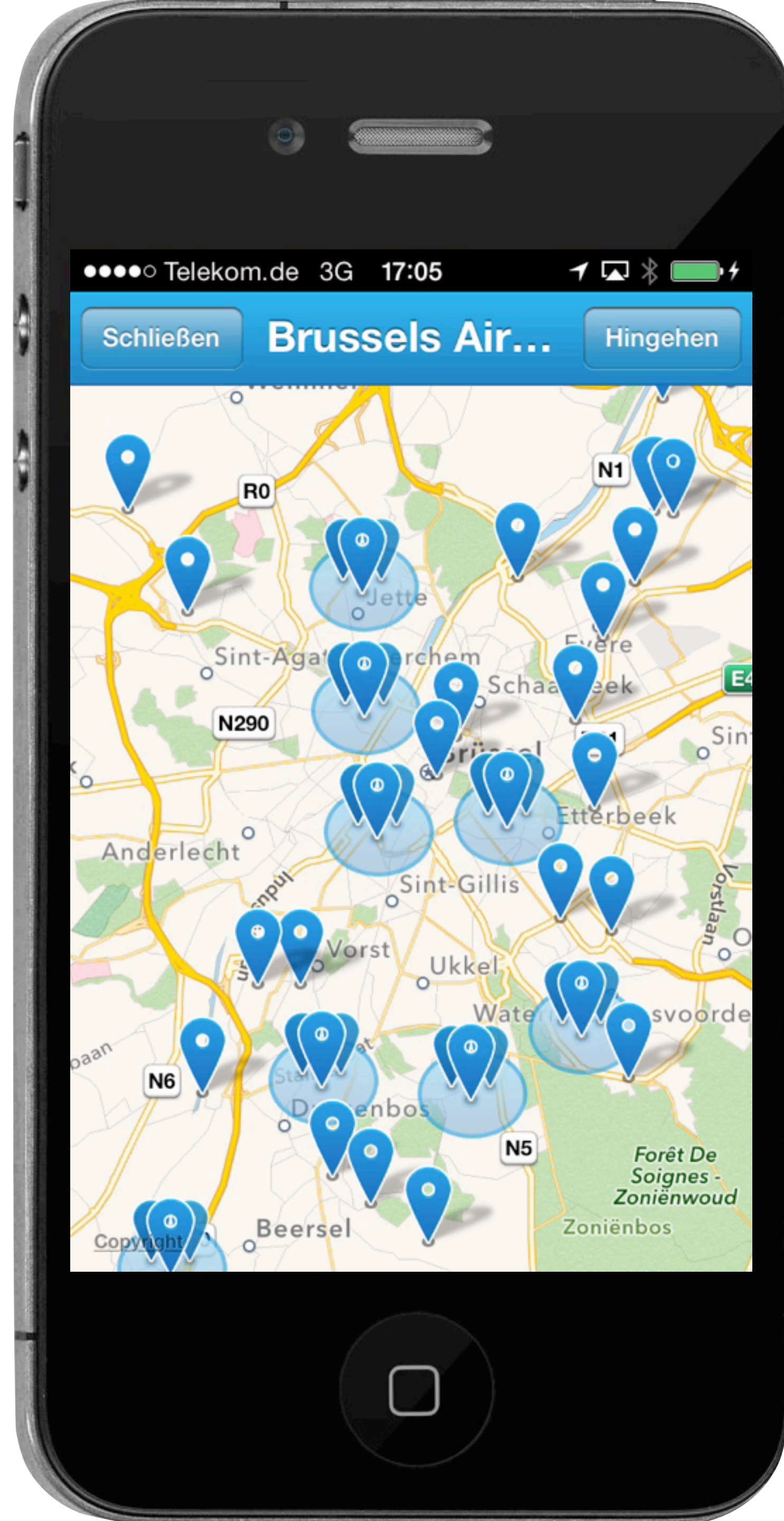


Öffnungszeiten (Superpin)

