Trams in Saint Petersburg:

A schematic map design for one of the world's largest tram networks

Saint Petersburg, Russia, has the largest tram network in Europe, covering over 200 kilometers with 43 tram routes as of January 2025. Trams play a major role in the city's public transportation system, yet no maps illustrate the full network with individual lines clearly separated. This map highlights trams as an efficient and environmentally friendly transportation option while showcasing their essential role in urban mobility in Saint Petersburg.

Design Approach for Easy Navigation

This map prioritizes simplicity and clear communication, combining various design techniques to make navigation intuitive. It incorporates classic schematic map principles along with new approaches tailored to Saint Petersburg's unique urban context.

Using Rivers as a Guide for Line Angles and Basemap

Rivers and channels, central to Saint Petersburg's layout, serve as guides for the angles of tram lines on the map. Instead of the typical 90° and 45° schematic angles, tram lines align with the directions of the rivers. This slight simplification balances realistic orientation with clarity, creating contrast between the detailed river background and simplified tram lines.

Schematic Geometry and Color Coding

Each tram line is assigned a unique color, helping users distinguish routes at a glance. This color coding aids quick route identification and minimizes confusion, by using similar colors in different map areas.

Highlighted Terminals and Transfer Points

Metro and railway stations are highlighted to emphasize the integration of trams with other transport modes, making it easier for riders to plan multimodal trips. Stop names are not shown on this map due to scale constraints but will be included in the interactive version at later stages.

Dual-Language Labels

All map labels are in both Russian and English, ensuring accessibility for local residents, tourists, and expatriates alike.

Detailed Legend

A comprehensive legend lists all tram routes, indicating their lengths and the colors of route lights: unique colors displayed as lights above each tram's windshield help passengers identify the correct tram, especially at night or in low visibility.

Data Sources and Creation

Data for this map was sourced from the Open Data of Saint Petersburg web portal in GTFS format. The first steps of data processing were conducted in QGIS, but most of the design work was completed in Adobe Illustrator.

This map was made during the *Project Map Creation* course at TU Wien in the summer semester of 2024 by Bella Mironova