

This real-time visualisation aims to show the bike-sharing status in Milan, Italy, allowing users to quickly identify the location and availability of bikes and slots. It shows a map with dots indicating the locations of bike stations, and a legend is on the top left for these dots. Users can get more detailed information on the number of available bikes, empty slots, and bike type by hovering their mouse over the dots. Data sources for this visualisation include the API provided by Citybik.es (<https://www.citybik.es/>), which provides real-time data on bike-sharing systems worldwide, and the Open Street Map with Mapbox, which provides the base map layer.

To create this visualisation, the technical approach involves using DeckGL to set up the map and add scatterplots, with the API used to populate the map with data on available bikes and slots. The dots are coloured differently to identify whether bikes or slots are available in the specific location. The radius and colour of each point on the map are set according to the values of bikes and slots, where green indicates that more bikes are available, while red signifies fewer bikes are available. A larger radius implies more empty slots for users. Additionally, a tooltip from d3.js is applied to create bar charts to display available bike categories, such as e-bikes, bikes with a child seat, and so on, which are presented as popups. The design of the visualisation features a monochrome light grey map, which makes it easier to see the colours of the dots on the map. The title, source, and legend are in the top left of the screen, making it easy for users to understand the context and data sources.

Overall, this real-time visualisation of bike sharing provides an interactive and informative way for commuters and visitors to identify the location and availability of bikes and slots in the city. With the use of real-time data and interactive elements such as popups and bar charts, this visualisation allows users to explore the data and gain a better understanding of the bike-sharing system in Milan.