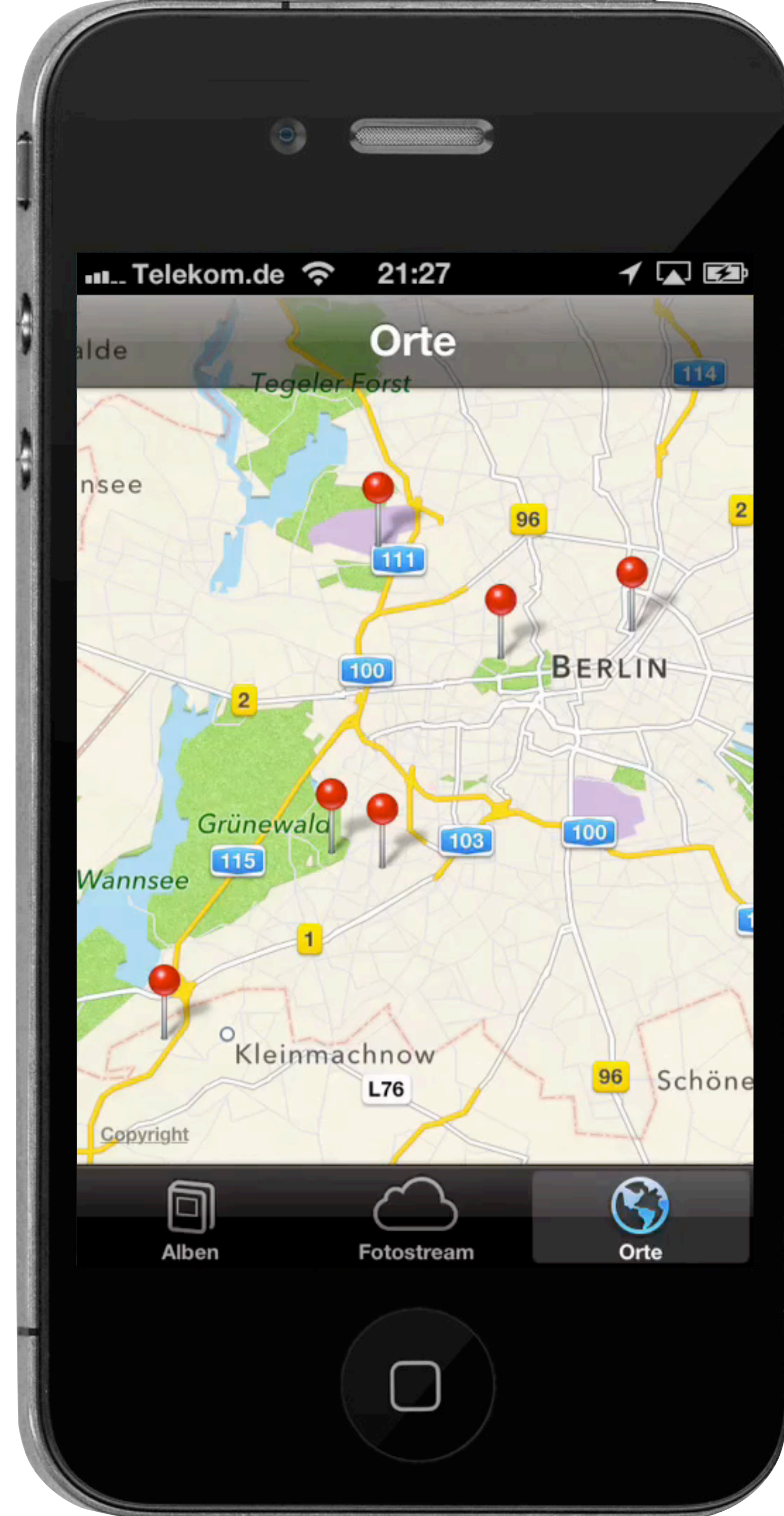


RailTime

(ADClusterMapView)



Fotos



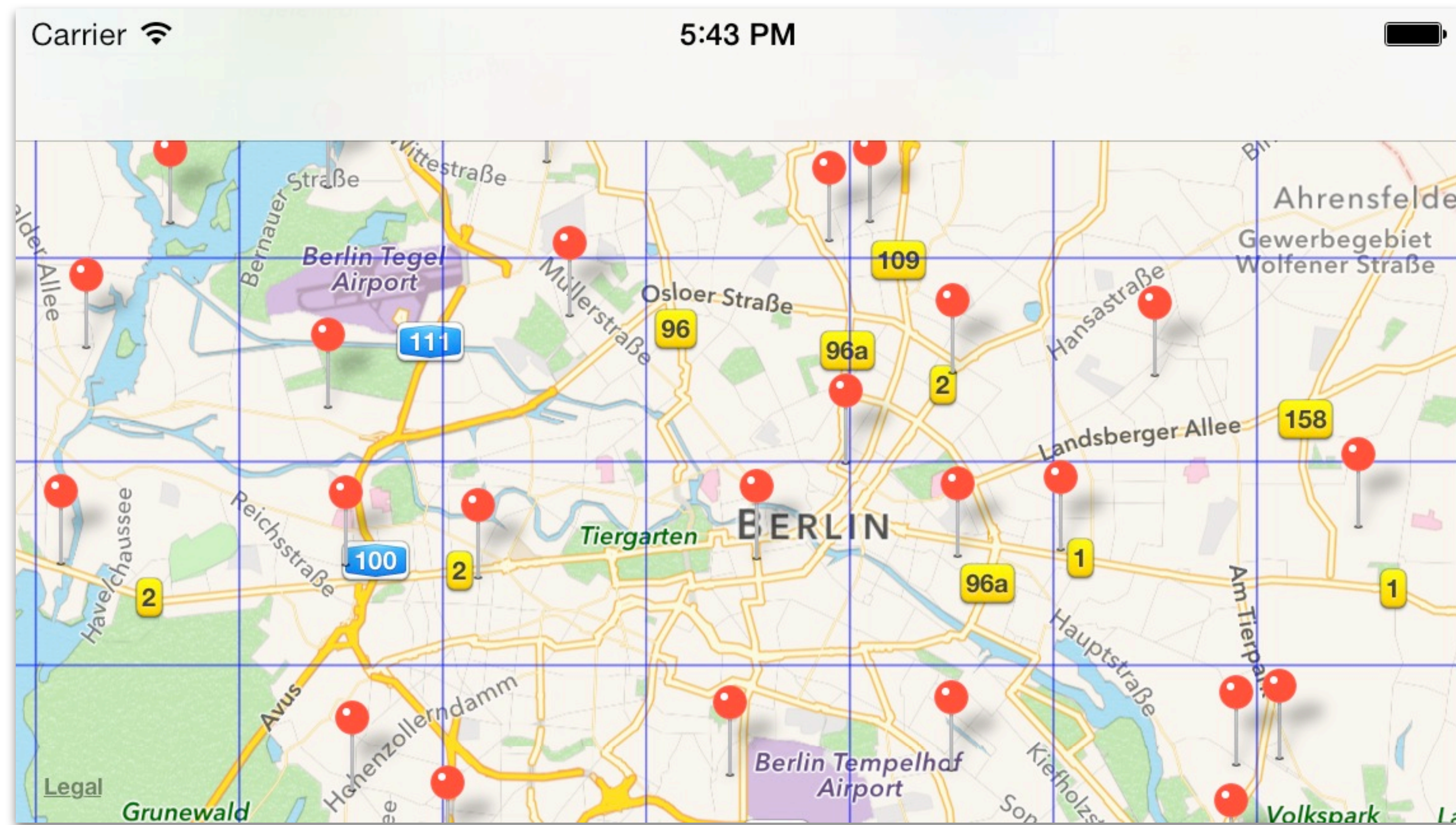
Anforderungen

- Client-seitiges Clustering
- Schneller Algorithmus, aber trotzdem einfach zu verstehen
- Kein Popping
- Kein Grideffekt
- Ähnlich Fotos App

