Team: Smart City - Smart People
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Project: Mobile App MyMuc
Gathering street information in a Bottom-Up Approach to facilitate a more diverse and inclusive use of the streets of Munich
Solution Development

Challenge Goal

- Nudge people towards more social and sustainable behavior in a Smart City context, exemplary in Munich

Solution Strategy
Social Nudging

- Nudges steer people to take specific actions that benefit themselves and their society
  - Without using penalties or monetary rewards
  - Preserve Freedom of Choice
  - Low cost

- Different types of Nudges, such as
  - **Reward System** (e.g., Community Garden & Nudging Flower in MyMuc)
    - A reward system can help steer people to take the desired action
  - **Smart Disclosure** by Nudging Flower
Nudging Flower

The Nudging Flower praises the user and suggests they might rate their route or offers information on the social, environmental and health-related benefits of MyMuc

- "Cycling, skating or walking helps improving peoples' fitness"
- "Cycling to work instead of using public transport or your personal car helps cut emissions and saves the environment!"
- "You are an active member of our community and others appreciate your efforts!"
- "Check out our communal garden! Your plant has grown beautifully"
Video Presentation
MyMuc Mobile App

Main Page - Map View
- Route search (Start - Destination)
- Explore
- Category (Standard, Skate, Inclusive, Bike)
- Filters (Safe, Nature)

Example
- Route from Odeonsplatz to Englischer Garten
- Standard: Like Google Maps
- Nature: Preferably leads through green areas
Rate a Route

- Users can rate routes or streets with respect to different categories and filters.
- Users are encouraged to give feedback after reaching their route destination.
- Rating a route waters your virtual plant which makes it grow.
Personal Plant in Community Garden

Personal Plant
- Giving feedback → Your PP grows

Community Garden
- Shows your plant next to all others
- Nudge: Motivation to get the biggest PP

Plant a Real Tree
- If your plant has a certain height, you can decide if you want a real tree planted in cooperation with the city of Munich
Challenge of the Month

- Additional nudges by providing challenges in which users can participate
- Social Aspect: Get to know other users who participate in challenges
- Get to know Munich: explore new spots in Munich you did not know before
Smart City Aspects

Project "CUT - Connected Urban Twins" (Digital Twin of Munich)

- 2D/3D model of city can be imported (Data Exchange)
- Traffic data is recorded by sensors and could be used for finding low frequented routes

(Big) Data Aspect

- Most users will rate a route, not individual street sections
- MyMuc gets better and stays up-to-date the more citizens participate

Personalized Nudging

- ML methods
- Similar to Netflix Algorithm
- E.g. "Other users also liked this route"
Sustainability & Social Impact

- Accessibility tailored to different needs of different groups of people
- Health benefits
- Take the strain off public transport by promoting alternative means of transport (cycling, skating, etc.)
- Making it easier for people with special needs to participate in social life
- Creating a safer city environment for all
  - Safe Mode tells you which route to walk home safely at night
Future Developments of MyMuc

- Accessibility of the App: Connect voice assistants with MyMuc
- Social Mode:
  - Share route with friends
  - Meet new people on common routes
- Integrating the App into municipal Apps and Strategies

Business Strategy
- Model project “Smart Cities Smart Regions - Kommunale für Städtebau und Mobilität der Zukunft” of Bavaria
- Funding Programs (e.g. Strategie BAYERN DIGITAL, Hightech Agenda Bayern, EU’s Horizon 2020 program)
Thank you for your Attention!