

Mappy Munich

An online guide that provides accessibility information for tourists with limited mobility



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Mappy Munich is an online, informational guide for tourists with limited mobility who would like to explore Munich. Through web maps, it provides accessibility information for essential amenities and tourist attractions in the city center of Munich. For this mapping project, the class visited Pfennigparade, a rehabilitation center for people with physical disabilities in Munich, to learn about their personal experiences and difficulties as disabled persons. Mappy Munich was created to support the disabled community and help them have a barrier-free travel experience.

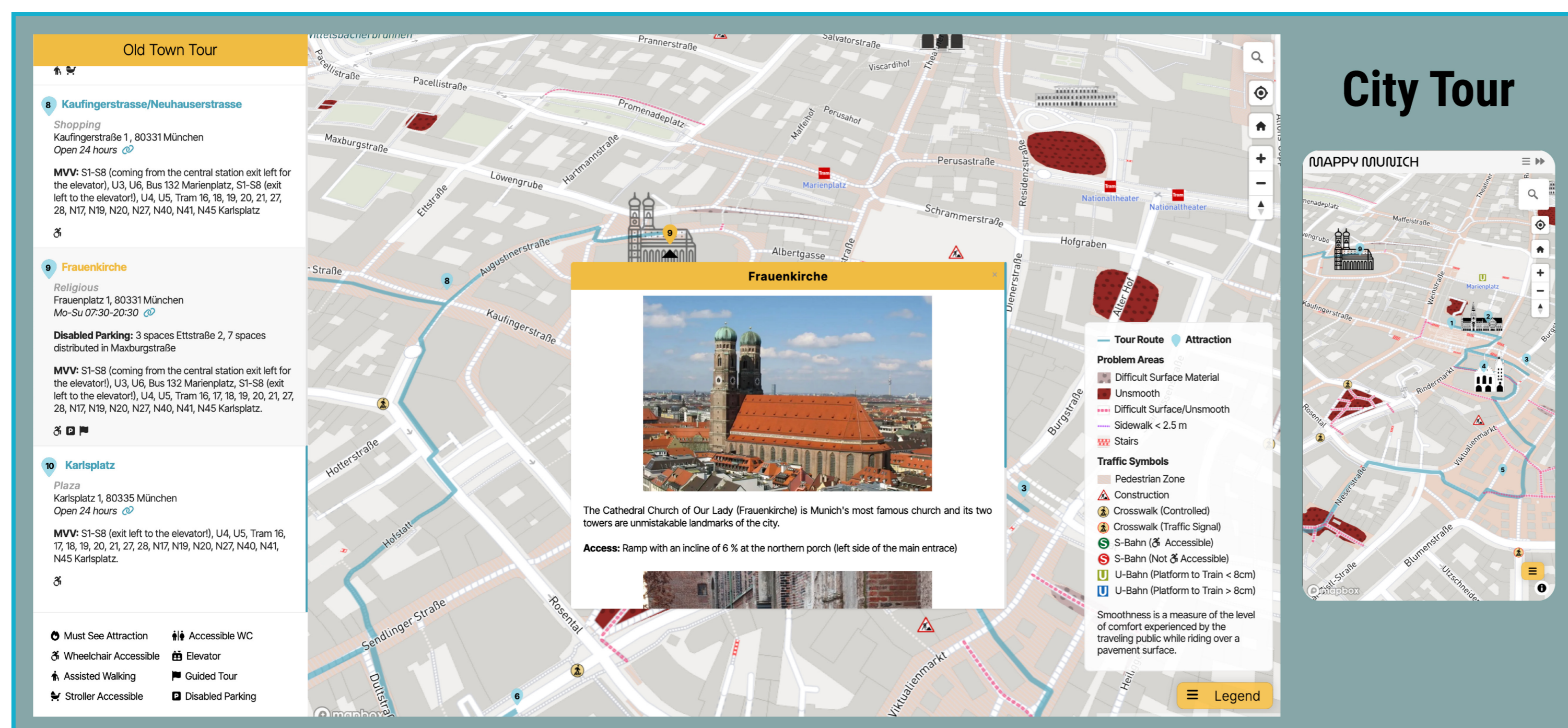


Fig 1. One of the city tours showing a sidebar and pop-up for the attraction with accessibility information. On the right is a screenshot of the same map on a mobile device.

OBJECTIVE

The main aim was to provide an aesthetically pleasing and map-focused online platform that provides touristic accessibility information of Munich city center for those with limited mobility.

METHOD & RESULTS

We created a narrative of a disabled tourist travelling to Munich to create a list of what to include in our maps. Then, we came up with rough sketches of the web design and layout. We referenced tourism sites to select the most visited tourist attractions and routes that are accessible. We used qGIS and ArcGIS Pro to adjust routes, delineate problem areas, and add attributes for accessibility.

