



TECHNISCHE  
UNIVERSITÄT  
DRESDEN

# Application Development for Mobile and Ubiquitous Computing

Things

Group 16 – Jonas Precht, Cheng De Yu

Dresden, 16.12.2016



DRESDEN  
concept  
Exzellenz aus  
Wissenschaft  
und Kultur

## App Idea

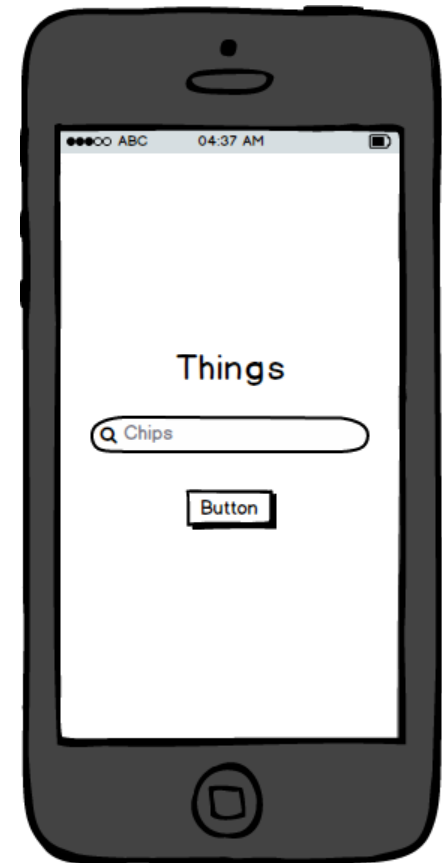
It's 11pm and you are in the mood for chips, beer or something else?

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?



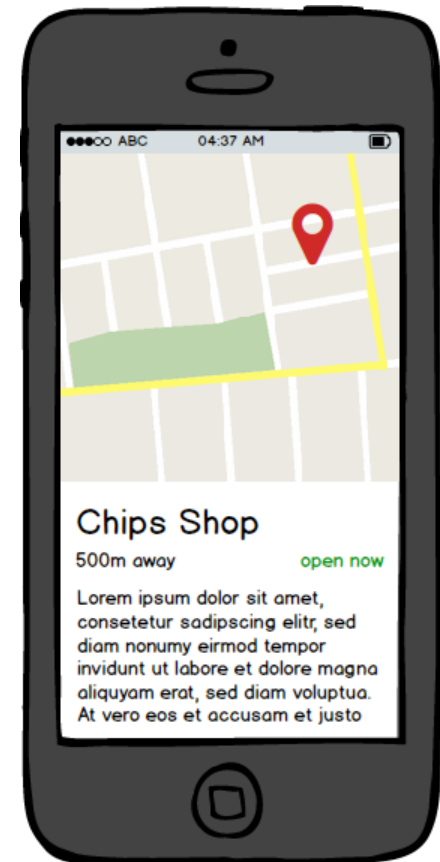
## Result Screen

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

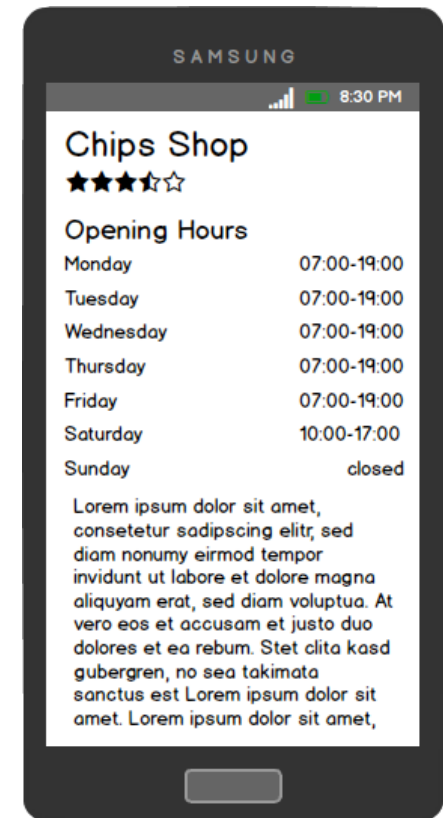
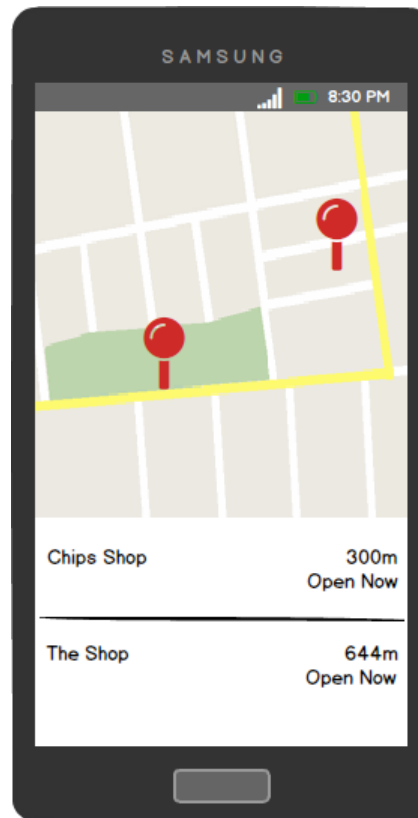


## Detail Screen:

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



# Android Version (Testing)



## 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