



# Application Development for Mobile and Ubiquitous Computing

Seminar Task

Final Presentation

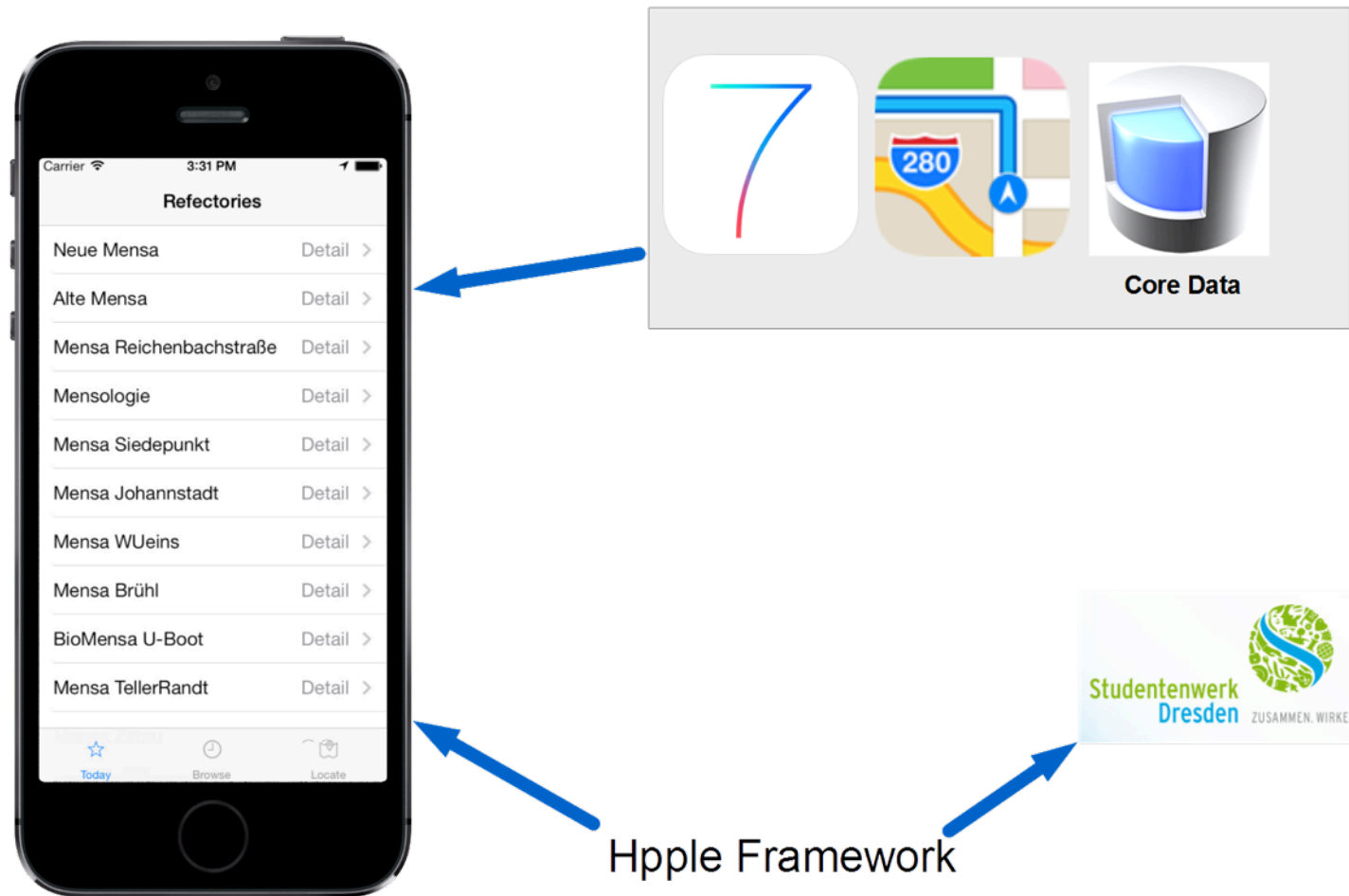
GroupNo. 13

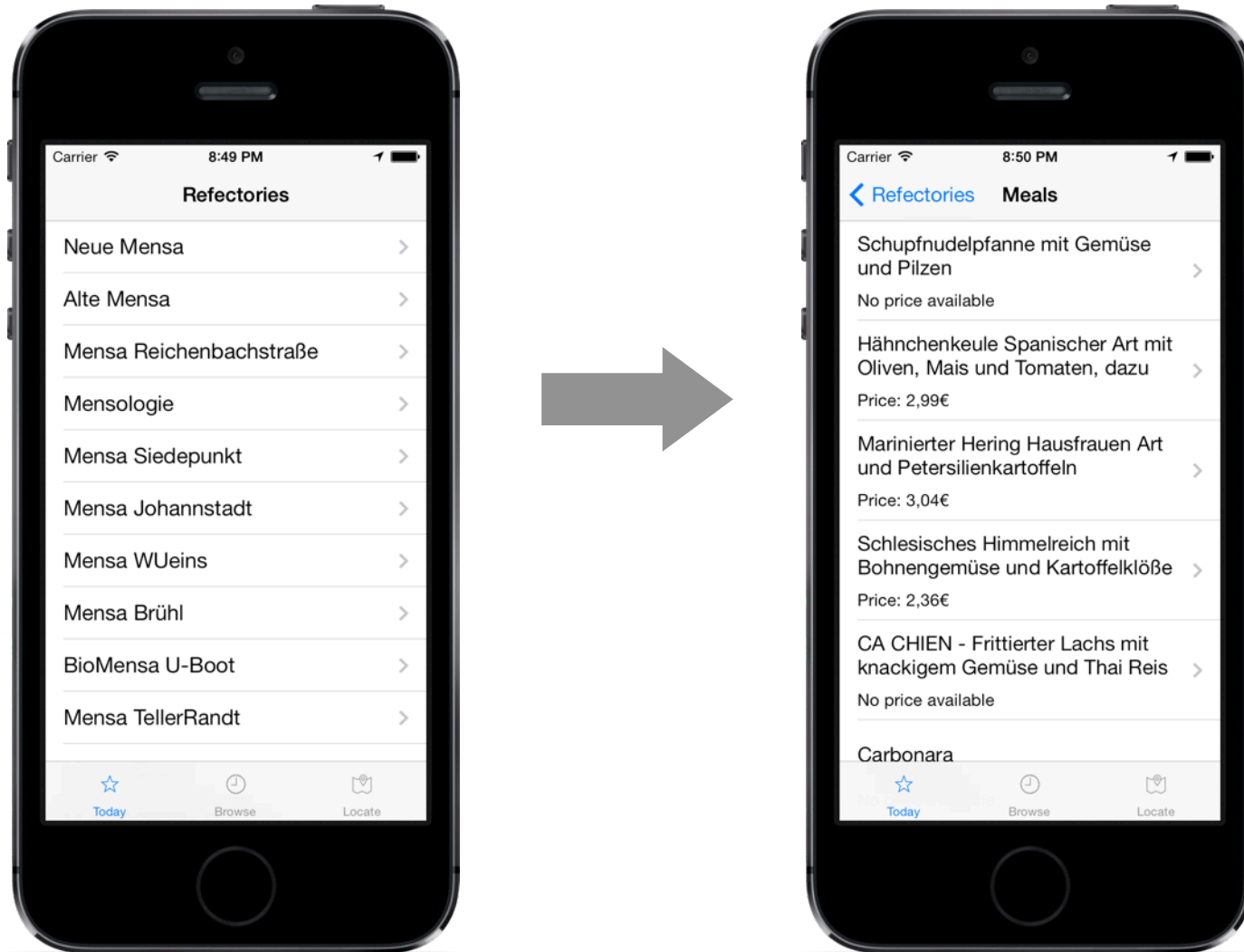
