



TECHNISCHE  
UNIVERSITÄT  
DRESDEN

8<sup>th</sup> Symposium on Location-Based Services  
Vienna, 21-23 November 2011

LBS 2011

Department of Geosciences, Institute for Cartography

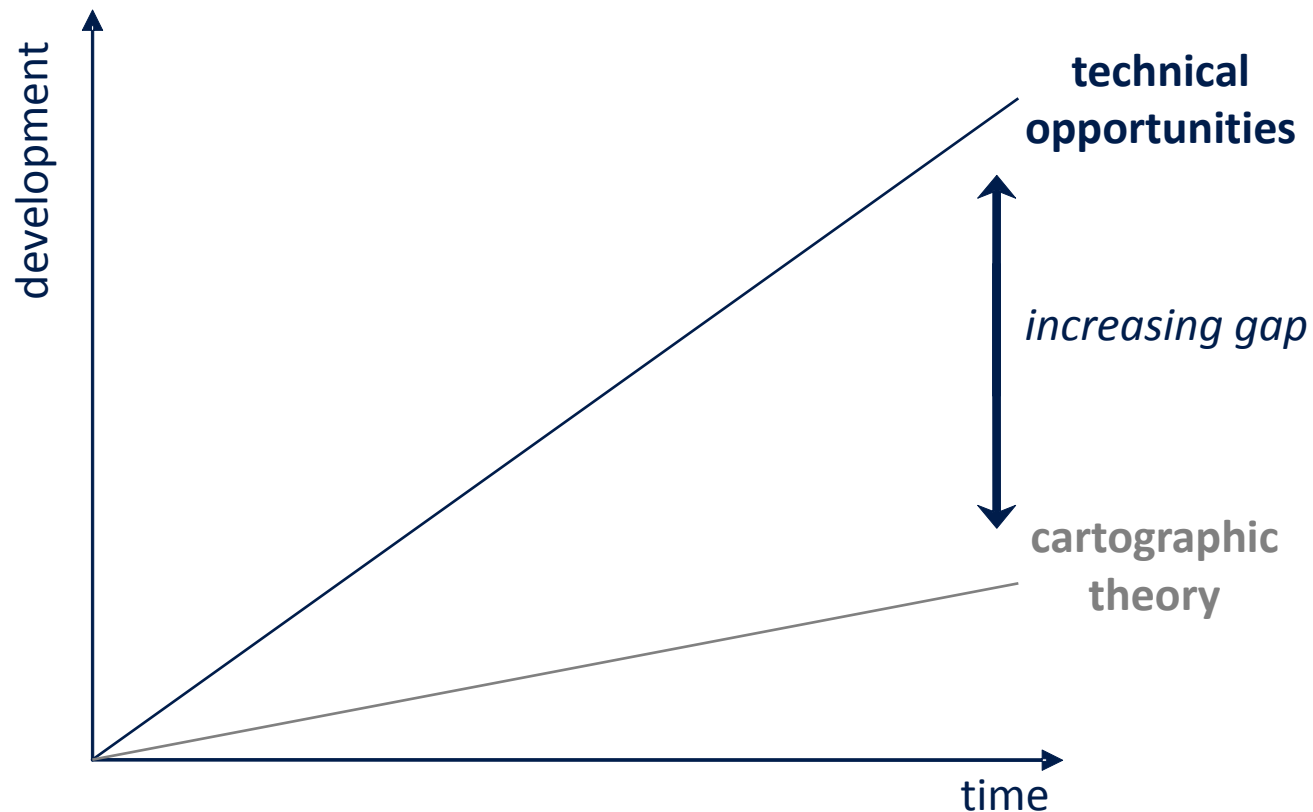


8th Symposium on Location-Based Services  
Investigation and Development  
of Mobile Touristic Applications

