

Application Development for Mobile and Ubiquitous Computing

Things

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Dresden, 16.12.2016



App Idea

It's 11pm and you are in the mood for chips, beer or something else? You don't know where you could get it? Just use "Things" to find out where to get it.



Landing Page

- Server Request Variables
 - User Location
 - Time and Weekday
 - User Query [Optional]
 - Product Category?
 - Price Range?

●●●OO ABC 04:37 AM
Things
Things
Q Chips
Button



Result Screen

- Map and List View
 - Stores
 - Names
 - Distance to User
 - Open Status
 - Locations in Map
- Options:
 - Get DetailView of Store

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●●●●○○ ABC 04:37 AM
Searched: Chips
Chips Shop ^{500m}
Patatine Fritte
Cips Mağaza ^{1,3km}
Chips Negozio
Pecetoj Butiko ^{3km}
Sceallóga Siopa ^{4km}
Chips Plommer ^{5km}



Detail Screen:

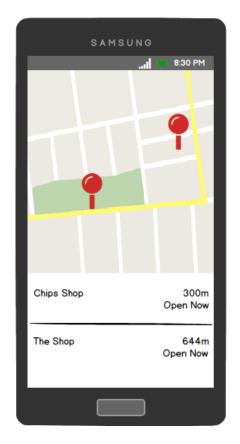
- List View:
 - Name
 - Price Rating
 - Opening Times
 - Product Categories
- Options:
 - Start navigation to Store

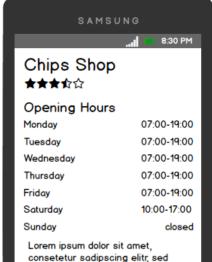
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04:37 AM	
Chips Shop 500m away Lorem ipsum dolor si consetetur sadipscir diam nonumy eirmod invidunt ut labore et aliquyam erat, sed di At vero eos et accus	open now it amet, ng elitr, sed tempor dolore magna am voluptua.



Android Version (Testing)

SAMSUNG
<mark>.11</mark> 🔳 8:30 PM
Things
Things
Put in your radius
Search Close Stores





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Adaption Mechanism:

- Caching:
 - Always cache the latest query results
 - User can still revisit data of known Stores
 - Depending on amount of previous results and/or signal Strength:
 - Repeat Query with higher Radius



Adaption Mechanism:

- Prefetching:
 - Retrieve detail data about next Store in list when user checks previous Store
 - No delay when user checks next Details
 - Depending on signal strength and total amount of cached stores:
 - Prefetch more/less details



Work Plan

- 16.12.16 31.12.16
 - Improve implementations, collect real world data
- 31.12.16 27.01.17
 - Bugfixing, additional Features