## **NODES -**

```
PROBLEMS
          OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
D:\Infracloud\Project\boutique-assignment [master =]> kubectl cluster-info --context kind-qa-cluster
Kubernetes control plane is running at https://127.0.0.1:54926
KubeDNS is running at https://127.0.0.1:54926/api/v1/namespaces/kube-system/services/kube-dns:dns/proxy
To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.
D:\Infracloud\Project\boutique-assignment [master =]> kubectl get nodes
NAME
                           STATUS
                                    ROLES
                                                           AGE
                                                                   VERSION
qa-cluster-control-plane
                           Ready
                                    control-plane, master
                                                                   v1.20.7
                                                           3m49s
qa-cluster-worker
                           Ready
                                    <none>
                                                           3m23s
                                                                   v1.20.7
D:\Infracloud\Project\boutique-assignment [master =]>
```

## PODS -

D:\Infracloud\Project\boutique-assignmo									
D:\Infracloud\Project\boutique-assignment [master =]> kubectl get pods									
NAME	READY	STATUS	RESTARTS	AGE					
adservice-78d848d44d-9lkj6	0/1	ImagePullBackOff	0	10m					
cartservice-c8c9d58cf-5n5ng	0/1	Running	6	10m					
checkoutservice-79dc4c7fb6-t79s8	1/1	Running	0	10m					
currencyservice-d6c6fbcbd-fxhgm	1/1	Running	1	10m					
emailservice-549fc6dc86-55cpn	1/1	Running	0	10m					
frontend-6b4d599649-pkhkh	1/1	Running	1	10m					
paymentservice-7b64f64758-qltsk	1/1	Running	0	10m					
productcatalogservice-d6b8696f8-6v4ht	1/1	Running	0	10m					
redis-cart-85c9fb8bd4-sm99g	0/1	Pending	0	10m					
shippingservice-5d9f5fc746-9c2qb	1/1	Running	0	10m					
D:\Infracloud\Project\boutique-assignme	ent [mast	ter ≡]> [							

```
D:\Infracloud\Project\boutique-assignment [master =]> kubectl logs adservice-78d848d44d-9lkj6

Error from server (BadRequest): container "server" in pod "adservice-78d848d44d-9lkj6" is waiting to start:

l image

D:\Infracloud\Project\boutique-assignment [master =]> []
```

```
Events:
Type Reason Age From Message

Normal Scheduled 35m default-scheduler Normal Pulling 28m (x4 over 34m) kubelet Pulling image "gcr.io/google-samples/microservices-demo/adservice:v0.3.1" Failed to pull image "gcr.io/google-samples/microservices-demo/adservice:v0.3.1"; rpc error: cod pack image "gcr.io/google-samples/microservices-demo/adservice:v0.3.1: not found

Warning Failed 28m (x4 over 34m) kubelet From Failed to resolve reference "gcr.io/google-samples/microservices-demo/adservice:v0.3.1"; failed to resolve reference
```

### Resolved -

D:\Infracloud\Project\boutique-assignme	ent [mast	er ≡ +0 ~1	0 !] <b>&gt; ku</b> b	pectl get pods
NAME	READY	STATUS	RESTARTS	AGE
adservice-f96c966c9-bkn79	1/1	Running	2	5m20s
cartservice-c8c9d58cf-p6wts	0/1	Running	3	5m20s
checkoutservice-79dc4c7fb6-z4pb2	1/1	Running	0	5m19s
currencyservice-d6c6fbcbd-stzmt	1/1	Running	1	5m19s
emailservice-549fc6dc86-tqxzr	1/1	Running	0	5m18s
frontend-6b4d599649-brvkj	1/1	Running	0	5m14s
paymentservice-7b64f64758-m9vqn	1/1	Running	0	5m13s
productcatalogservice-d6b8696f8-hbfsp	1/1	Running	0	5m12s
redis-cart-85c9fb8bd4-kfk99	0/1	Pending	0	5m11s
shippingservice-5d9f5fc746-z5n96	1/1	Running	0 _	5m8s