Eva Hauthal & Dirk Burghardt

Vienna - 2011/11/22

## Motivation



*Kraak & Ormeling (2010): „Cartography. Visualization of Geospatial Data.“*

## Overview

### Mobile Touristic Applications



#### Theory

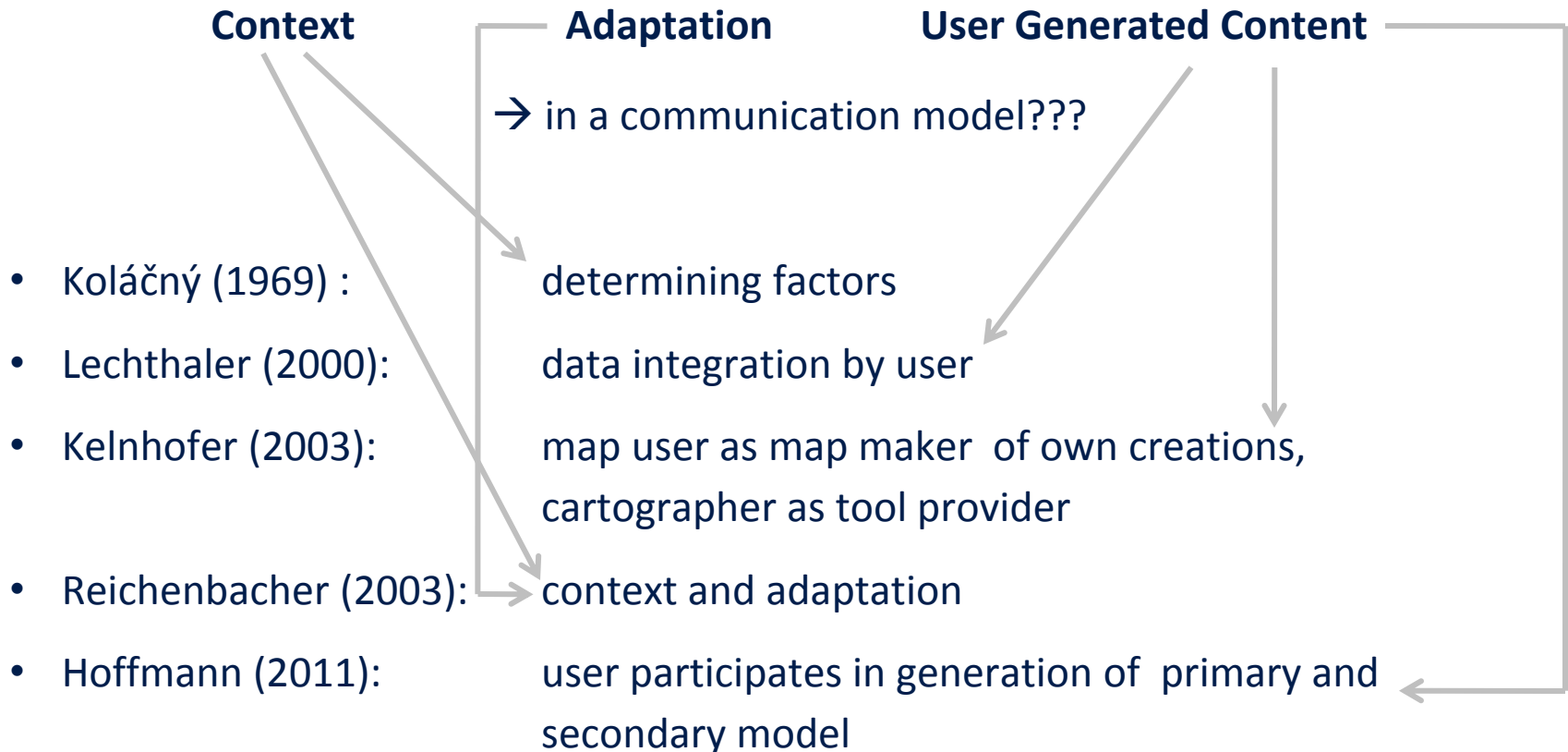
- analysis of existing cartographic communication models
- own communication model for mobile, interactive maps



