**Types of Metrics**

* Counter:
  + These are type of metrics which will use track either the number or size of the events
  + Examples
    - Request Count
    - Exception Count
    - Size of records processed
* Gauge:
  + These are snapshot of some current state
  + While for counters how fast it is increase is what we care about, for gauge it is actual value of gauge
  + Examples
    - number of items in queue
    - memory usage of a cache
    - number of active threads
* Histogram:
  + A summary while provide the average latency, but waht if you want quanitile?
  + Quantile tells you that a certain proportion of events had a size belo a give value.
  + For example: 0.95 quantile being 300 ms meants that 95% of requests took less than 300 ms

**Instrumentation**

* The largest payoffs you will get from prometheus are through instrumenting your own applications using direct instrumentation and client library
* <https://github.com/asquarezone/ExpertKubernetes/commit/b374d0f3ecb478739d6b76665d9f17d186bb559f> for the sample instrumentation code