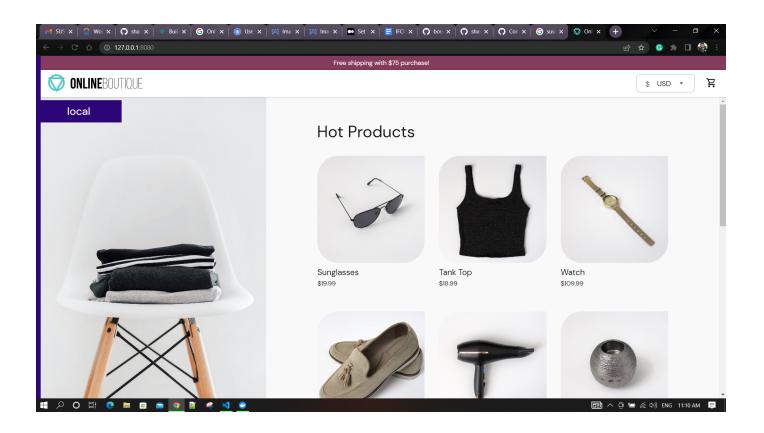
<pre>D:\Infracloud\Project\boutique-assignme</pre>	ent [mast	ter ≡ +0 ~2 -0 !] <b>&gt;</b>	kubectl get	pods
NAME	READY	STATUS	RESTARTS	AGE
adservice-f96c966c9-8jgt9	0/1	Running	3	7m6s
cartservice-5cfdb68865-g4x9v	0/1	CrashLoopBackOff	5	7m6s
checkoutservice-79dc4c7fb6-j977p	1/1	Running	0	7m4s
currencyservice-d6c6fbcbd-4cvsw	0/1	Running	2	7m4s
emailservice-549fc6dc86-9dmnr	1/1	Running	0	7m1s
frontend-6b4d599649-n9g2p	1/1	Running	0	7m
paymentservice-7b64f64758-79vjp	0/1	Running	1	7m
productcatalogservice-d6b8696f8-p6vrm	1/1	Running	0	7m
redis-cart-878fc4c69-w29jg	1/1	Running	0	6m56s
shippingservice-5d9f5fc746-77t6r	1/1	Running	0	6m53s
D:\Infracloud\Project\boutique-assignme	ent [mast	ter = +0 ~2 -0 !]>[	]	

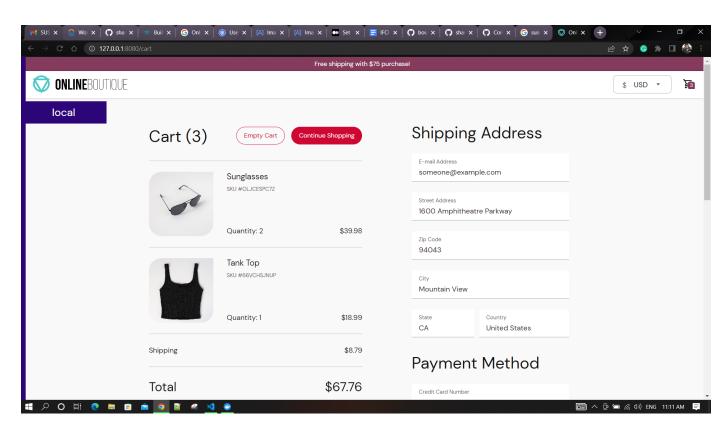
D:\Infracloud\Project\boutique-assignme	ent [mast	ter ≡]> kubectl get	pods	
NAME	READY	STATUS	RESTARTS	AGE
adservice-f96c966c9-bkn79	1/1	Running	4	20m
cartservice-c8c9d58cf-p6wts	0/1	CrashLoopBackOff	8	20m
checkoutservice-79dc4c7fb6-z4pb2	1/1	Running	0	20m
currencyservice-d6c6fbcbd-stzmt	1/1	Running	1	20m
emailservice-549fc6dc86-tqxzr	1/1	Running	0	20m
frontend-6b4d599649-brvkj	1/1	Running	0	20m
paymentservice-7b64f64758-m9vqn	1/1	Running	0	20m
productcatalogservice-d6b8696f8-hbfsp	1/1	Running	0	20m
redis-cart-85c9fb8bd4-kfk99	0/1	Pending	0	20m
shippingservice-5d9f5fc746-z5n96	1/1	Running	0	20m