Team: Patrick Buchholz and Mikael Reiersølmoen

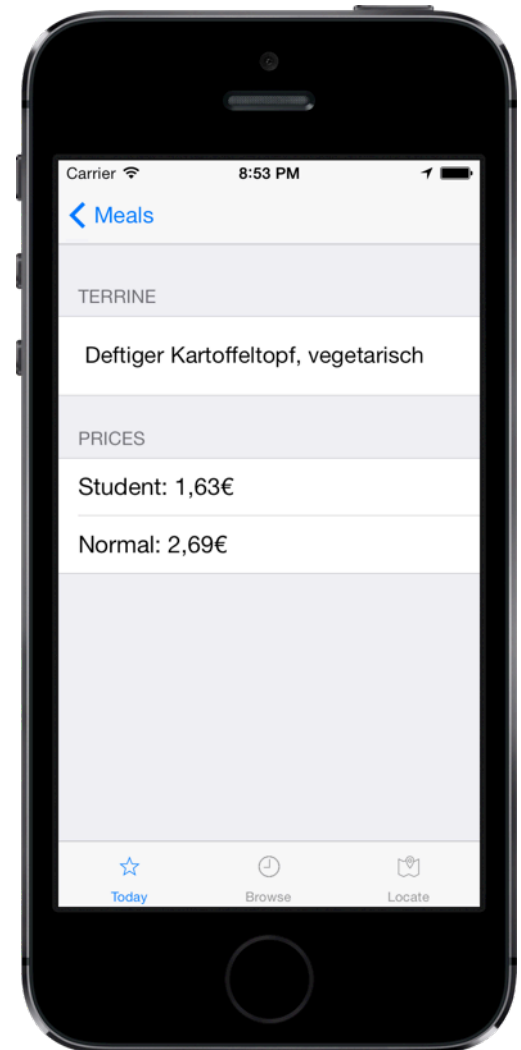
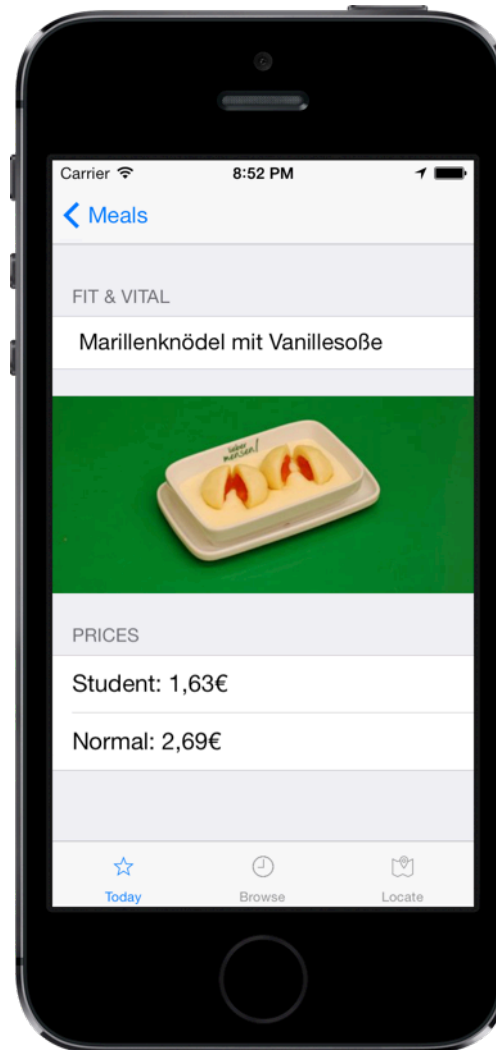
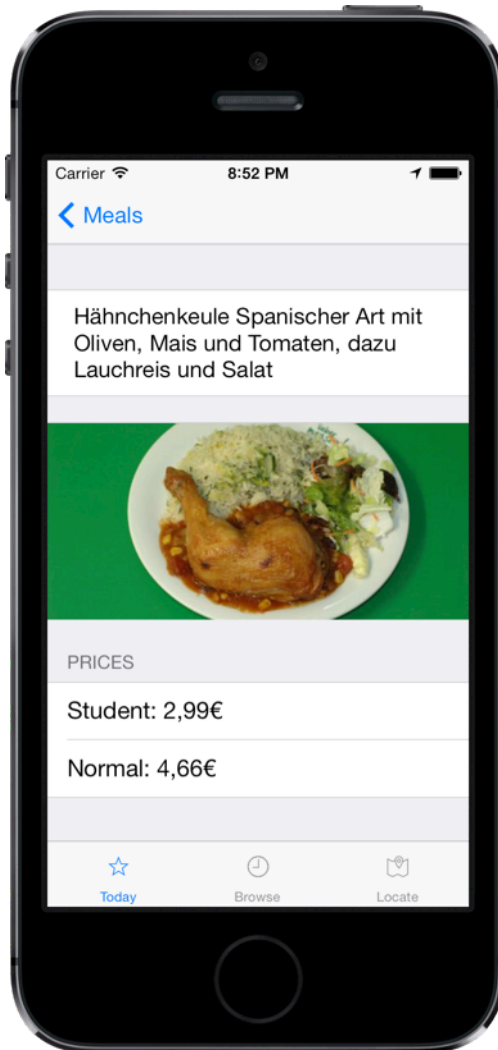
## MensaApp

