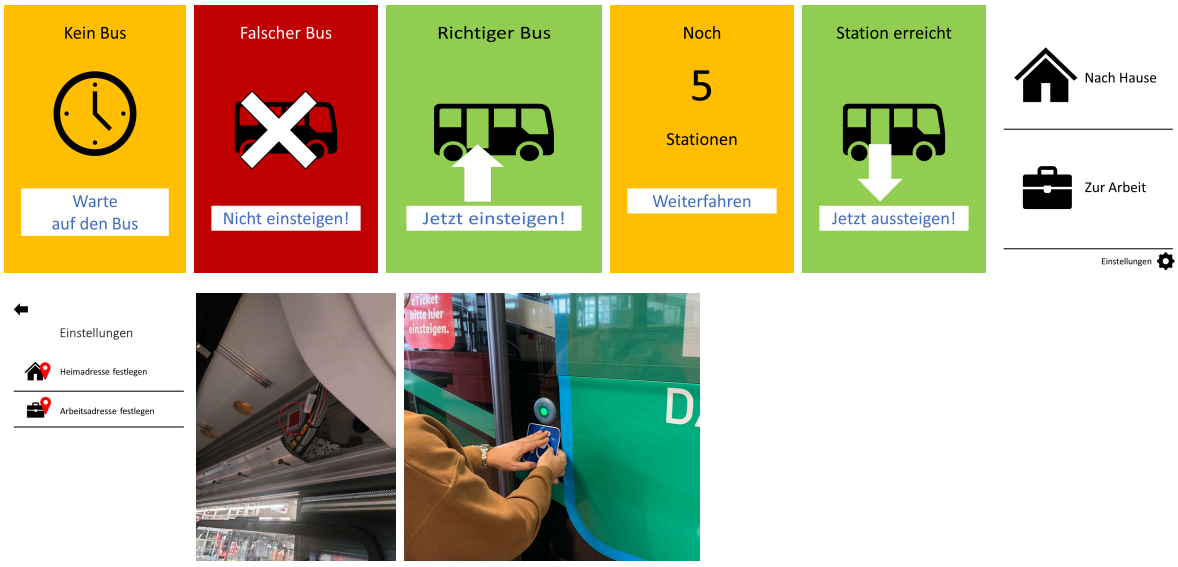

Master Thesis 17.03.2026

Development of inclusive Bus Navigation App

Support people with disabilities in moving safely and independently on public transport, as barrier-free use of public transport is currently a major obstacle despite the UN Convention on the Rights of Persons with Disabilities.

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Overview

People with intellectual or visual impairments and senior citizens or their relatives have a lot of difficulties using public buses. They are open to technical means to support them in using the buses more self-reliantly.

There was a previous Bachelor thesis that explored requirements and created a first app prototype. Final presentation: https://drive.google.com/uc?export=download&id=132gPtrHdiH4Bm6AOWh4UksCKQsCBViwW

Autak e.V. provides:

- Contact to Mrs. Feldmann from Inclusion, Gender and Diversity Management Rectorate Staff Unit, RWTH Aachen.
- Contact to bus operator ASEAG, Aachen.
- Previous work from the Bachelor thesis.
- Regular reviews and feedback.

Goals

1. Publish an app (BusBuddy) which informs a user with clear illustrations, descriptions and instructions whether a bus is the right one or the wrong one.
2. Provide hardware for the buses where needed, to signal the phone via Bluetooth.
3. Provide the server and connection to bus operators.

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