### Logs -

Events:				
Type	Reason	Age	From	Message
Normal	Scheduled	22m	default-scheduler	Successfully assigned default/cartservice-c8c9d58cf-p6wts to qa-cluster-worker
Normal	Pulling	21m	kubelet	Pulling image "gcr.io/google-samples/microservices-demo/cartservice:v0.3.1"
Normal	Pulled	20m	kubelet	Successfully pulled image "gcr.io/google-samples/microservices-demo/cartservice:v0.3.1" in 1m36.9222304
s				
Warning	Unhealthy	19m	kubelet	Liveness probe failed: timeout: failed to connect service ":7070" within 1s
Normal	Killing	18m (x2 over 19m)	kubelet	Container server failed liveness probe, will be restarted
Warning		18m (x5 over 19m)	kubelet	Liveness probe failed:
Normal		18m (x3 over 20m)	kubelet	Created container server
Normal	Pulled	18m (x2 over 19m)	kubelet	Container image "gcr.io/google-samples/microservices-demo/cartservice:v0.3.1" already present on machin
e				
Normal	Started	18m (x3 over 20m)	kubelet	Started container server
		18m (x2 over 19m)	kubelet	Readiness probe errored: rpc error: code = Unknown desc = failed to exec in container: container is in
	EXITED stat			
Warning	Unhealthy	11m (x17 over 19m)	kubelet	Readiness probe failed:
		6m46s (x4 over 18m)	kubelet	Readiness probe failed: timeout: failed to connect service ":7070" within 1s
Warning	Back0ff	99s (x44 over 13m)	kubelet	Back-off restarting failed container

```
D:\Infracloud\Project\boutique-assignment [master = +0 ~3 -0 ~]> kubectl get nodes
NAME
                           STATUS
                                    ROLES
                                                            AGE
                                                                  VERSION
                                    control-plane, master
qa-cluster-control-plane
                                                            78m
                                                                  v1.20.7
                           Ready
qa-cluster-worker
                           Ready
                                    <none>
                                                            77m
                                                                  v1.20.7
D:\Infracloud\Project\boutique-assignment [master = +0 ~3 -0 ~]> kubectl get pods
NAME
                                         READY
                                                  STATUS
                                                            RESTARTS
                                                                       AGE
adservice-74d667bbc4-xpb5g
                                         1/1
                                                  Running
                                                                       66m
                                                            2
cartservice-5cc8bff87b-ls2v4
                                         1/1
                                                  Running
                                                            1
                                                                       48m
checkoutservice-79dc4c7fb6-v44zm
                                         1/1
                                                  Running
                                                            0
                                                                       66m
currencyservice-d6c6fbcbd-qwl4w
                                          1/1
                                                  Running
                                                            0
                                                                       67m
emailservice-549fc6dc86-csxsw
                                         1/1
                                                  Running
                                                            4
                                                                       66m
frontend-6b4d599649-zpnp9
                                         1/1
                                                  Running
                                                            0
                                                                       66m
paymentservice-7b64f64758-q5c26
                                          1/1
                                                  Running
                                                            2
                                                                       67m
productcatalogservice-d6b8696f8-nlw5r
                                          1/1
                                                  Running
                                                            0
                                                                       67m
recommendationservice-764bdd9d7c-x6wxs
                                          1/1
                                                  Running
                                                            2
                                                                       9m42s
redis-cart-878fc4c69-tkhsl
                                          1/1
                                                  Running
                                                            0
                                                                       66m
shippingservice-5d9f5fc746-4847d
                                          1/1
                                                                       66m
                                                  Running
D:\Infracloud\Project\boutique-assignment [master = +0 ~3 -0 ~]>
```



