Diploma Thesis Topic description

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Key words

- Mobile App Development
- Information visualization
- Human-centered visualization
- Human Computer Interaction
- Social computing
- Smart Home, Smart Building, Smart Cities
- Perhaps Progressive Web App instead of native App

Mobile App

- Working title: My CO_2 Footprint
- General App accessible for all but with the basic idea of the Aspern Seestadt
- Provides information to a user about consumption of
  - Electricity
  - Gas
  - Heating/warmth
  - …
- Gives advice if switching to another energy provider is useful

Self-customizable mobile App

- Background: There are different types of users concerning energy consumption:
  - Some might care about their exact rate of consumption (Green)
  - Some might want to waste less energy but do not care about their exact rate of consumption (Cozy)
  - Some only want to know if they are doing ok in general (Lazy)
  - …and maybe more
- App customizes itself due to some questions that appear when first using the App

  example question: Vienna has a negative energy balance.

  O That‘s great! O I do not care O Awesome! How can I help to improve that even further?

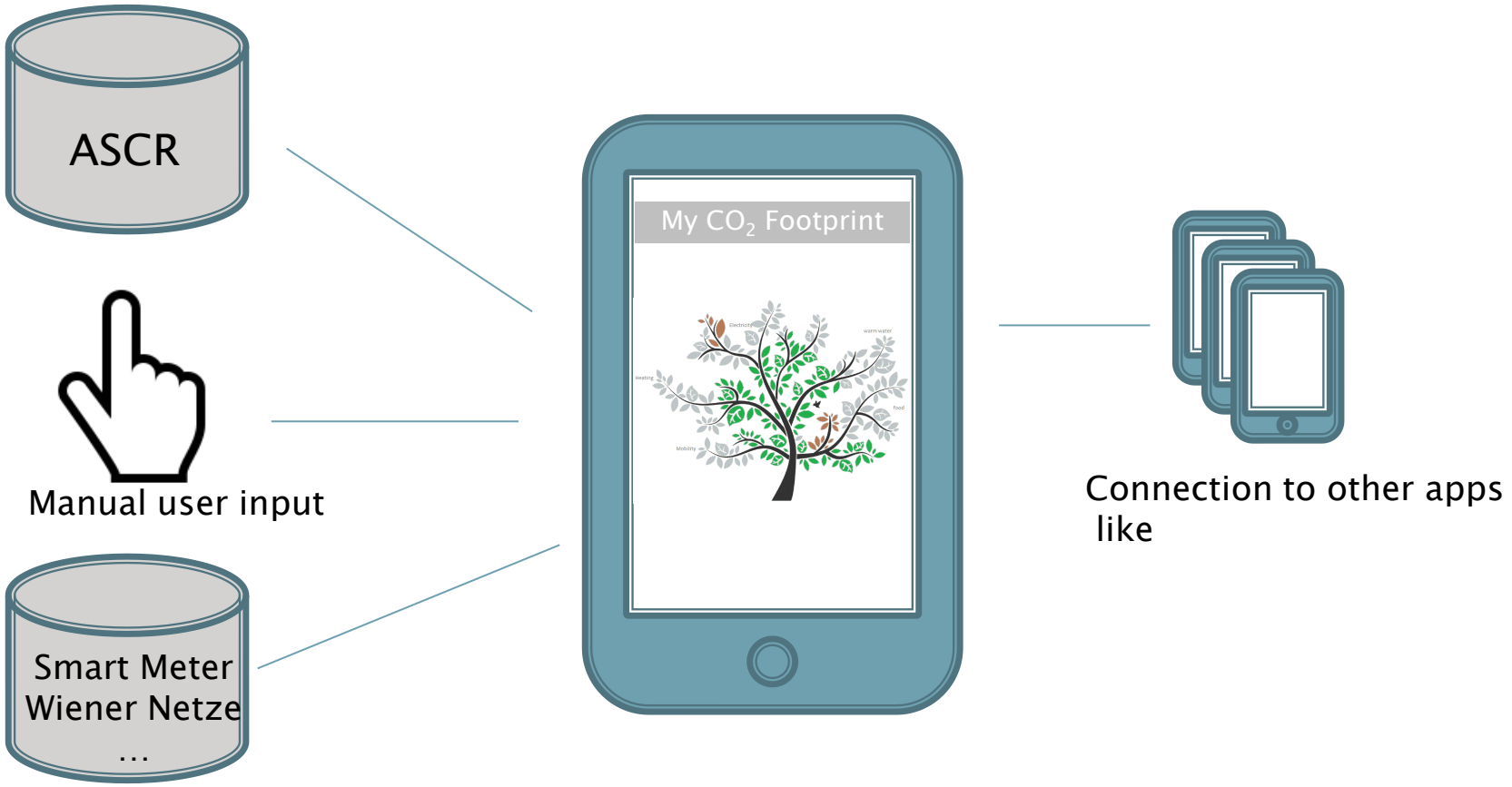
Self-customizable mobile App ctd.