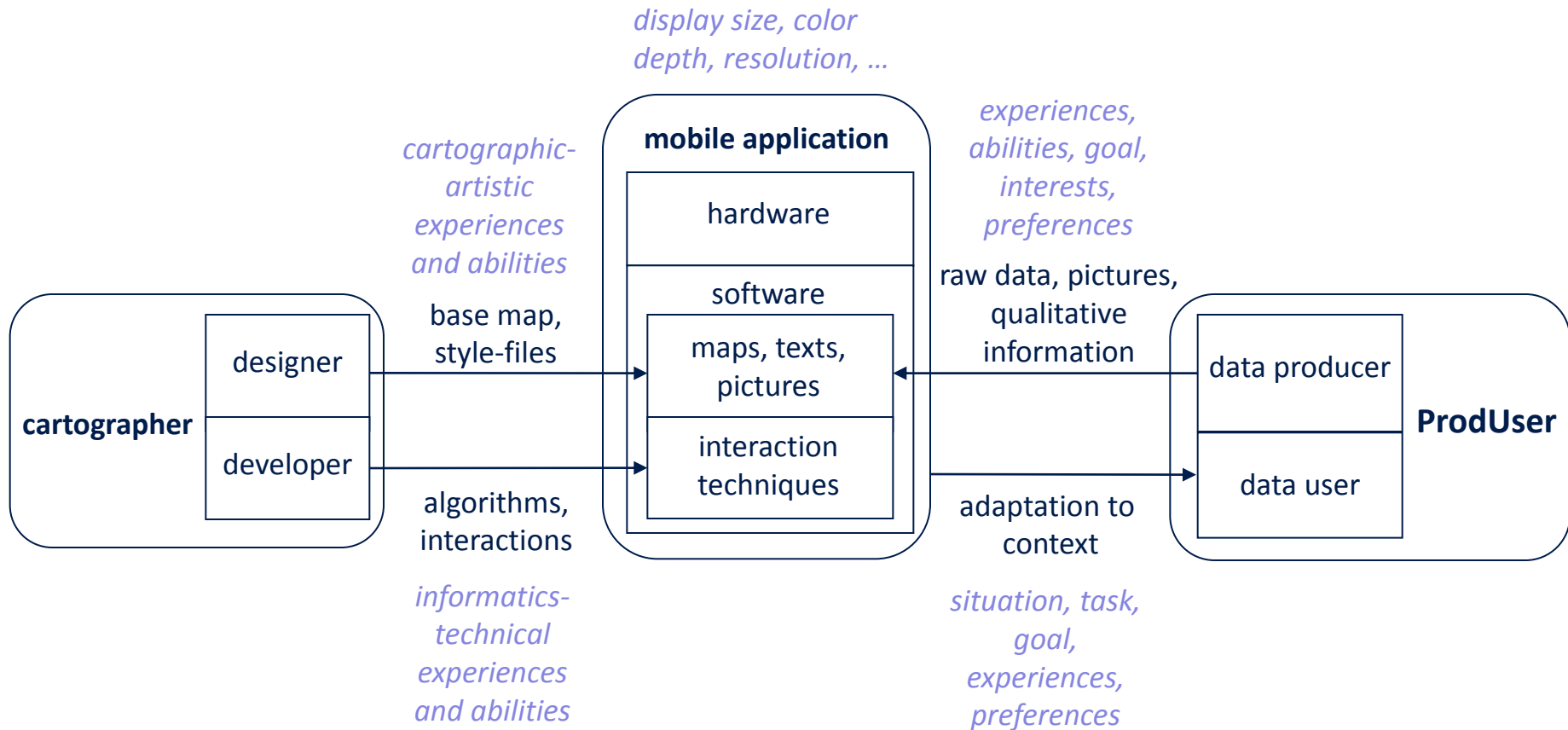
#### Practice

- analysis of existing touristic mobile applications
- conception and prototypical implementation of own application



## Cartographic Communication Models



## Communication Model for Mobile Interactive Maps



## Analysis of Touristic Mobile Applications

 iPhone	territorial validity	 purpose
<b>Android</b>		
<i>outdooractive Allgäu</i>	global	leisure guide
<i>Qype</i>	global	city guide
<i>TravelBook Berlin</i>	regional	city guide
<i>Vienna Travel Guide</i>	regional	city guide
<b>iPhone</b>		
<i>Allgäu</i>	regional	leisure guide
<i>Lonely Planet Berlin</i>	regional	city guide
<i>Lonely Planet Paris</i>	regional	city guide
<i>Ostseeküste - ADAC Wanderführer</i>	regional	leisure guide
<i>The North Face Trailhead</i>	global	leisure guide