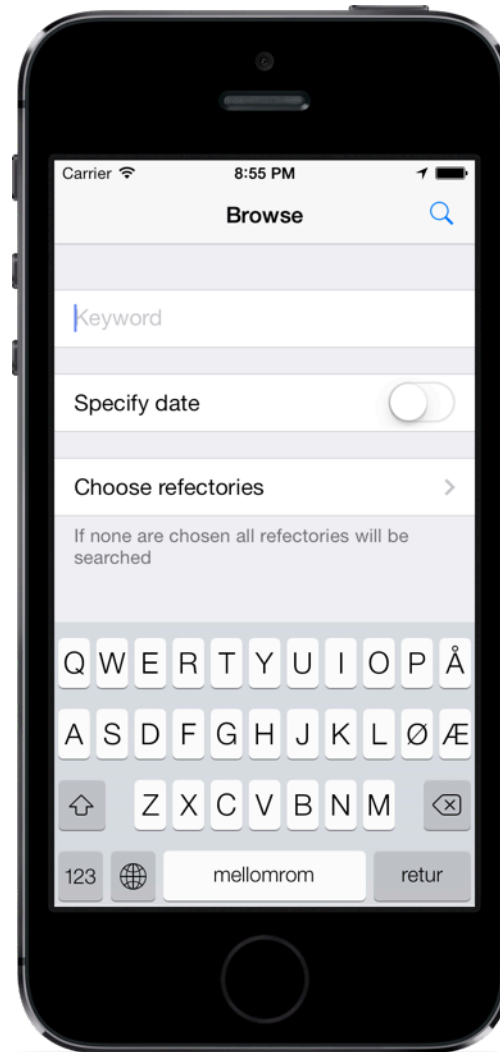
Users can...

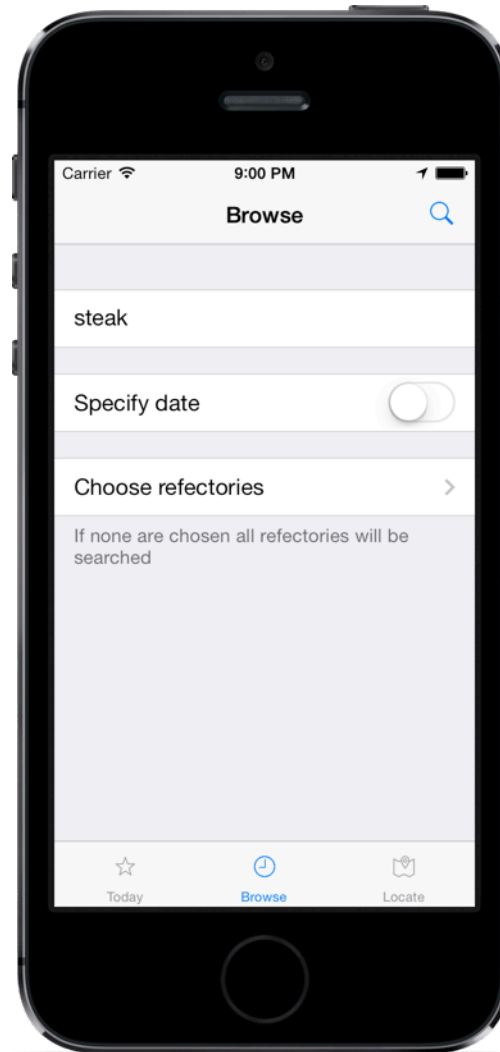
- see what meals are being served in the refectories
- browse meals on different criteria's
- locate refectories using the built-in map