- The categorization of the user into the different consumer types might also depend on following factors
  - Means of transportation used
  - m^2 of the flat/house he/she is living in
  - place of living
  - Family/Single household
  - Job

Self-customizable mobile App ctd.

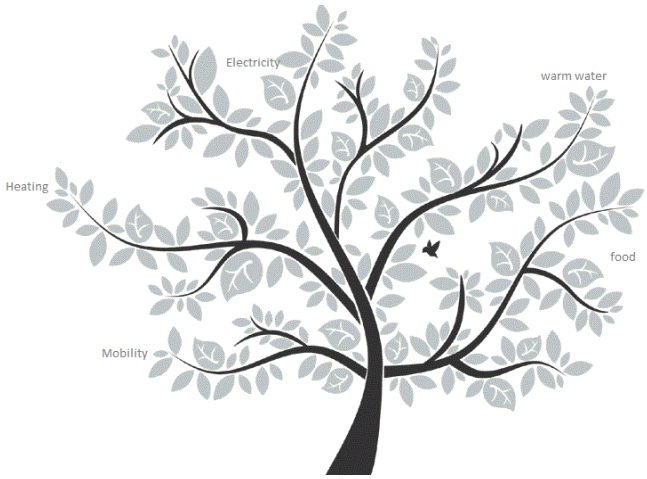
- The app changes it‘s appearance then according to the type of the user
  - A „Green“-user gets a detailed chart with the consumption of all the fields
  - A „Cozy“-user gets an overall overview of what he/she consumed (not to detailed)
  - A „Lazy“-user only gets for example a green or red sign, that the rate of consumption is ok or above average
- The app might also give advice for the best energy provider e.g. a „Green“-user might get the advice to switch to „Ökostrom“

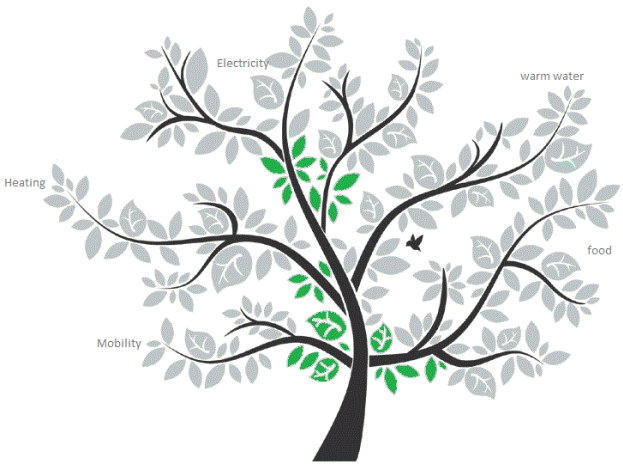
Data Ressource

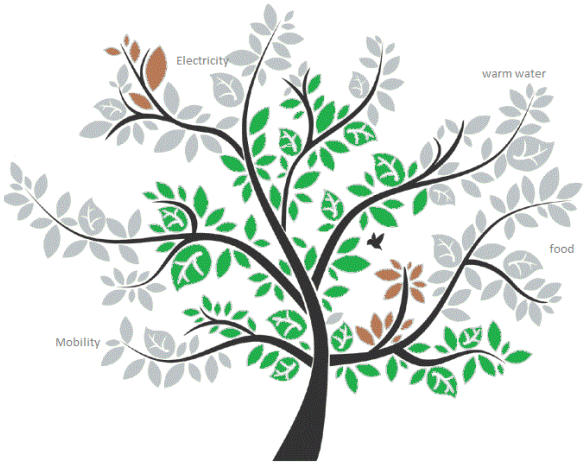


Playful approach

- Visualizations to simply show the user the current status of consumption







Supersede Feedback

- In order to check the user acceptance and to improve the development circle the Supersede Feedback Mechanism can be applied

Schedule

- now – 31.3. -> Abstract
- 1.4. – 30.4. -> Implementation/Development plan, Architektur, Konzept (~ 3 Chapter)
- 3.5. Presentation of Proposal and Feedback from Reviews
- 1.5. – 31.7. -> Entwicklungszeit (~ 1 Chapter)
- 1.8. – 31.9. -> Implementation description, Validation, Evaluation

Next steps

- Define…
  - research question
  - problem definition
  - expected results
- Start with proposal