WWDC 2011 / Session 111

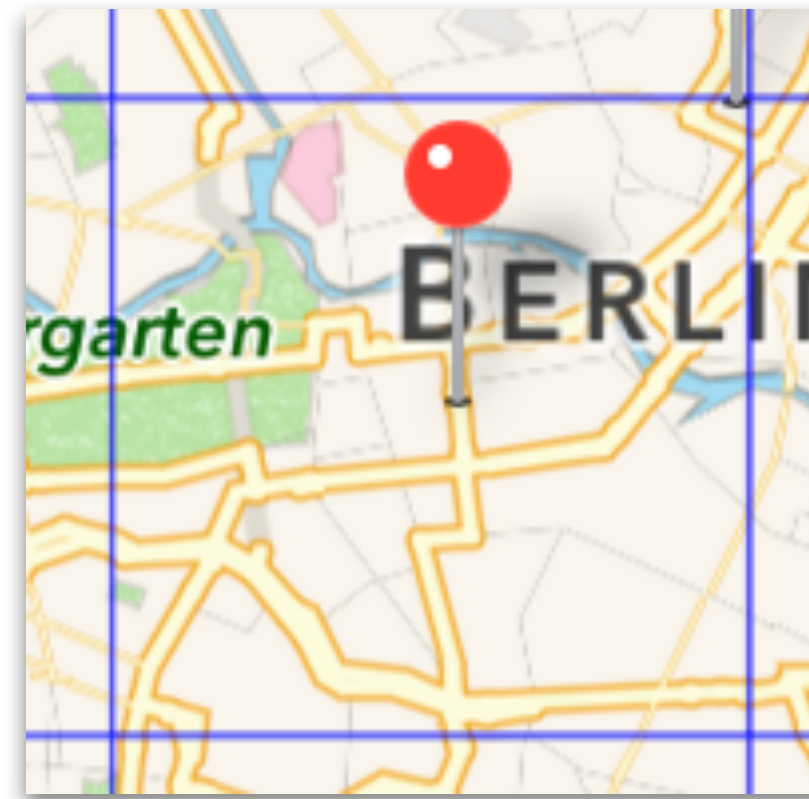


Clustering Algorithmus I

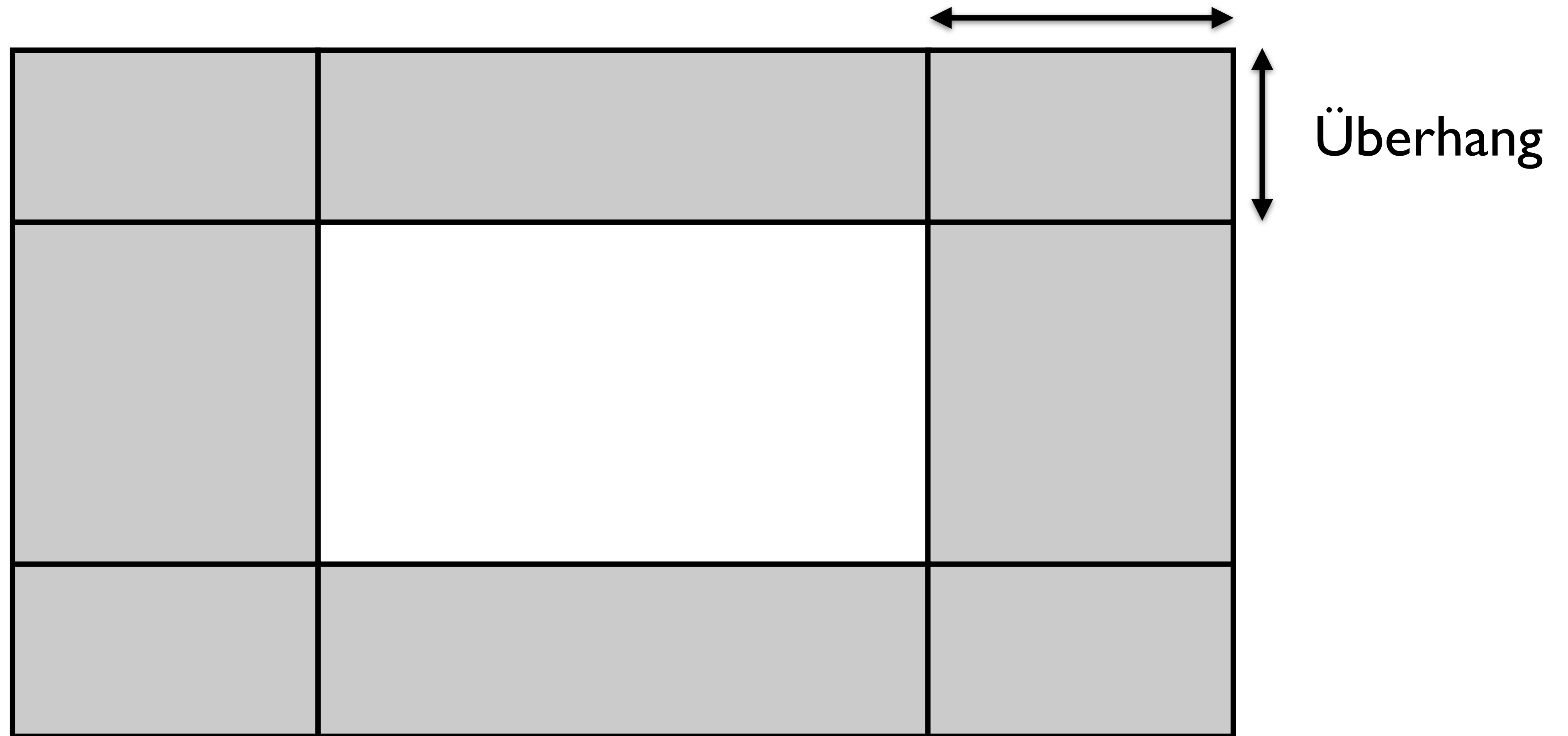


↕ Zellengröße