## Analysis of Touristic Mobile Applications

 iPhone



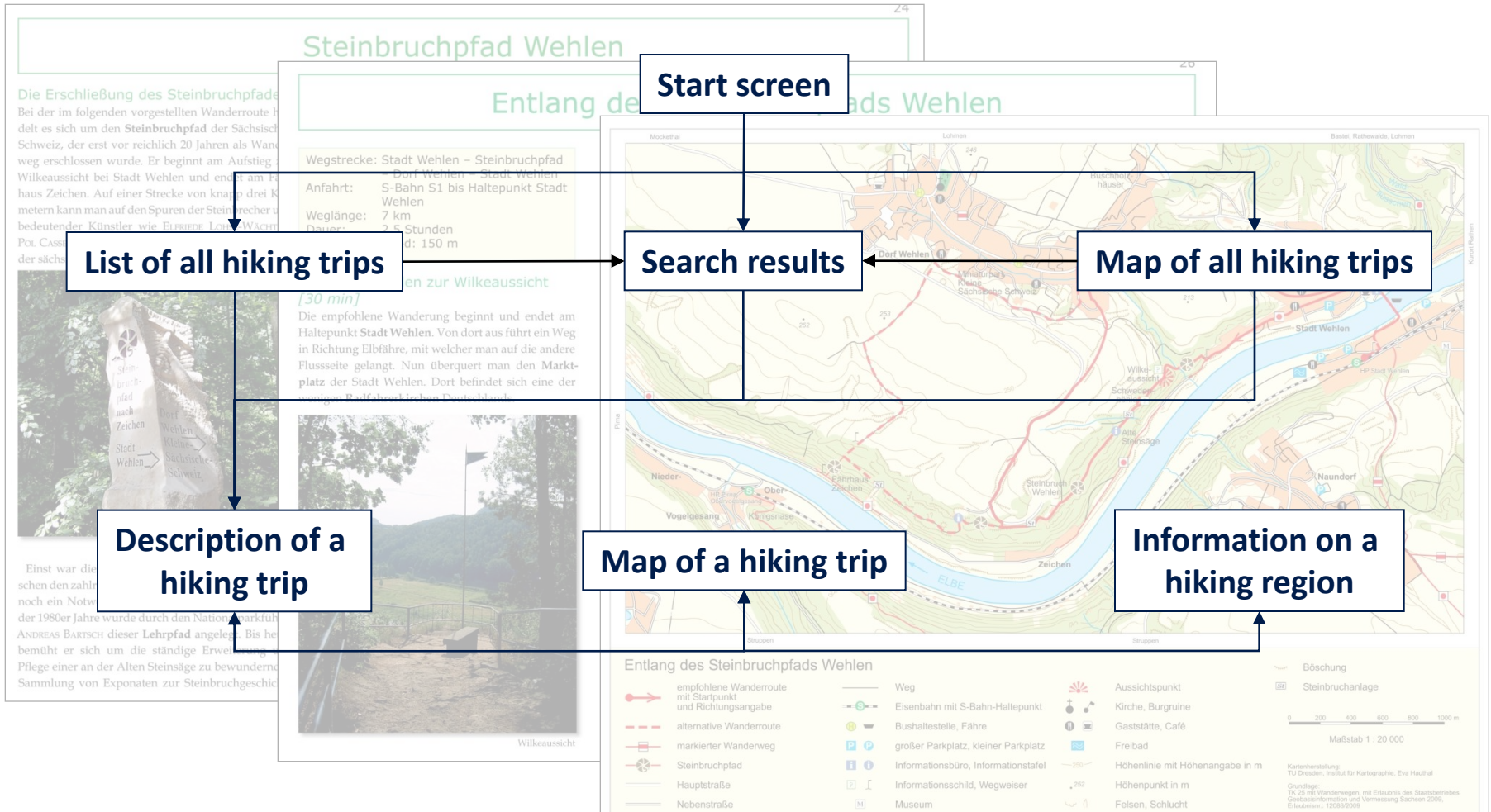
user localisation

links between map and other content

search function

unrestricted use without internet connection

# Conception of own Mobile Application