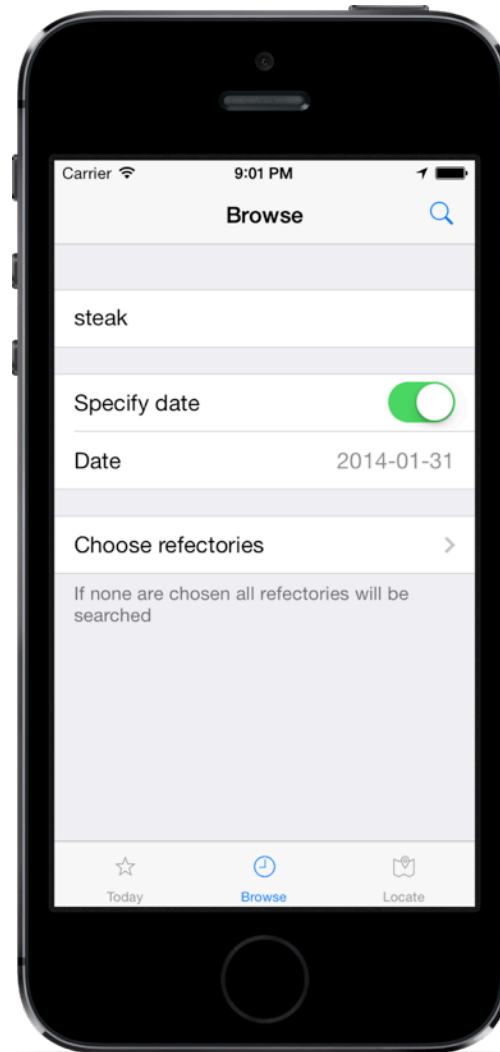




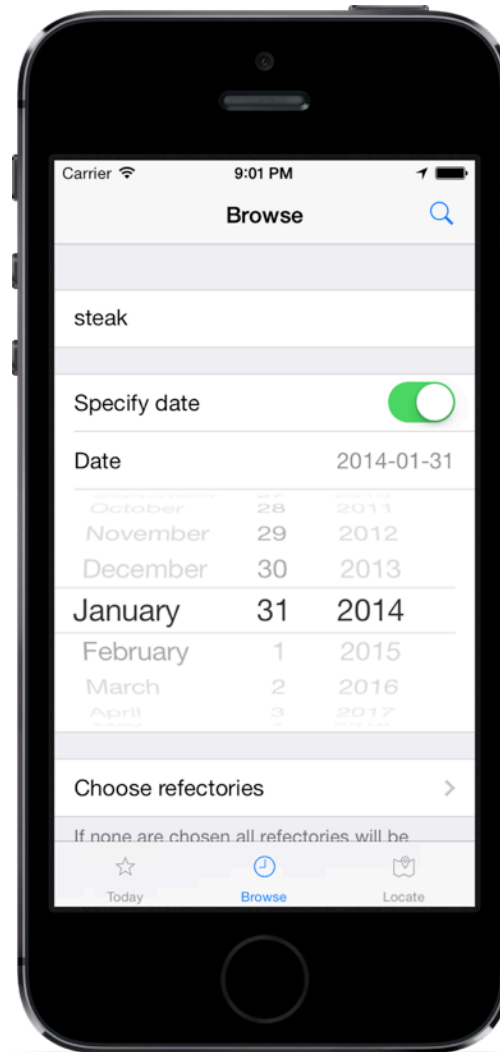


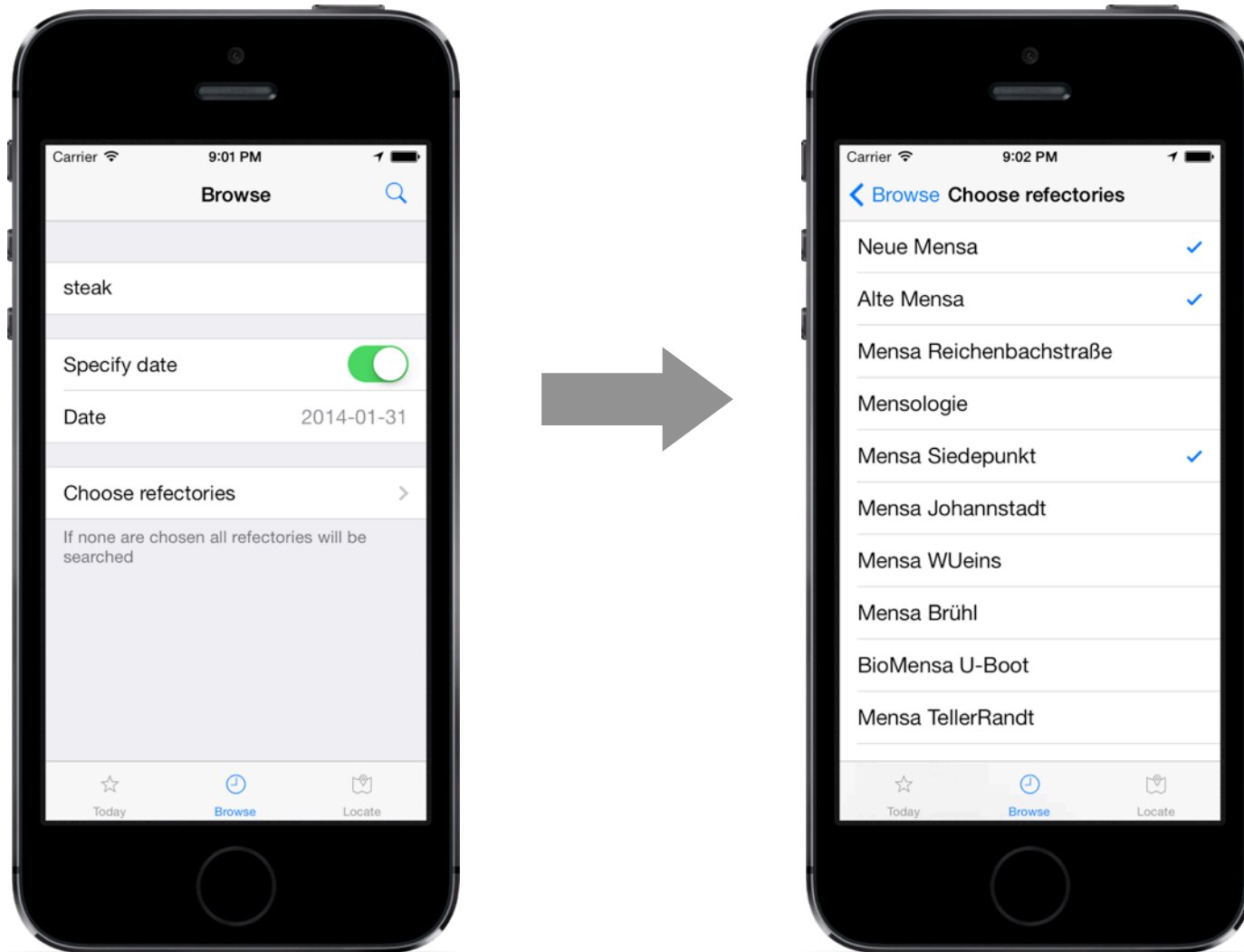


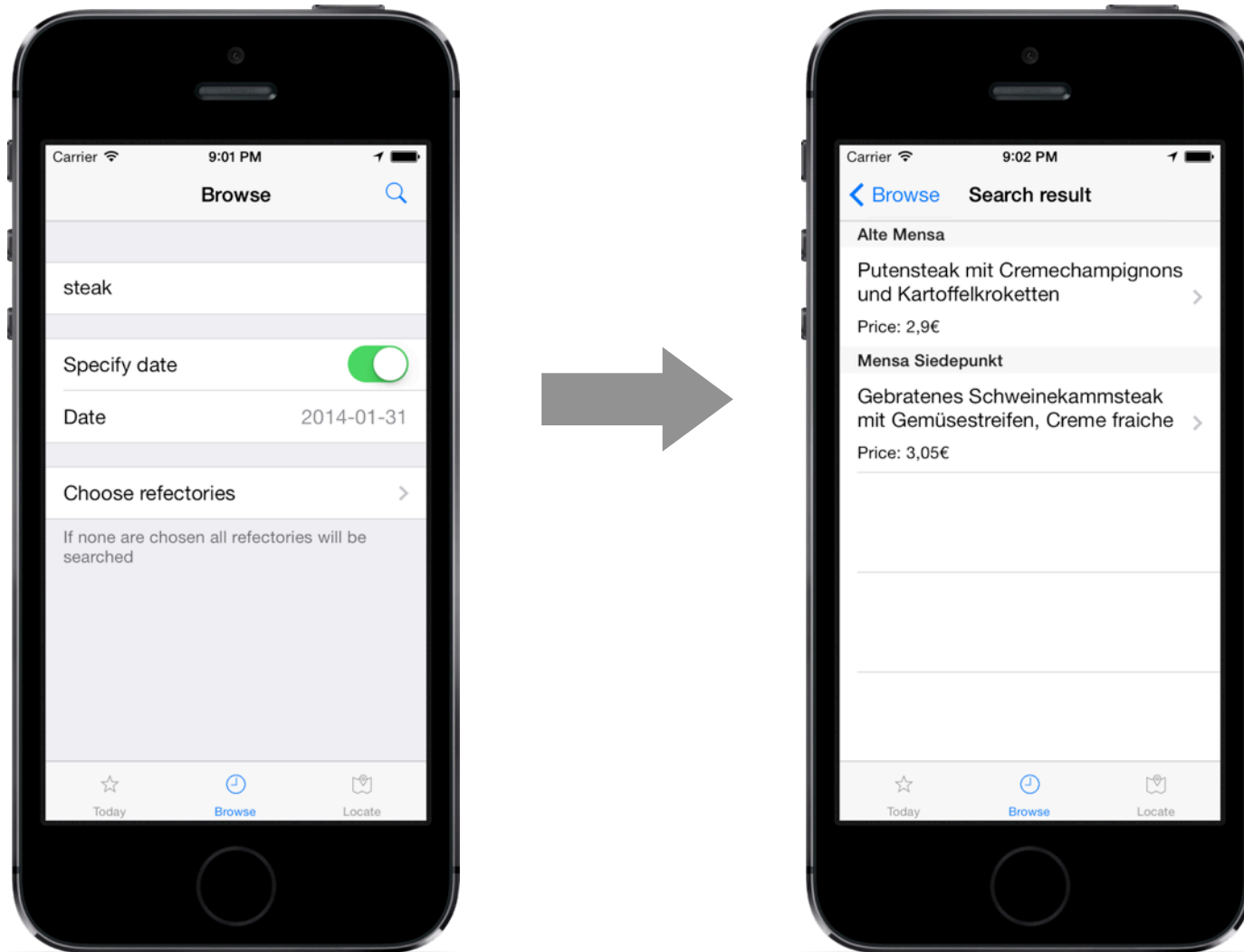


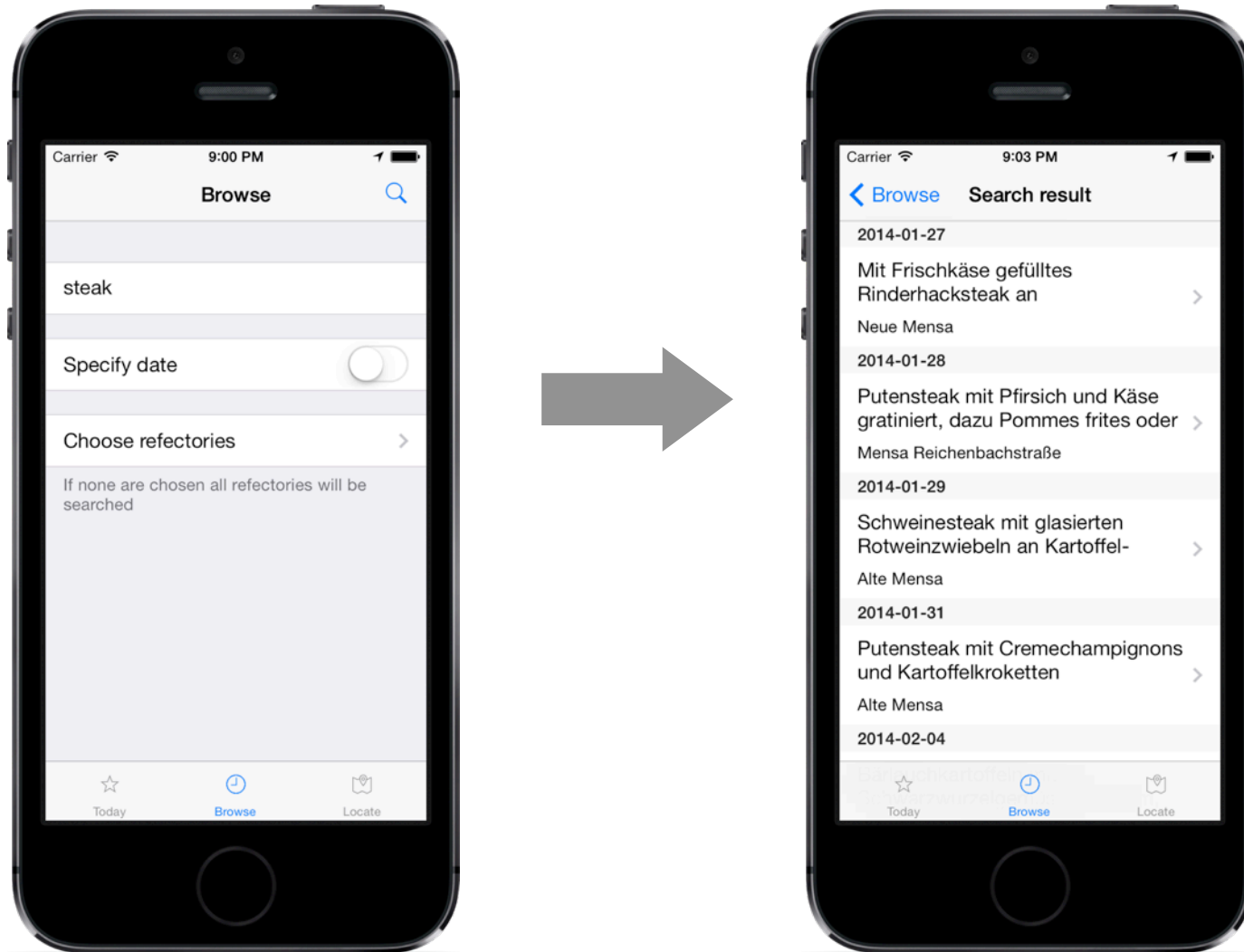


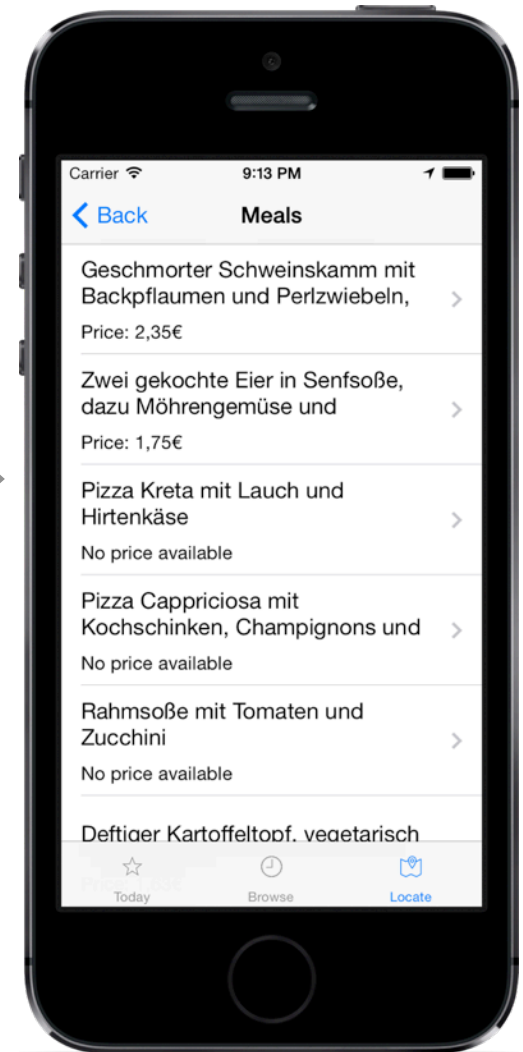