Clustering Algorithmus II

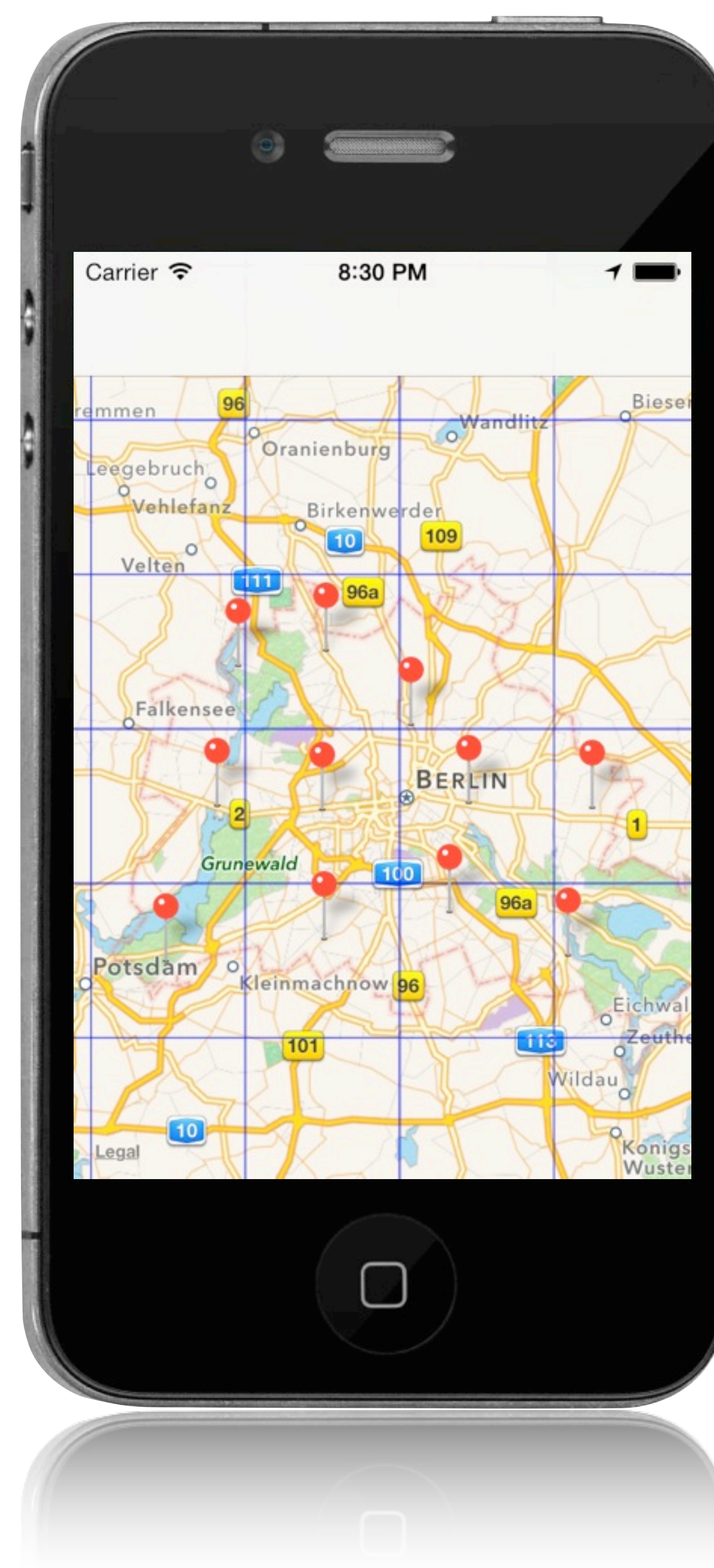


Clustering Algorithmus III



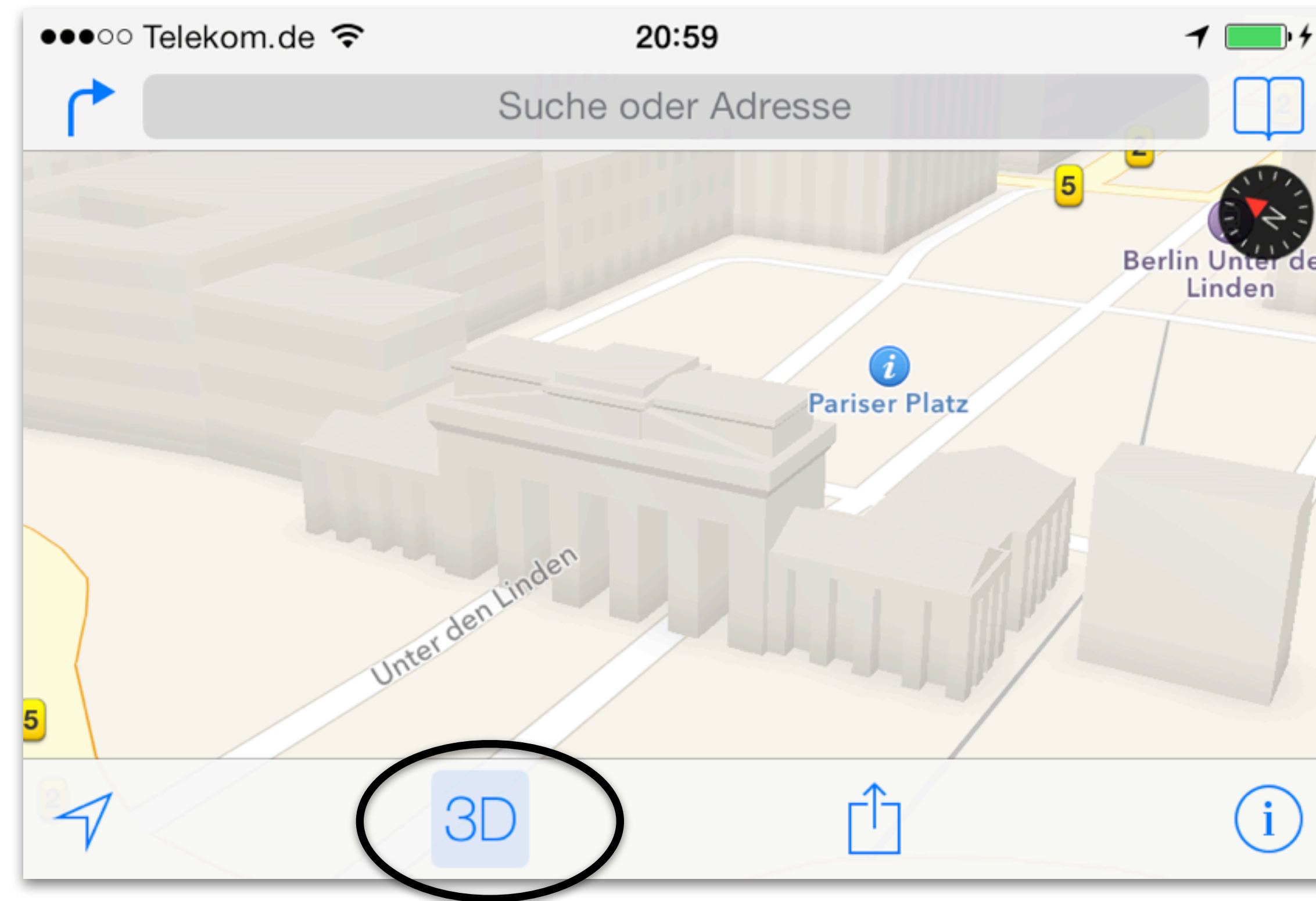
Demo

Demo