## Implementation of own Mobile Application

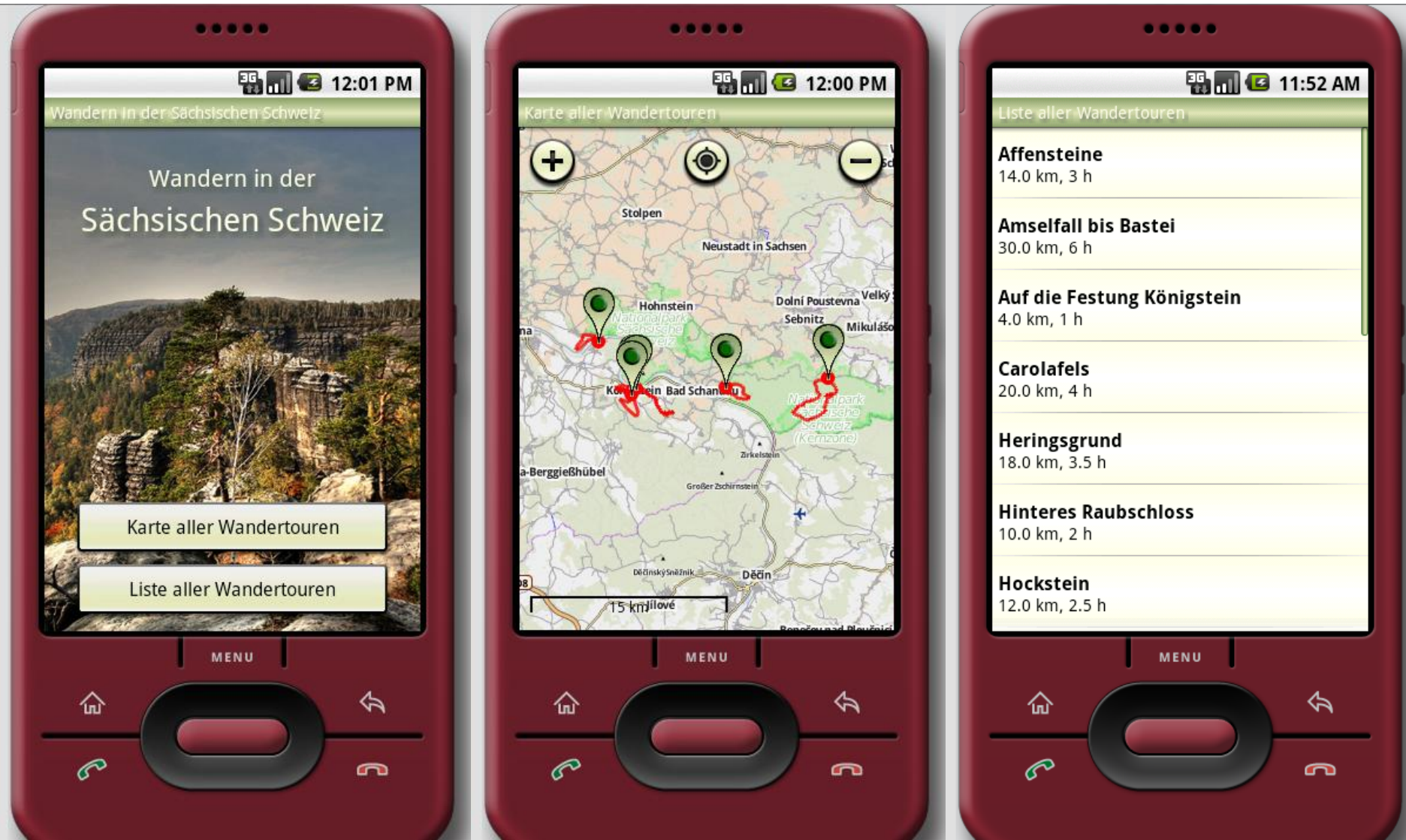
- for Android Smartphone



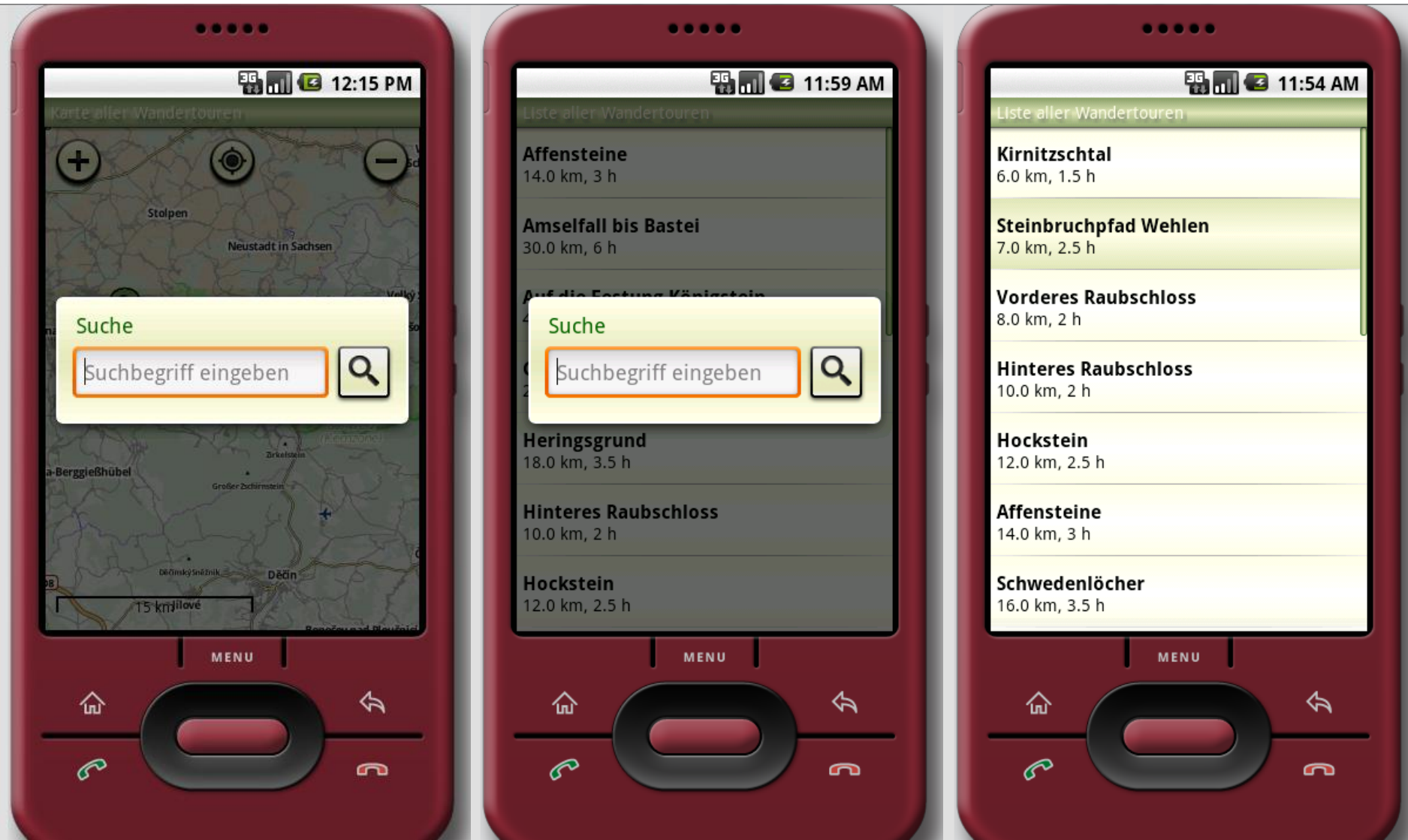
Liste aller Wandertouren
Affensteine 14.0 km, 3 h
Amsellall bis Bastei 30.0 km, 6 h
<b>Carolafels</b> 20.0 km, 4 h
Heringsgrund 18.0 km, 3.5 h
Hinteres Raubschloss 10.0 km, 2 h
Hockstein 12.0 km, 2.5 h
Kirnitzschtal 6.0 km, 1.5 h
Schrammsteinaussicht 28.0 km, 5.5 h
Schrammsteine 24.0 km, 4.5 h
Schwedenlöcher 16.0 km, 3.5 h
Steinbruchpfad Wehlen 7.0 km, 2.5 h
Vorderes Raubschloss

