

OUTPUT SCREENSHOTS

PES2UGSSCS164

DEEKSHA SUKUMAR JAIN

WEEK1

SS

```
NAME READY STATUS RESTARTS AGE
ab-stress-test-rzwgm 0/1 Completed 0 6h25m
nginx-deployment-pes2ug22cs132-9d4cfb889-g76lm 1/1 Running 6 (3h17m ago) 35d
nginx-deployment-pes2ug22cs132-9d4cfb889-wjkbh 1/1 Running 6 (3h17m ago) 35d
redis-5f86f8f9c7-vj8mm 1/1 Running 1 (3h17m ago) 6h37m
url-shortener-5f4597c48-cv9fv 1/1 Running 1 (3h17m ago) 6h35m
url-shortener-5f4597c48-18knj 1/1 Running 1 (3h17m ago) 6h35m
url-shortener-5f4597c48-rsn5b 1/1 Running 1 (3h17m ago) 6h35m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get svc
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 39d
redis ClusterIP 10.109.147.56 <none> 6379/TCP 6h37m
redis-service ClusterIP 10.110.44.140 <none> 6379/TCP 6h35m
url-shortener-service LoadBalancer 10.103.210.254 127.0.0.1 5000:30814/TCP 6h35m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl autoscale deployment url-shortener --cpu-percent=50 --min=3 --max=6
Error from server (AlreadyExists): horizontalpodautoscalers.autoscaling "url-shortener" already exists

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get podskubectl logs redis-5f86f8f9c7-vj8mm
error: the server doesn't have a resource type "podskubectl"

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get pods
NAME READY STATUS RESTARTS AGE
ab-stress-test-rzwgm 0/1 Completed 0 6h28m
nginx-deployment-pes2ug22cs132-9d4cfb889-g76lm 1/1 Running 6 (3h20m ago) 35d
nginx-deployment-pes2ug22cs132-9d4cfb889-wjkbh 1/1 Running 6 (3h20m ago) 35d
redis-5f86f8f9c7-vj8mm 1/1 Running 1 (3h20m ago) 6h39m
url-shortener-5f4597c48-cv9fv 1/1 Running 1 (3h20m ago) 6h37m
url-shortener-5f4597c48-18knj 1/1 Running 1 (3h20m ago) 6h37m
url-shortener-5f4597c48-rsn5b 1/1 Running 1 (3h20m ago) 6h37m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl logs redis-5f86f8f9c7-vj8mm
1:C 22 Apr 2025 09:48:59.261 * oO00oO00oO00o Redis is starting oO00oO00oO00o
1:C 22 Apr 2025 09:48:59.261 * Redis version=7.4.2, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 22 Apr 2025 09:48:59.261 # Warning: no config file specified, using the default config. In order to specify a config file use redis-server /path/to/redis.conf
1:M 22 Apr 2025 09:48:59.262 * monotonic clock: POSIX clock_gettime
1:M 22 Apr 2025 09:48:59.265 * Running mode=standalone, port=6379.
1:M 22 Apr 2025 09:48:59.265 * Server initialized
1:M 22 Apr 2025 09:48:59.266 * Ready to accept connections tcp

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>curl -X POST http://localhost:5000/shorten -H "Content-Type: application/json" -d '{"url":"https://pes.edu/"}'
{"short_url":"http://127.0.0.1:5000/h34c8M"}
```

WEEK 2-3

SS

```
redis ClusterIP 10.109.147.56 <none> 6379/TCP 6h37m
redis-service ClusterIP 10.110.44.140 <none> 6379/TCP 6h35m
url-shortener-service LoadBalancer 10.103.210.254 127.0.0.1 5000:30814/TCP 6h35m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener> kubectl autoscale deployment url-shortener --cpu-percent=50 --min=3 --max=6
Error from server (AlreadyExists): horizontalpodautoscalers.autoscaling "url-shortener" already exists

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get podskubectl logs redis-5f86f8f9c7-vj8mm
error: the server doesn't have a resource type "podskubectl"

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get pods
NAME READY STATUS RESTARTS AGE
ab-stress-test-r2wqm 0/1 Completed 0 6h28m
nginx-deployment-pes2ug22cs132-9d4cfb889-g76lm 1/1 Running 6 (3h20m ago) 35d
nginx-deployment-pes2ug22cs132-9d4cfb889-wjkbh 1/1 Running 6 (3h20m ago) 35d
redis-5f86f8f9c7-vj8mm 1/1 Running 1 (3h20m ago) 6h39m
url-shortener-5f4597c48-cv9fv 1/1 Running 1 (3h20m ago) 6h37m
url-shortener-5f4597c48-18knj 1/1 Running 1 (3h20m ago) 6h37m
url-shortener-5f4597c48-rsn5b 1/1 Running 1 (3h20m ago) 6h37m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl logs redis-5f86f8f9c7-vj8mm
1:C 22 Apr 2025 09:48:59.261 * oO000oO000oO0o Redis is starting oO000oO000oO0o
1:C 22 Apr 2025 09:48:59.261 * Redis version=7.4.2, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 22 Apr 2025 09:48:59.261 # Warning: no config file specified, using the default config. In order to specify a config file use redis-server /path/to/redis.conf
1:M 22 Apr 2025 09:48:59.262 * monotonic clock: POSIX clock_gettime
1:M 22 Apr 2025 09:48:59.265 * Running mode=standalone, port=6379.
1:M 22 Apr 2025 09:48:59.265 * Server initialized
1:M 22 Apr 2025 09:48:59.266 * Ready to accept connections tcp

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>curl -X POST http://localhost:5000/shorten -H "Content-Type: application/json" -d '{"url":"https://pes.edu/"}'
{"short_url":"http://127.0.0.1:5000/h34c8M"}

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl exec -it redis-5f86f8f9c7-vj8mm -- redis-cli
127.0.0.1:6379> keys *
1) "h34c8M"
127.0.0.1:6379>

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl apply -f k8s/stress-test-job.yaml
job.batch/ab-stress-test unchanged

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get hpa
NAME REFERENCE TARGETS MINPODS MAXPODS REPLICAS AGE
url-shortener Deployment/url-shortener cpu: 1%/50% 3 6 3 6h40m
```

Activate Windows

Go to Settings to activate Windows.