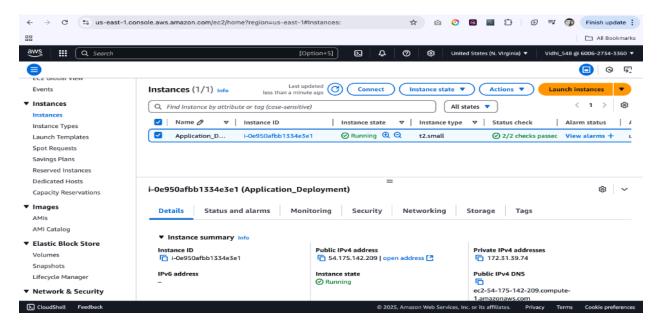
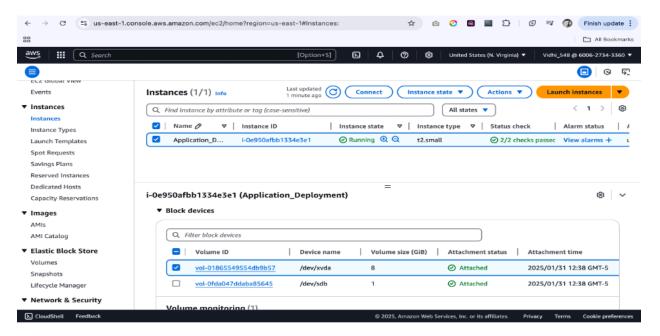
Project 1

1) Screenshot of AWS Console showing the instance running and the volumes you allocated on EBS:

Instance is running and up:



Volumes attached:



2) Linux command "df" in instance:

```
[ec2-user@ip-172-31-39-74 ~]$
[ec2-user@ip-172-31-39-74 ~]$ df
                        Used Available Use% Mounted on
Filesystem 1K-blocks
                        0 993748 0% /dev
devtmpfs
               993748
              1003088
                          0
                              1003088 0% /dev/shm
tmpfs
                       572
                              1002516 1% /run
tmpfs
              1003088
                         0 1003088 0% /sys/fs/cgroup
              1003088
tmpfs
            8376300 3299184
/dev/xvda1
                              5077116 40% /
            998060 47596
/dev/xvdb
                              898036 6% /data
               200620
                         0
                               200620 0% /run/user/1000
tmnfs
[ec2-user@ip-172-31-39-74 ~]$
[ec2-user@ip-172-31-39-74 ~]$
```

"fdisk -l" command:

```
[[ec2-user@ip-172-31-39-74 ~]$ sudo fdisk -1
Disk /dev/xvda: 8 GiB, 8589934592 bytes, 16777216 sectors Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: C19EA533-E536-46F1-B7F1-2B3696B3C827
Device
                           End
                                Sectors Size Type
              Start
               4096 16777182 16773087
/dev/xvda1
                                            8G Linux filesystem
/dev/xvda128
               2048
                          4095
                                    2048
                                            1M BIOS boot
Partition table entries are not in disk order.
Disk /dev/xvdb: 1 GiB, 1073741824 bytes, 2097152 sectors Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
[[ec2-user@ip-172-31-39-74 ~]$
[ec2-user@ip-172-31-39-74 ~]$
```

3) Running docker inspect on the database and application containers.