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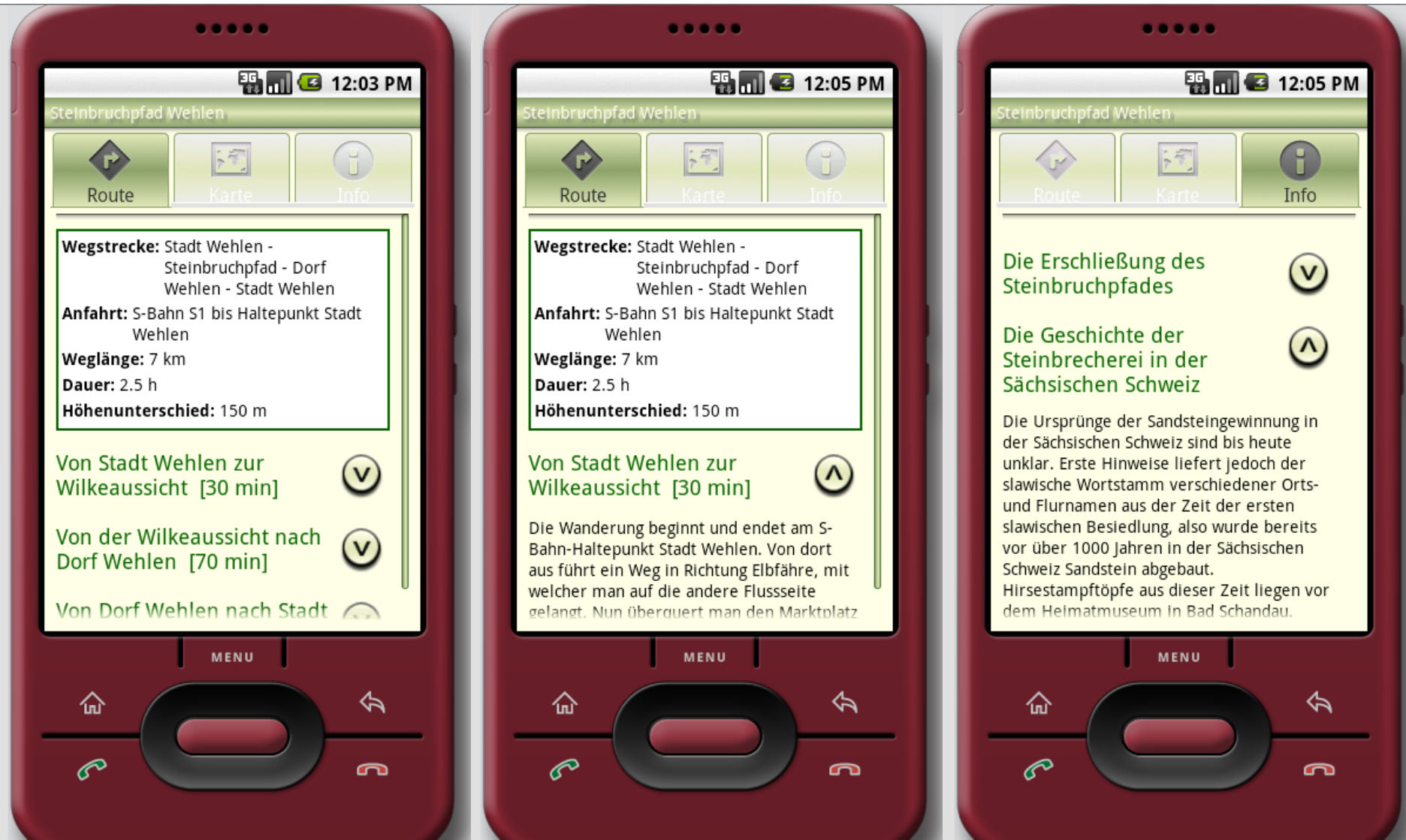
## Implementation of own Mobile Application



## Implementation of own Mobile Application



## Implementation of own Mobile Application

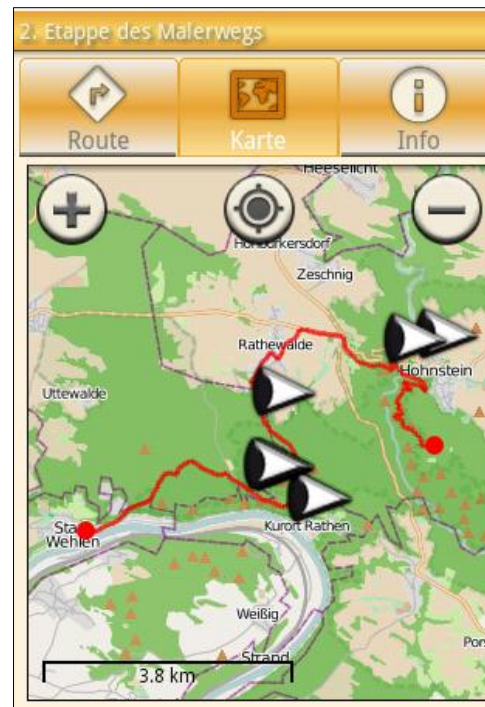
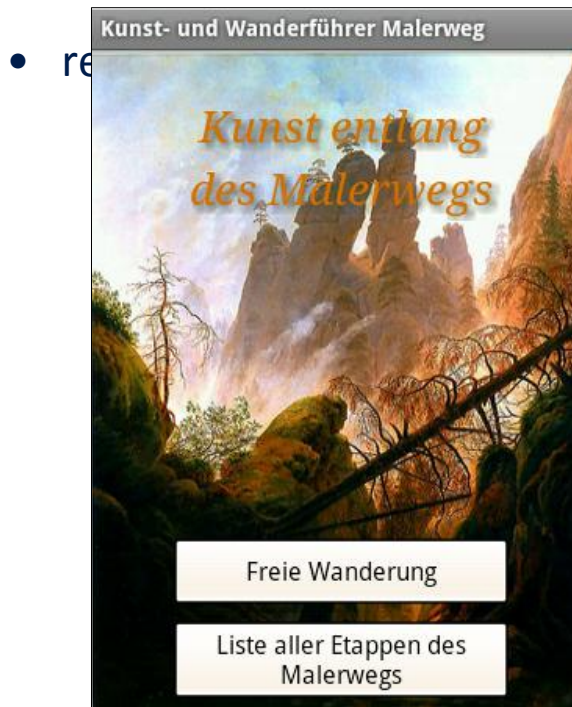