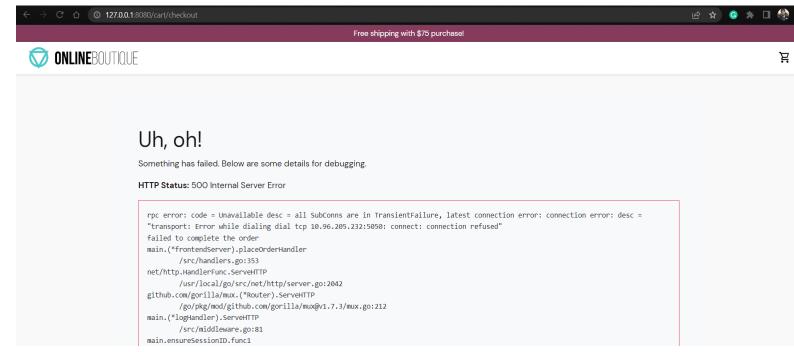


#### Checkout issue -

Events:

Type Reason Age From Message

Warning FailedToUpdateEndpointSlices 52m endpoint-slice-controller Error updating Endpoint Slices for Service default/checkoutservice: failed to update checkoutservice-wp6k6 EndpointSlice for Service default/checkoutservice: etcdserver: request timed out

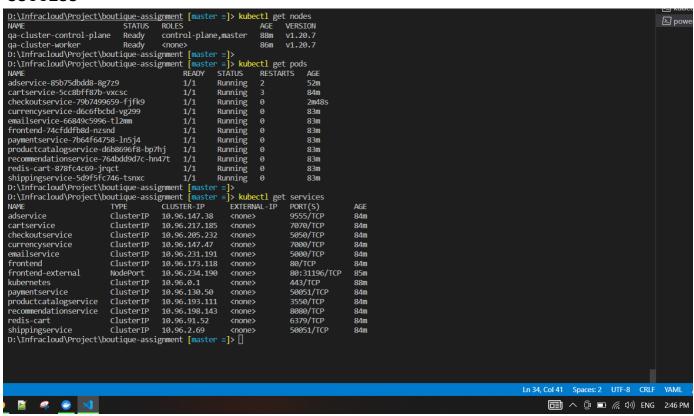


## Cause -

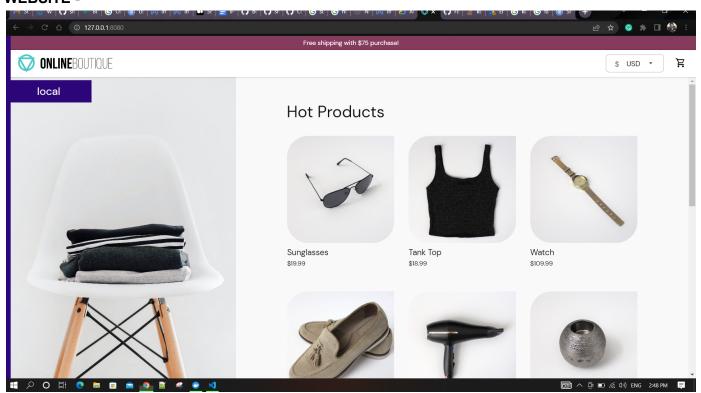
```
    README.md ●

                                            ! adservice.yaml M
                                                                                        ! checkoutservice.yaml M X
deploy > ! checkoutservice.yaml
                      memory: 254Mi
       apiVersion: v1
       kind: Service
      ∨ metadata:
         name: checkoutservice
         type: ClusterIP
         selector:
  64
         ports:
          - name: grpc
           port: 5050
           targetPort: 5050
```