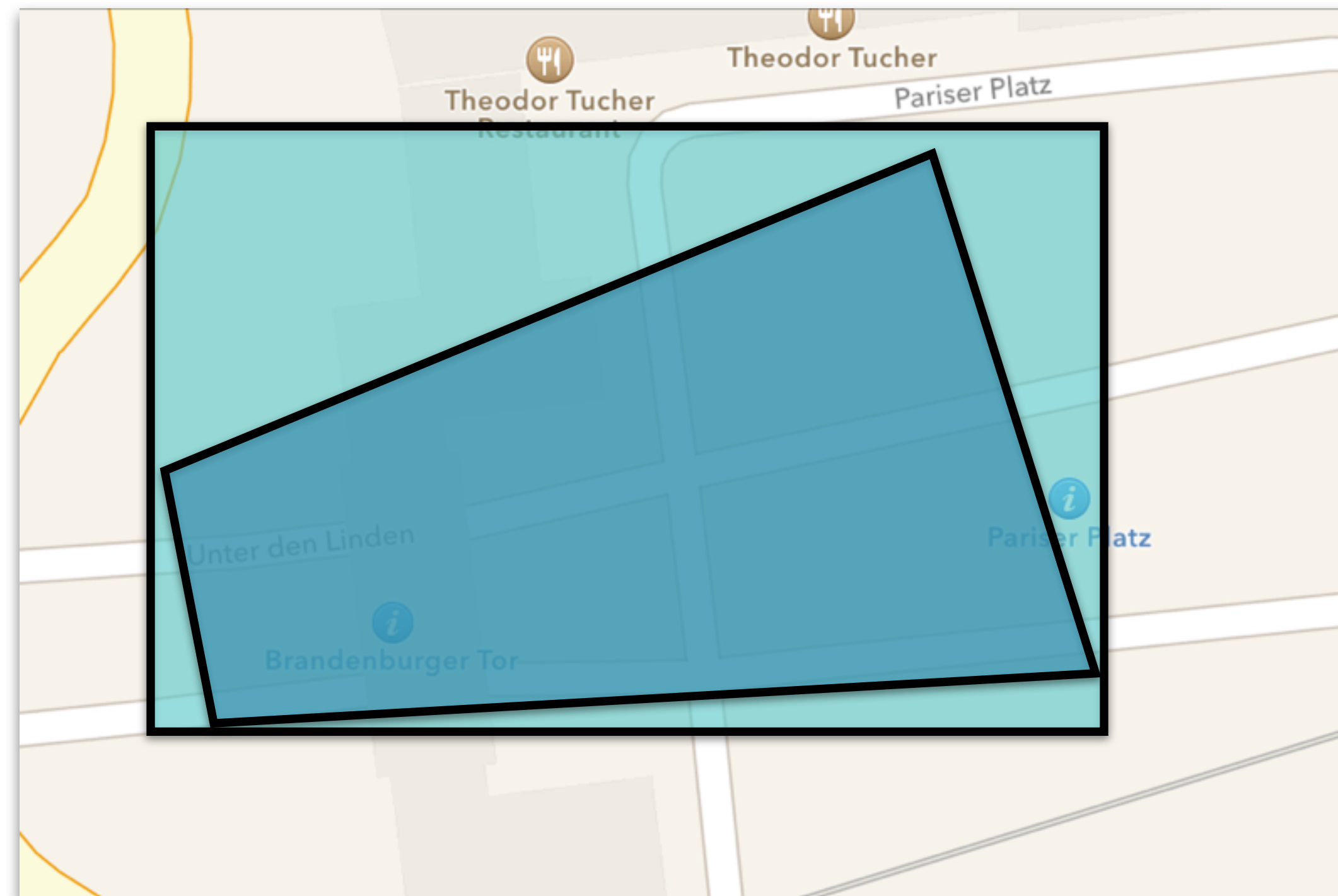
iOS 7

Rotation und 3D



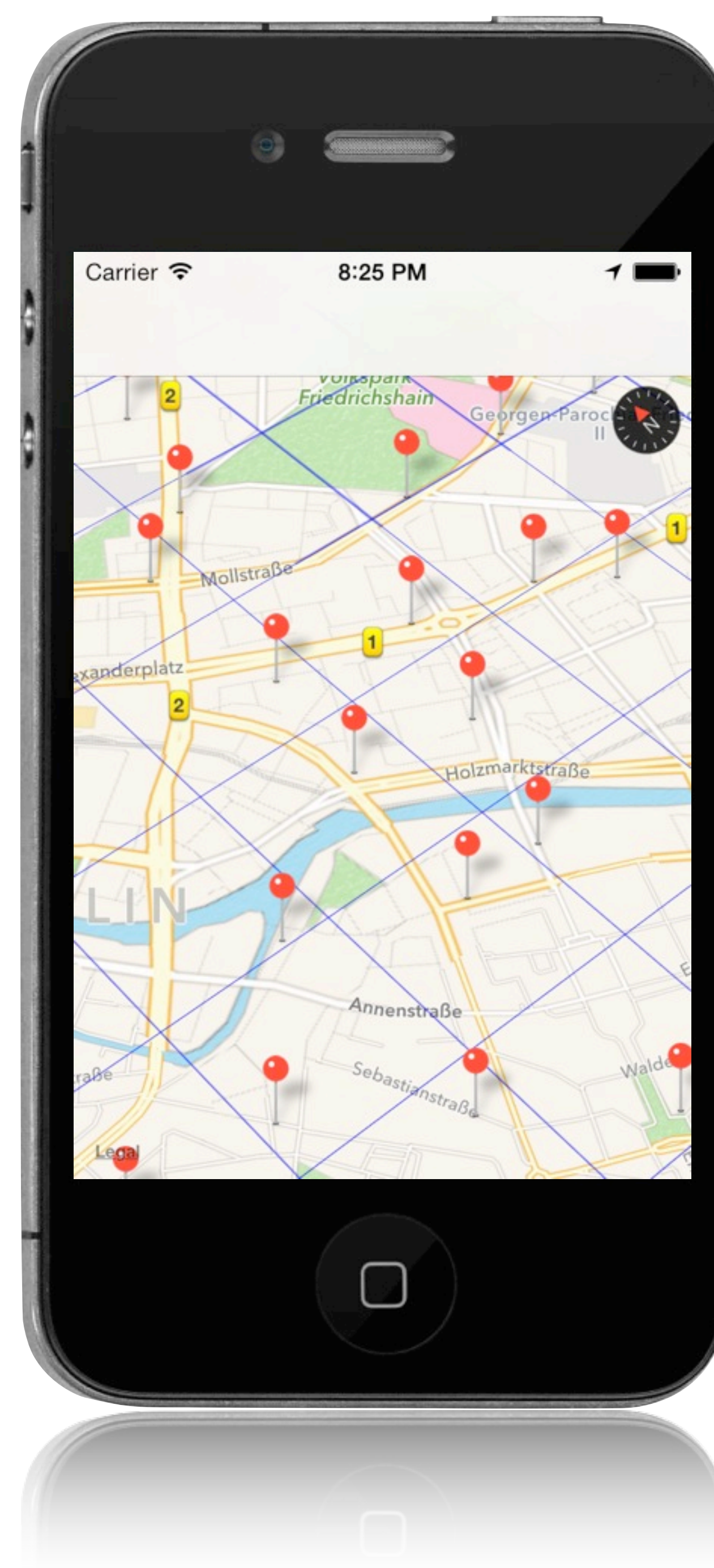
Rotation

[MKMapView visibleMapRect]



