# En bild som visar däck, hjul, Landfordon, fordon Automatiskt genererad beskrivningBike rental

Bike sharing systems are new generation of traditional bike rentals where whole process from membership, rental and return has become automatic. Through these systems, users can easily rent a bike from a particular position and return it at another position. Capital Bikeshare system in Washington D.C. is such a system where customers pay either per rental ($1 + $0.05/min) or through an annual membership ($95) to get 45 min/day free (additional minutes costs $0.05/min). This company shares their data online at <https://capitalbikeshare.com/system-data>. The data include the information on where and when a bike is picked up and returned as well as the type of a user (registered or casual). The dataset you will work with have been cleaned and preprocessed for easier analysis (see Data cleaning.qmd quarto file or rendered pdf Data-cleaning.pdf) and additional variables have also been added (see descriptions about the variables below). We will analyze daily data from 2011 and 2012. The data material is linked with weather data from the same days in the same city. This data material is openly available online. We have access to the following variables:

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| Variable | Explanation |
| dteday | Date from “2011-01-01” to “2012-12-31” |
| season | 1: spring, 2: summer, 3: fall, 4: winter |
| yr | 0: 2011 or 1: 2012 |
| mnth | 1: January, 2: February, …, 12: December |
| holiday | 1: if the day is a paid holiday for government full-time employees |
| weekday | 0: Sunday, 1:Monday ,…, 6: Saturday |
| workingday | 1: if workday for government employees, 0: if holiday, Saturday or Sunday |
| tempC | Mean temperature during day in C |
| feeltempC | Mean perceived temperature during day in C (calculation from temperature, humidity and wind) |
| hum | Mean humidity during day |
| windspeedkmh | Mean windspeed during day in km/h |
| windspeedms | Mean windspeed during day in m/s |
|  |  |
| casual | Number of rentals from non-members during the day |
| registered | Number of rentals from members during the day |
| total | Total number of rentals during the day |