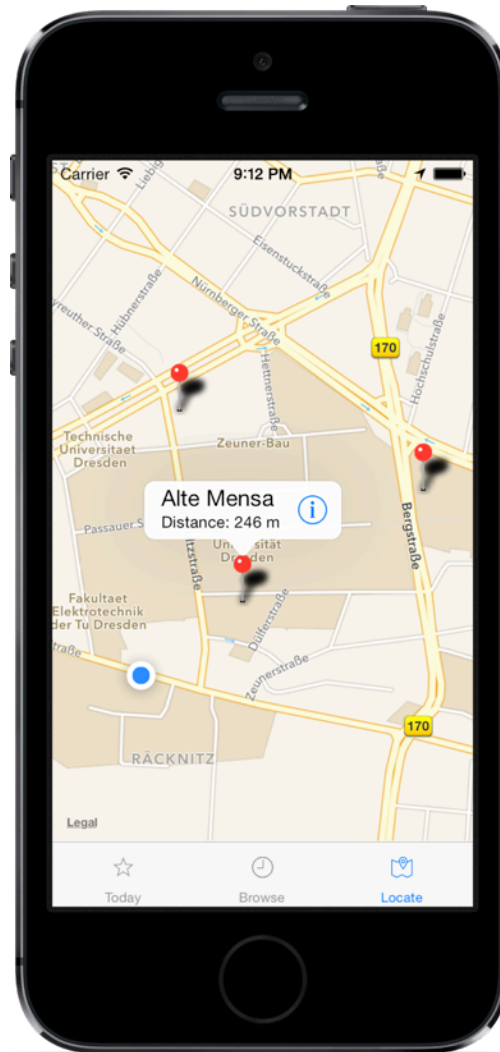
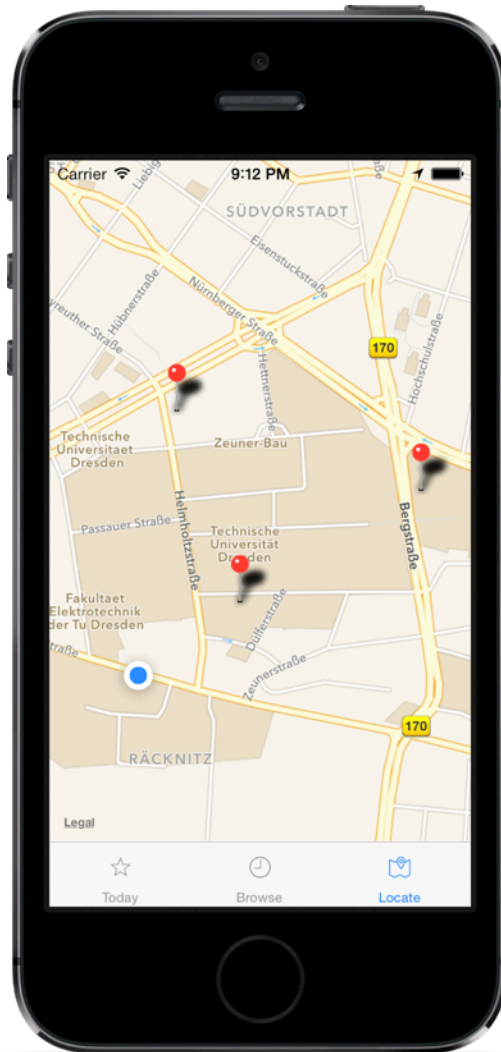















- Offline challenge
  - Meals are stored locally
  - Current date available without network connection
- Energy challenge
  - GPS coordinates only in “Locate-Tab”
  - Network connection only if required

# How data is fetched and stored

## Mensa-Speiseplan vom Freitag, den 31. Januar 2014

Neue Mensa	Infos	Preise
Germknödel mit Heidelbeerfüllung, dazu Vanillesoße		2,00 € / 3,67 €
Frische Pasta: Amori mit Paprika und Schinken in Tomatenragout, dazu Parmesan		2,20 € / 3,87 €
Aktionstheke: Pizzaburger mit Pommes frites rot/weiß		2,99 € / 4,66 €
Weitere Angebote und Informationen anzeigen ▼		