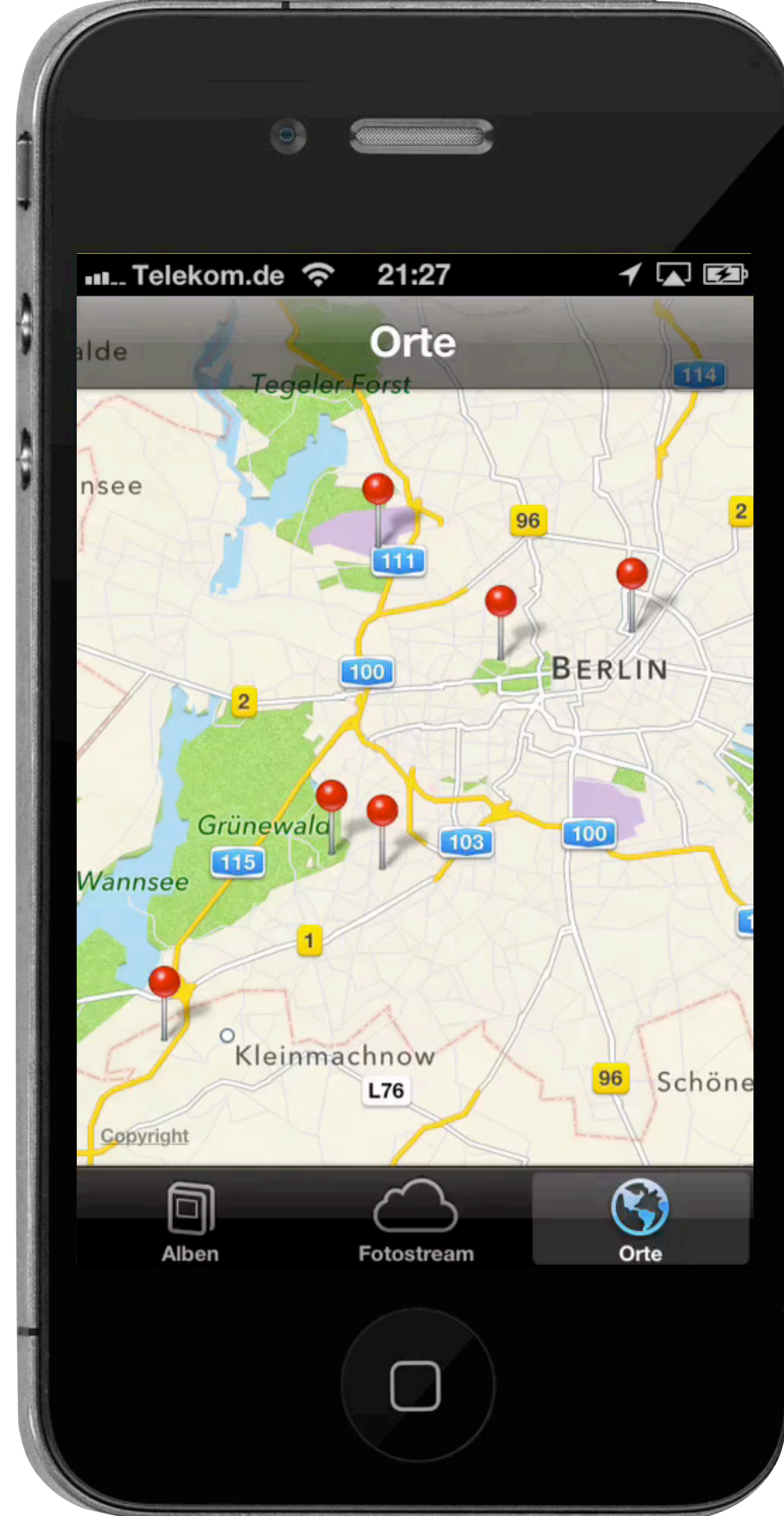
Demo

Demo

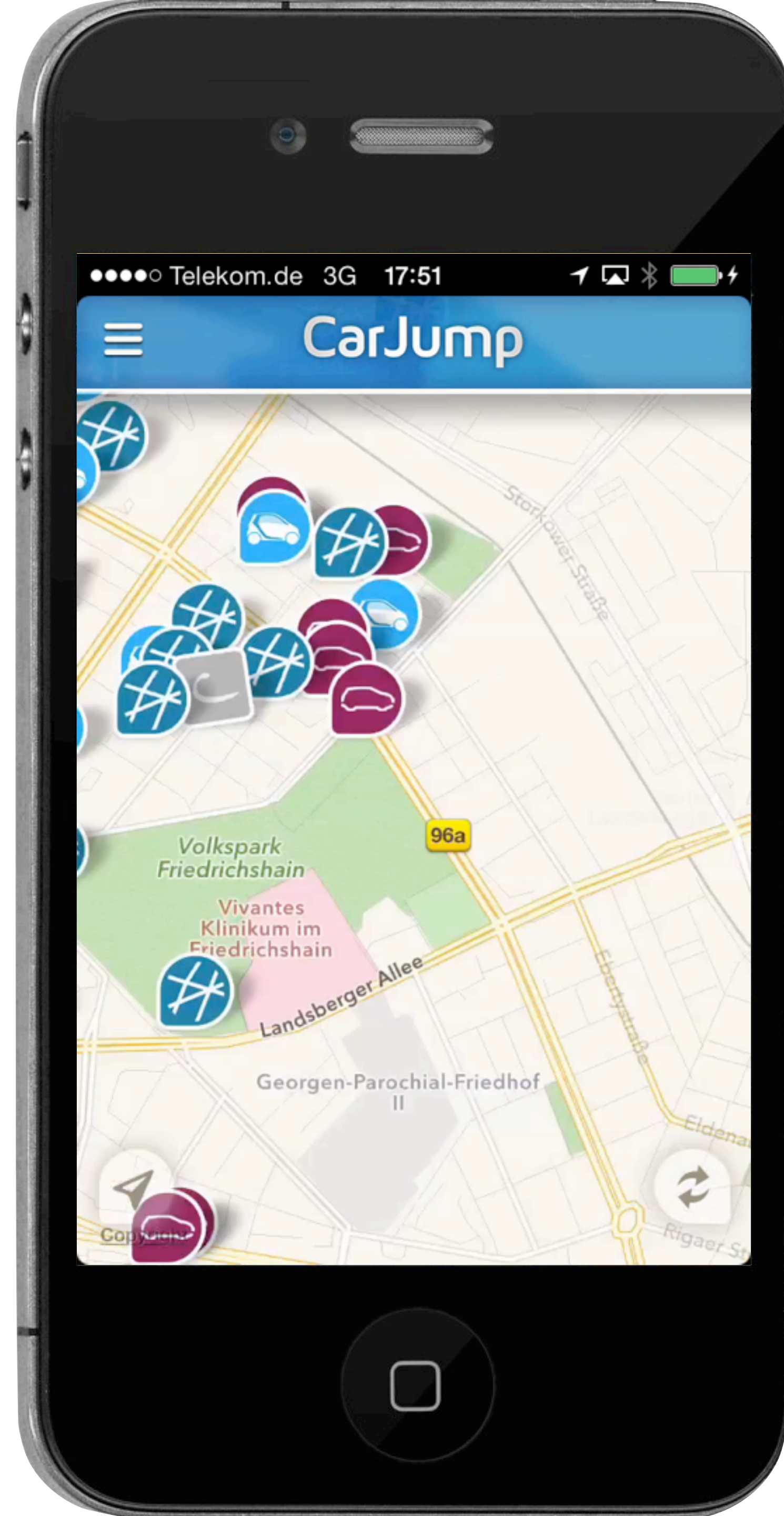


Animationen

Fotos

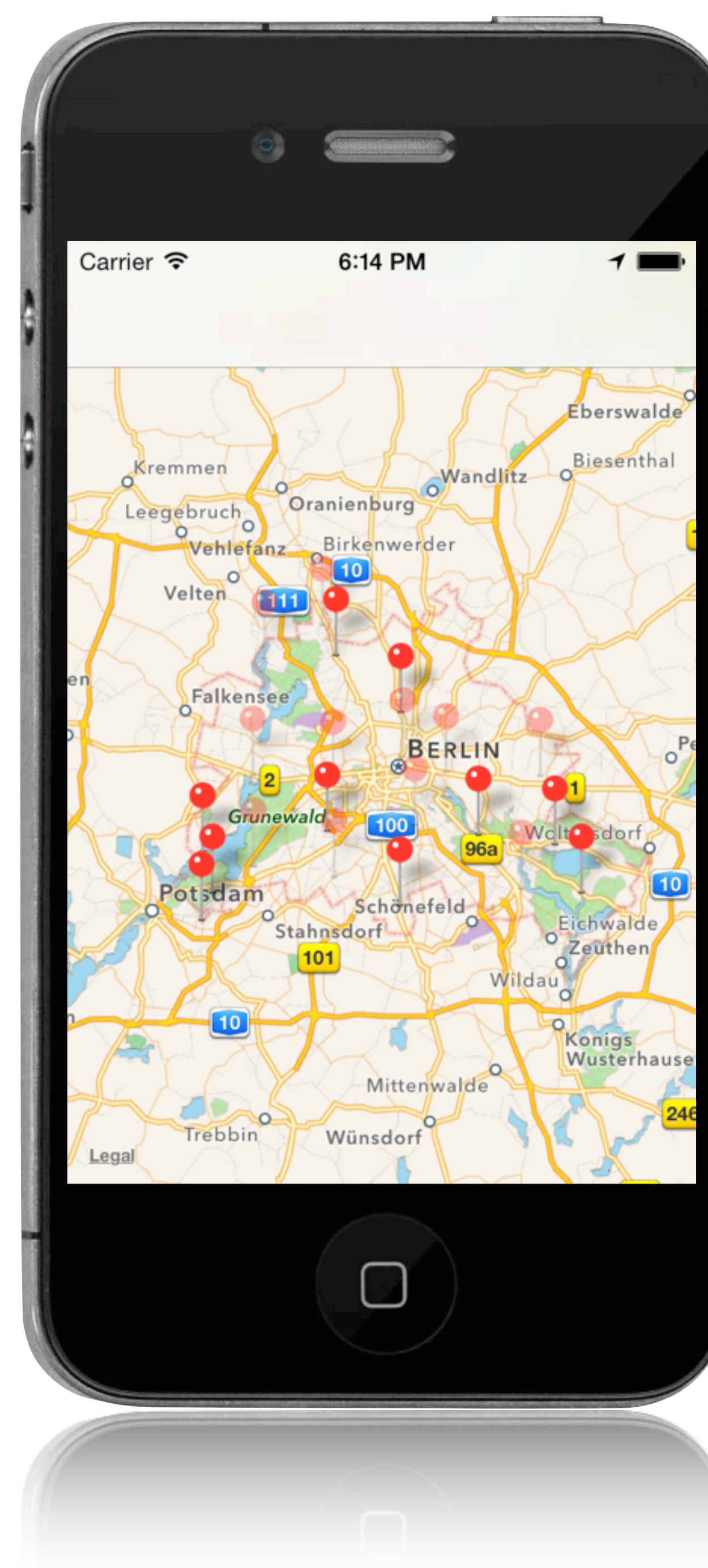


CarJump




Demo

Demo





Ausblick

KingPin


PUBLIC  **itsbonczek / kingpin** Watch 30 ★


A drop-in MapKit/MKAnnotation pin clustering library for MKMapView on iOS
<http://itsbonczek.github.com/kingpin>








36 commits 2 branches 3 releases 1 contributor


 branch: **master** **kingpin** / 

bump podspec version

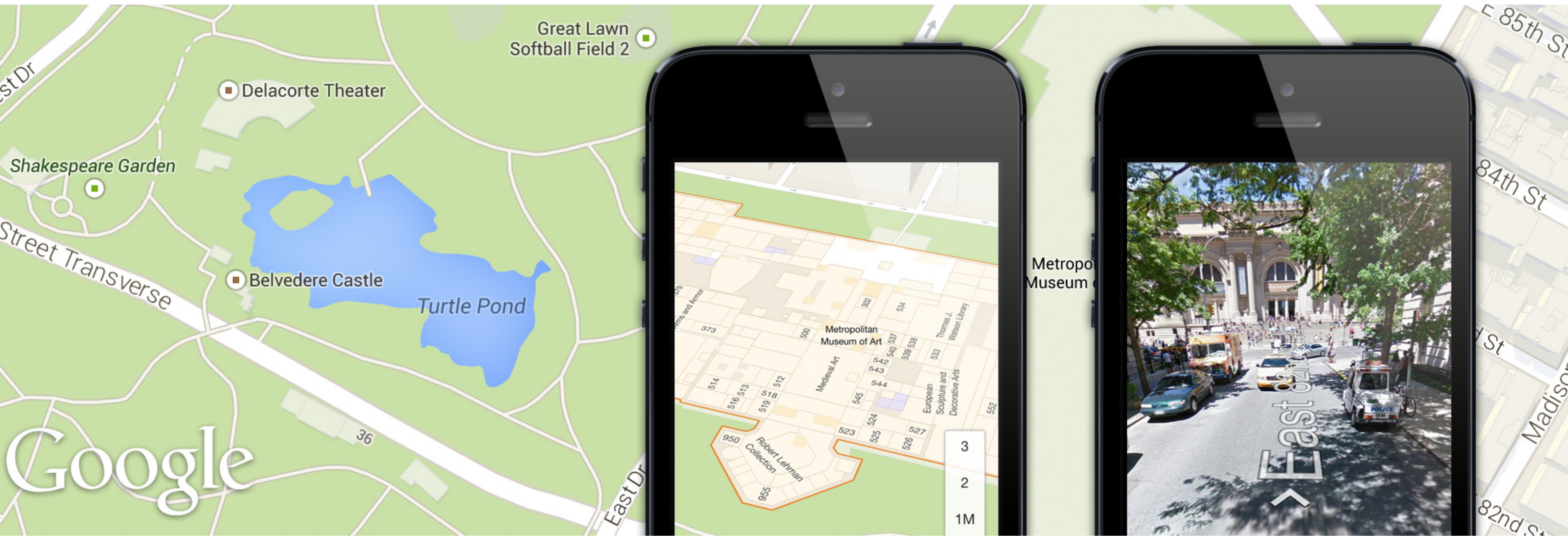
 **itsbonczek** authored 19 days ago

latest commit 91e7cdb6e7 