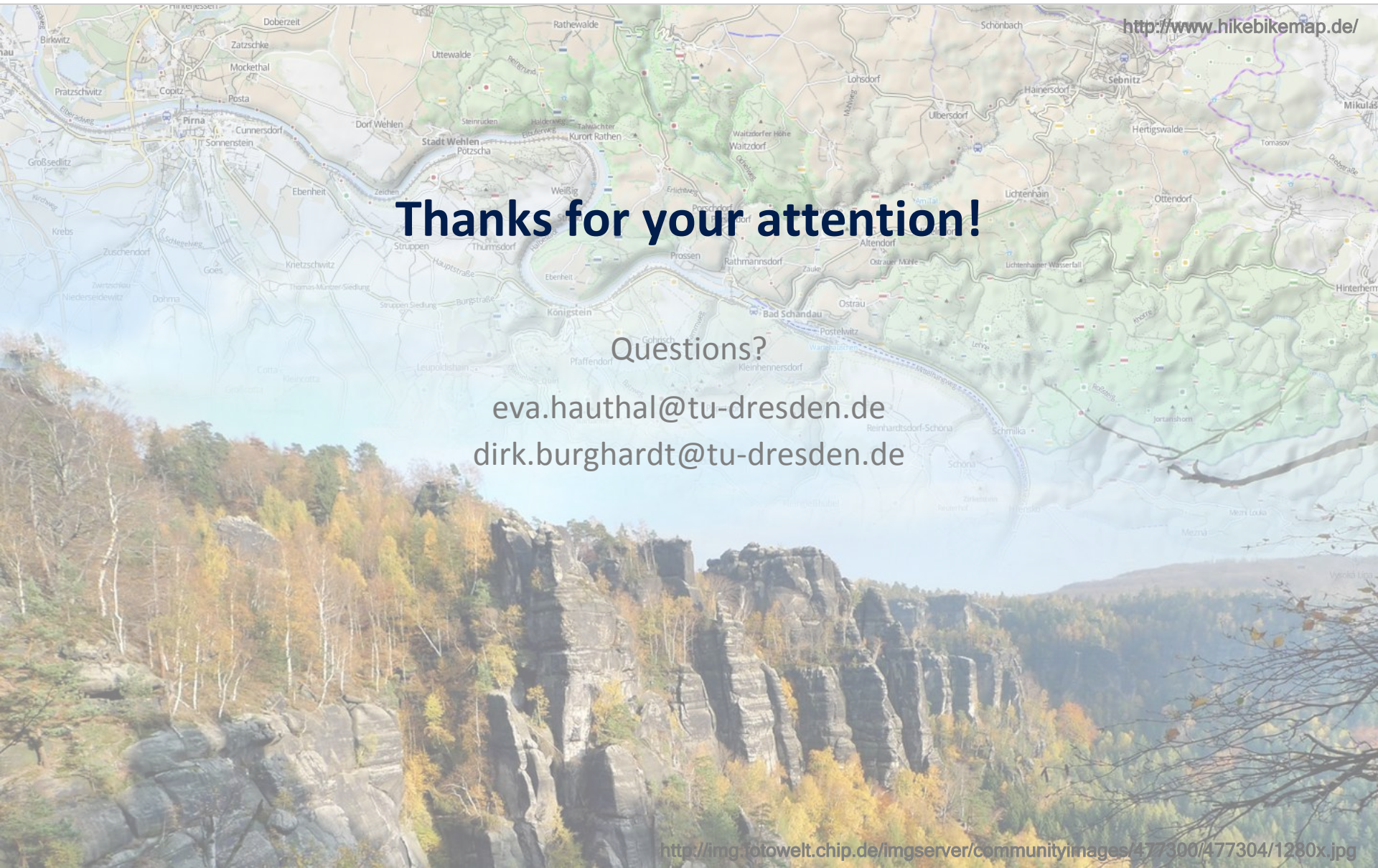
## Implementation of own Mobile Application



## Summary of own Application

- context: predefined
- adaptation: adaptivity and adaptability
- User Generated Content: Hike & Bike Map (<http://www.hikebikemap.de/>)





**Thanks for your attention!**

Questions?

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