**Result analysis of Production Ready Application**

* As per the application that is designed to search the github account name to retrieve the repositories, I have tested the performance for 1000 users.
* For 1000 users 8m cpus are being used and for 2000 approximately 16m to 18m cpus are being used. So based on this calculation for 70.000 users we would need 560m cpu which is 0.56 core CPU
* In our case if 70.000 clients per hour using our gitserach application would require a kubernets cluster with a node of 1 cpu core and 4GB memory
* As I am using GCP cloud here each node as a limit of 100 pods.
* Ideally the sizing of kubernets components for “Gitserach” application using GitHub (REST) API:
  + 1000 clients 8m CPU, 70000 clients 560m (0.56 core) CPU
  + 8 GB memory
  + Kubernets cluster with 1 node of 1 CPU core and 8 GB RAM
  + If replica sets are increasing more than 100 pods we would require to scale the node with autoscaling
  + http\_req\_duration for each user is **992.47ms** ≈**1s.** 
    - **http\_req\_duration:** http\_req\_sending + http\_req\_waiting + http\_req\_receiving

**226µs + 981.47ms +. 3.62ms**

**= 986ms**

**Architecture Diagram**

**Diagram, timeline

Description automatically generated**