 kingpin.xcodeproj	rename NSArray filter/map category method so they don't conflict with	19 days ago
 src	Do all calculations in terms of the visible map rect instead of	19 days ago
 tester	preliminary support for multiple tree controllers.	8 months ago
 .gitignore	more gitignore	11 months ago
 LICENSE	adding Apache license file	8 months ago
 README.md	update README for 0.1.2	19 days ago
 kingpin.podspec	bump podspec version	19 days ago

 **README.md**

Google SDK



Sonstiges

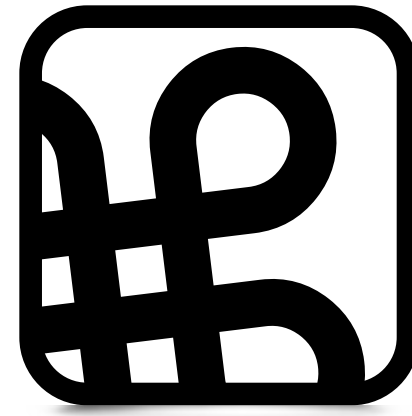
- Semantischer Zoom
- Offline sync
- Active culling

Quellenangaben

- Merkator-Projektion <http://commons.wikimedia.org/wiki/File:Mercator-proj.png> von Jecowa (modified) (CC BY-SA)
- Azimutalprojektion http://commons.wikimedia.org/wiki/File:Azimutalprojektion-transversal_kl.jpg von Stefan Kühn (CC BY-SA)
- WWDC 2011 <http://www.flickr.com/photos/kalleboo/5797720966/> von Karl Baron (CC BY)
- Google Maps SDK <https://developers.google.com/maps/documentation/ios/> von Google (CC BY)
- Alle anderen Bilder und Videos von Claus Höfele (CC BY)

Fragen?

<https://github.com/optionu/stolpersteine-ios>



Macoun