Alte Mensa	Infos	Preise
Kaiserschmarrn mit Fruchtmus von Apfel und Johannisbeere		1,96 € / 3,63 €
Schweinskambraten mit Weinkraut und Kartoffelklöße		2,28 € / 3,95 €
Polentakäseschnitte mit scharfer Tomatensalsa, Bechamelkartoffeln und Bohnensalat		2,60 € / 4,27 €

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# How data is fetched and stored

head	Refectory
body	Table body with meals
row	Meal
row	Meal
body	Empty table body

Loop all tables

    Create refectory entity

    Sort out empty table bodies

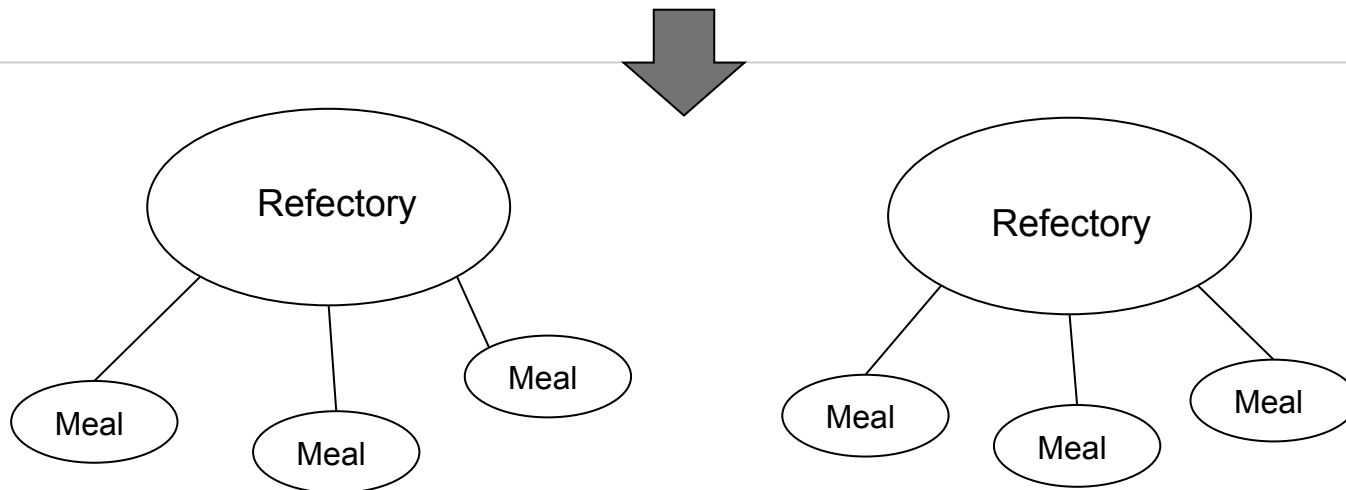
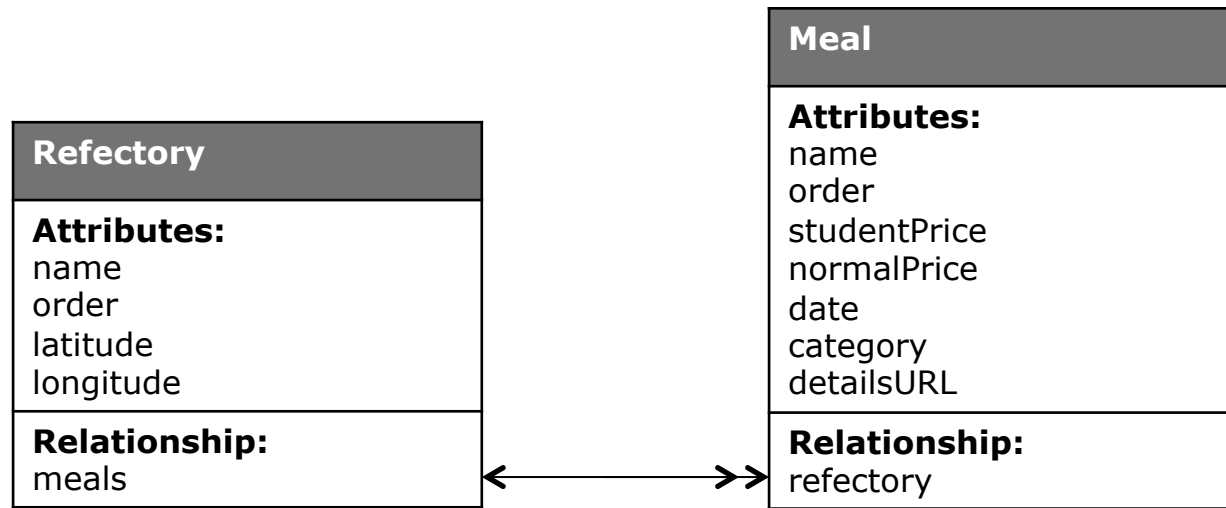
    Loop table bodies

        Loop table rows

            Create meal entity

Save to device

# How data is fetched and stored



- Disconnected functionality
- Reduction and transformation of data
- Physical and technical context awareness
  - Location based services
    - GPS/WiFi for user location
  - Network
    - Check for network connectivity
- Limits
  - Consistent data in device
  - Not aware of network strength

- Troubles with date formats
- Parsing of a partly-structured website is a mess
- Distance calculations