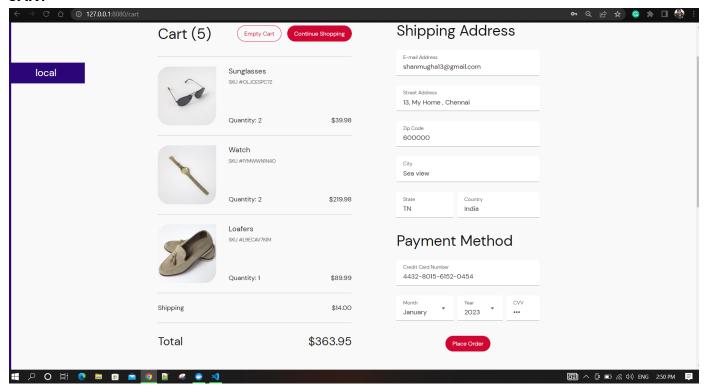
#### **SUCCESS -**



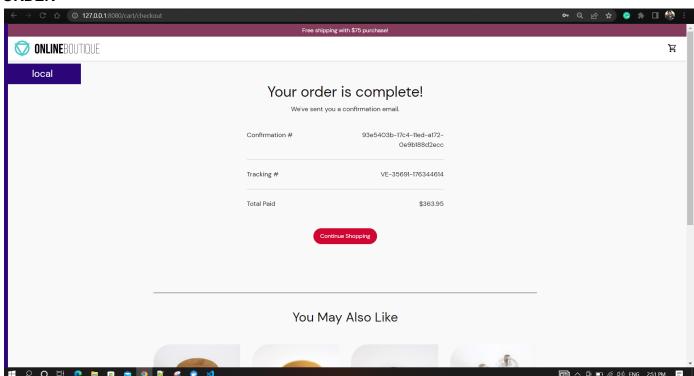
## **WEBSITE -**



## CART -



## **ORDER-**



# **LOAD GENERATOR - fails**

/										
ET /cart		63(100.00%)	4027	4005	4099	4005	!	0.00	0.00	
OST /cart		63(100.00%)	4036	4004	4577	4004	!	0.20	0.20	
OST /cart/checkout		17(100.00%)	4019	4005	4060	4005	!	0.10	0.10	
GET /product/0PUK6V6EV0		26(100.00%)	4020	4005	4053	4005	!	0.10	0.10	
GET /product/1YMWN1N40		32(100.00%)	4044	4005	4613	4005	!	0.00	0.00	
GET /product/2ZYFJ3GM2N		31(100.00%)	4023	4005	4064	4005	!	0.10	0.10	
GET /product/66VCHSJNUP		42(100.00%)	4048	4005	4584	4005	!	0.10	0.10	
GET /product/6E92ZMYYFZ		19(100.00%)	4017	4004	4049	4004	-	0.00	0.00	
GET /product/9SIQT8T0J0		28(100.00%)	4022	4005	4096	4005	!	0.00	0.00	
GET /product/L9ECAV7KIM		26(100.00%)	4017	4005	4061	4005	!	0.10	0.10	
GET /product/LS4PSXUNUM GET /product/OLJCESPC7Z		33(100.00%) 29(100.00%)	4027	4005 4005	4122 4044	4005		0.00	0.00	
BET /product/offcespc/2 POST /setCurrency		45(100.00%)	4020 4029	4005 4005	4044 4494	4005 4005	Τ	0.20	0.20 0.00	
Aggregated		483(100.00%) 483(100.00%)	4029	4004	4613	4004	. <u>.</u> 	1.10	1.10	
Name	# reqs	# fails	Avg	Min	Max	Median		req/s	failures/s	
 GET /	 29	29(100.00%)	4034	4005	4198	4005	 I	0.20	0.20	
GET /cart		63(100.00%)	4027	4005	4099	4005	i i	0.00	0.00	
POST /cart		63(100.00%)	4036	4004	4577	4004	i	0.10	0.10	
POST /cart/checkout		17(100.00%)	4019	4005	4060	4005	i	0.10	0.10	
GET /product/0PUK6V6EV0		26(100.00%)	4020	4005	4053	4005	i	0.10	0.10	
GET /product/1YMWWN1N4O		32(100.00%)	4044	4005	4613	4005	i	0.00	0.00	
GET /product/2ZYFJ3GM2N		31(100.00%)	4023	4005	4064	4005	i	0.10	0.10	
GET /product/66VCHSJNUP		42(100.00%)	4048	4005	4584	4005	i	0.10	0.10	
GET /product/6E92ZMYYFZ		19(100.00%)	4017	4004	4049	4004	i	0.00	0.00	
GET /product/9SIQT8TOJO		28(100.00%)	4022	4005	4096	4005	i	0.10	0.10	
iET /product/L9ECAV7KIM		27(100.00%)	4018	4005	4061	4005	i	0.10	0.10	
ET /product/LS4PSXUNUM		33(100.00%)	4027	4005	4122	4005	i	0.00	0.00	
ET /product/OLJCESPC7Z		29(100.00%)	4020	4005	4044	4005	i	0.20	0.20	
OST /setCurrency	45	45(100.00%)	4029	4005	4494	4005		0.00	0.00	
		484(100.00%)	4029	4004	4613	4004	 	1.10	1.10	

