**Capstone Project 1 Milestone Report:**

1. Bike Rental Company needed to determine the demand for bikes for different hours of the day and different seasons/weather conditions.
2. Dataset consisted of information of dates, hours, weather conditions and seasons, the formatting of data columns like dteday was formatted to datetime format and marked as index for resampling/better analysis of data.
3. Initial Analysis suggested
   1. Demand was higher in Fall Season (surprising finding)
   2. During the weekdays the demand was in a bimodal distribution form with peaks in demand during morning and evening.

(lower demand during middle of the day)

* 1. Weekend had low demand during morning and evening hours and higher demand during mid hours of the day.
  2. During the weekends the demand from registered users was less than causal users.

1. Statistical Analysis suggested
   1. ECDF, Swarm plot and Box plots were plotted which confirmed the initial findings.
   2. 95% confidence intervals were derived.

Github link to Code:

<https://github.com/samudassir/datascience>