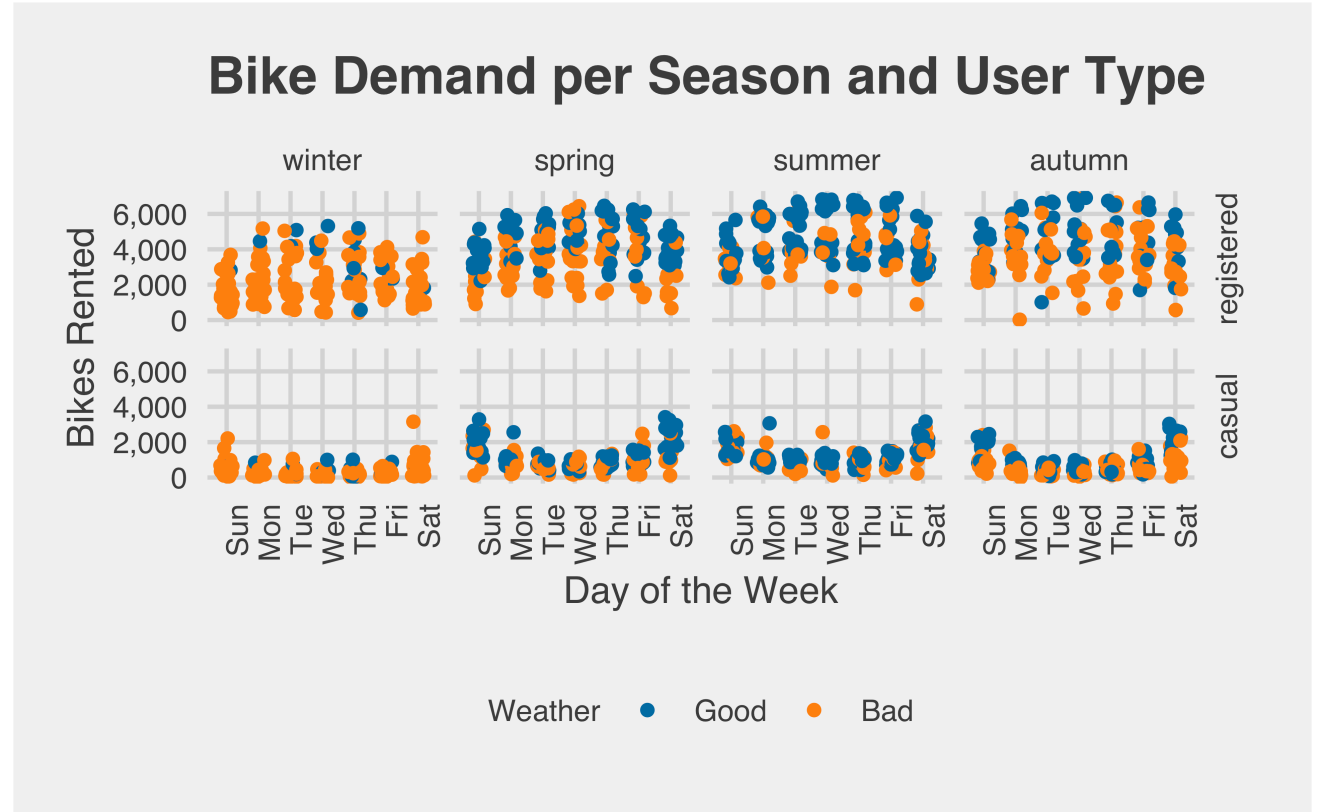


Fleet maintenance volumes and windows need to be carefully chosen

In order to **provide a good service** for the users of the bike sharing scheme, **unavailability needs to be avoided**, either by lack of maintenance or lack of supply. Thus, maintenance windows need to be selected **smartly**.

- Shared bikes are **used every day of the week**. Registered users provide a constant demand baseline.
- There is **some seasonality** in the demand: registered users brave through the winter keeping the numbers high.
- At first look, it seems that **weather conditions are the biggest deterrent** for bike usage. If it is too cold, or too hot or too windy casual users won't ride; registered users' numbers will also drop.
- Bikes will **keep breaking** - even if they are well built! Thus, **every opportunity** to undertake maintenance **needs to be taken**.



Challenge: Using data analytics, we can leverage the **weather forecast** to optimise the fleet **maintenance** without compromising **availability SLAs**.

