Shareable Bike Rebalancing System for studying effects of various rebalancing schemes

Project Objectives:
This project develops a web-based simulation testbed system for evaluating and studying short-term demand-supply gap prediction and bike rebalancing optimization approaches under various realistic conditions. The testbed is incorporated with a spatial-temporal rebalancing algorithm as a default approach for users to adjust and extend, and is capable of loading real-world bike sharing system datasets to simulate collective usage behaviours.

This is useful for system operators to find commercially viable ways to avoid inefficiency in managing the redistribution of shareable bikes among docking stations based on their preferences and business constraints.