The spatial data of accessible places are collected from OpenStreetMap. With Python Pandas library, we performed data pre-processing on duplicated data. Our website was built with HTML, CSS and JavaScript using Mapbox Studio and Mapbox GL JS because of its rich features and customizability. We also used Adobe Illustrator to create custom icons for our map.

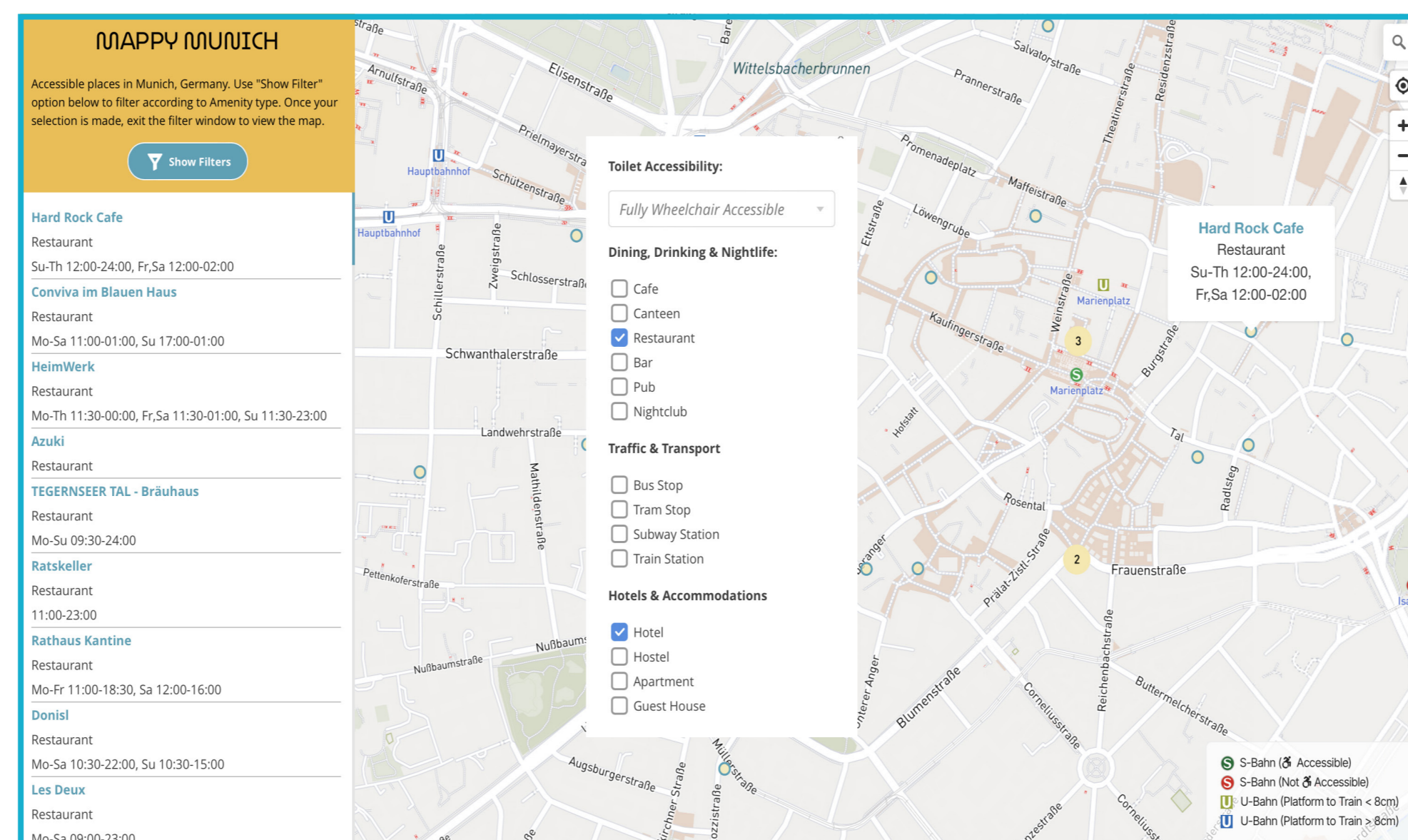


Fig 2. Accessible Places web map that shows accessible essential amenities in Munich with a filter function. The various categories could be symbolized differently for contrast.

FUTURE WORK

These suggestions could be useful: increase mobile-friendliness, conduct user test to further curate it for the disabled, add an option for users to rate route accessibility including photos, API to get live updates for all data sources, symbolize various amenity categories differently (e.g., different colors).

CONCLUSION

Mappy Munich is a fully functional website that can support the disabled community in planning their travels. It shows that similar tourism websites or applications can, and should indeed be improved or developed with more focus on interactive maps, and more importantly, inclusivity of disabled people.

IMPRINT

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LINK

<https://pheebe.ly.github.io/mappymunich/>

VIDEO DEMO