# **LOAD GENERATOR - SUCCESS**

.un Te	erminal Help	loadgenerator.yaml - boutique-	assignment -	Visual Studio Cod	de					
			! loadge	enerator.yaml >	< ! fr	ontend.yaml		frontend-e	xternal.yaml	
	test > ! loadgenerator.yaml 43     - name: main									
	PROBLEMS OUTPUT DEBUG CONSOLE	TERMINAL								
	GET /product/0PUK6V6EV0		10	0(0.00%)	1 :	20 14	34	17	1 0.00	0.00
	GET /product/1YMWWN1N40		8	0(0.00%)		92 13	351	17	0.20	0.00
	GET /product/2ZYFJ3GM2N		11	0(0.00%)	j 9	91 13	371	48	0.00	0.00
	GET /product/66VCHSJNUP		4	0(0.00%)	:	24 15	35	20	0.00	0.00
	GET /product/6E92ZMYYFZ			0(0.00%)		52 14	141	22	0.00	0.00
	GET /product/9SIQT8T0J0		8	0(0.00%)		54 14	3219	23	0.10	0.00
	GET /product/L9ECAV7KIM		11	0(0.00%)		19 13	276	22	0.10	0.00
	GET /product/LS4PSXUNUM		11	0(0.00%)		33 14	111	27	0.20	0.00
	GET /product/OLJCESPC7Z		11	0(0.00%)		23 13	61	16	0.10	0.00
	POST /setCurrency		17	0(0.00%) 	40	95 42	2766	130	0.10	0.00
	Aggregated		144	0(0.00%)	18	34 13	4890	37	1.10	0.00
	Name		# reqs	# fails	A	/g Min	Max	Median	req/s	failures/s
	GET /			0(0.00%)		58 36	1949	79	0.00	0.00
	GET /cart		18	0(0.00%)		52 13	209	28	0.00	0.00
	POST /cart		18	0(0.00%)		19	1029	85	0.10	0.00
	POST /cart/checkout			0(0.00%)	104		4890	94	0.10	0.00
	GET /product/0PUK6V6EV0		11	0(0.00%)		21 14	34	18	0.00	0.00
	GET /product/1YMWWN1N4O		8	0(0.00%)		92 13	351	17	0.20	0.00
	GET /product/2ZYFJ3GM2N		11	0(0.00%)		91 13	371	48	0.00	0.00
	GET /product/66VCHSJNUP		4	0(0.00%)		24 15	35	20	0.00	0.00
	GET /product/6E92ZMYYFZ			0(0.00%)		50 14	141	22	0.00	0.00
	GET /product/9SIQT8T0J0		8	0(0.00%)		54 14	3219	23	0.10	0.00
	GET /product/L9ECAV7KIM		11	0(0.00%)		19 13	276	22	0.00	0.00
	GET /product/LS4PSXUNUM		11	0(0.00%)		33 14	111	27	0.20	0.00
	GET /product/OLJCESPC7Z		11	0(0.00%)		23 13	61	16	0.10	0.00
	POST /setCurrency		18 	0(0.00%) 		95 42 	2766	130	0.10 	0.00 
	Aggregated		147	0(0.00%)	18	32 13	4890	40	0.90	0.00
	Name		# reqs	# fails	A	/g Min	Max	Median	req/s	failures/s
	GET /		7	0(0.00%)		58 36	1949	79	0.00	0.00
	GET /cart		18	0(0.00%)		52 13	209	28	0.00	0.00
	POST /cart		18	0(0.00%)	2		1029	85	0.10	0.00
	POST /cart/checkout			0(0.00%)	104		4890	94	0.10	0.00
	GET /product/0PUK6V6EV0		11	0(0.00%)		21 14	34	18	0.00	0.00
	GET /product/1YMWWN1N40		8	0(0.00%)		92 13	351	17	0.20	0.00
	GET /product/2ZYFJ3GM2N		11	0(0.00%)		91 13	371	48	0.00	0.00
	GET /product/66VCHSJNUP		4	0(0.00%)	1 2	24 15	35	20	0.00	0.00