Output for container "cs548db":

```
[ec2-user@ip-172-31-39-74 ~]$ docker inspect cs548db
               "Id": "afc39c0fe8ec27332716494aa09fd669256776003f8b9e101b7f27766d9d99ab".
               "Created": "2025-01-31T17:50:16.142385747Z",
               "Path": "docker-entrypoint.sh",
               "Args": [
               "postgres"
               "State": {
               "Status": "running",
"Running": true,
               "Paused": false
               "Restarting": false
               "OOMKilled": false,
               "Dead": false,
               "Pid" - 3621
               "ExitCode": 0,
"Error": "",
               "StartedAt": "2025-01-31T19:18:28.035479607Z", 
"FinishedAt": "2025-01-31T19:16:49.960664411Z"
               "Image": "sha256:9a0ce6be5dd4a74a9bc1e4709f8cc8496ce2ee09adcb64c2689a03e78c2e5214"
               "ResolvConffath": "/var/lib/docker/containers/afc39c0fe8ec27332716494aa09fd669256776003f8b9e101b7f27766d9d99ab/resolv.conf", "HostnamePath": "/var/lib/docker/containers/afc39c0fe8ec27332716494aa09fd669256776003f8b9e101b7f27766d9d99ab/hostname",
               "HostsPath": "/var/lib/docker/containers/afc39c0fe8ec27332716494aa09fd669256776003f8b9e101b7f27766d9d99ab/hosts",
               "LogPath":
"/war/lib/docker/containers/afc39c0fe8ec27332716494aa09fd669256776003f8b9e101b7f27766d9d99ab/afc39c0fe8ec27332716494aa09fd669256776003f8b9e101b7f27766d9
d99ab-json.log",
"Name": "/cs548db",
               "RestartCount": 0,
               "Driver": "overlay2",
               "Platform": "linux",
               "MountLabel": ""
               "ProcessLabel": ""
```

```
"AppArmorProfile":
  "ExecIDs": null,
 "HostConfig": {
 "Binds": [
"/data:/var/lib/postgresql/data"
 ],
"ContainerIDFile": "",
 "LogConfig": {
"Type": "json-file",
"Config": {}
 },
"NetworkMode": "cs548-network",
 "PortBindings": {
 "5432/tcp": [
{
                              "HostIp": "",
"HostPort": "5432"
},
"RestartPolicy": {
 "Name": "no",
"MaximumRetryCount": 0
 },
"AutoRemove": false,
 "VolumeDriver": "",
"VolumesFrom": null,
"ConsoleSize": [
 31.
 115
"CapAdd": null,
"CapDrop": null,
"CgroupnsMode": "host",
"CgroupnsMode": "host"
"Dns": [],
"DnsOptions": [],
"DnsSearch": [],
"ExtraHosts": null,
"GroupAdd": null,
"IpcMode": "private",
"Cgroup": "",
"Links": null,
"OomScoreAdj": 0,
"PidMode": "",
"Privileged": false,
"PublishAllPorts": false,
 "Privileged": false,
"PublishAllPorts": false,
"ReadonlyRootfs": false,
"SecurityOpt": null,
"UTSMode": "",
"UsernsMode": "",
 "ShmSize": 67108864,
"Runtime": "runc",
"Isolation": "",
"CpuShares": 0,
 "Memory": 0,
"NanoCpus": 0,
 "CgroupParent": "",
 "BlkioWeight": 0,
 "BlkioWeightDevice": [],
"BlkioDeviceReadBps": [],
"BlkioDeviceReadBps": [],
"BlkioDeviceWriteBps": [],
"BlkioDeviceReadIOps": [],
"BlkioDeviceReadIOps": [],
"BlkioDeviceWriteIOps": [],
"CpuPeriod": 0,
"CpuQuota": 0,
"CpuRealtimePeriod": 0,
"CpuRealtimeRuntime": 0,
"CpusetCpus": "",
"CpusetCpus": "",
"Devices": [],
"DeviceScroupNulcs": null
 "DeviceCgroupRules": null,
"DeviceRequests": null,
"MemoryReservation": 0,
"MemoryReservation": 0,
"MemorySwap": 0,
"MemorySwappiness": null,
"OomKilDisable": false,
"PidsLimit": null,
"Ulimits": [
                              "Name": "nofile", "Hard": 65536,
                               "Soft": 32768
  "CpuCount": 0,
 "CpuPercent": 0,
"IOMaximumIOps": 0,
 "IOMaximumBandwidth": 0,
 "MaskedPaths": [
"/proc/asound",
 "/proc/acpi",
"/proc/kcore",
 "/proc/keys",
"/proc/latency_stats",
 "/proc/timer_list",
"/proc/timer_stats",
"/proc/sched_debug",
"/proc/scsi",
 "/sys/firmware"
```

```
"/sys/devices/virtual/powercap"
                      "ReadonlyPaths": [
                       "/proc/bus",
                      "/proc/fs",
                       "/proc/irq",
                       "/proc/sys",
                      "/proc/sysrq-trigger"
                      "GraphDriver": {
                      "Data": {
                      "LowerDir"
"/var/lib/docker/overlay2/ea5da4af97bd8638daa1ef670b6c1a6a000f2aab77dffcd09f168c9a17174408-init/diff:/var/lib/docker/overlay2/2b7d23dddec639121e941a5478
8223cfa8eed28fef788323a1285f5fd5120eb9/diff:/var/lib/docker/overlay2/6d6e692376ccd7552ef426ae095a755ab4b898ffc8aeldcb61e91969736a3744/diff:/var/lib/dock
er/overlav2/612652a712c6b08b28f1762b1374f5e26e0cd22d2fa707b2b6afa30c84e89f40/diff:/var/lib/docker/overlav2/18f0500fe9c5e41e9b346623f313d5ebb8442b37fe957
75d6ff783a0c104eac3/diff:/var/lib/docker/overlay2/4ad9bbbfa05a965b0cf45303229d81b02a48cb81b3ab2d34cf10c593e289ceaf/diff:/var/lib/docker/overlay2/5e79db5
0cb328ab61a8c5143d61ac8b27ab4fa68e9106795c13199df7998eee0/diff:/var/lib/docker/overlav2/70d95eac9f3dbed3656c0375ec3bc030acfc6f3b1504ace5075b507a99f29bff
diff:/var/lib/docker/overlay2/0474dea494e995ef53b7b16ddcad658521298957ce16672de0e65368cec7cf30/diff:/var/lib/docker/overlay2/7bd6887286b842c5c45b832118
fa4b2010a31d2062840fc35dad34a3c79a8d05/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/6b2df9c6048a0f26b59afd8c7a6031c651cd7a5ec190ceac9bb2eead47bcfc56/diff:/var/lib/docker/overlay2/diff.
er/overlay2/cfbffab2727875a95a1c74098354cff727919f64977a83da10492b796ca97dfd/diff:/var/lib/docker/overlay2/edc2alecd20e3c1f5fab125226d55e00e943d803d823a
13a855dda75d8a1aedb/diff:/var/lib/docker/overlay2/e2c496838959c6936cb6da145259e043192d9e8aa5e633ce0cd6ae35e44ab1c8/diff:/var/lib/docker/overlay2/530211c
39da7cd35e0c9c895d5db97dee767cec9aa7cf770e63018ec08db586f/diff",
"MergedDir": "/var/lib/docker/overlay2/ea5da4af97bd8638daa1ef670b6c1a6a000f2aab77dffcd09f168c9a17174408/merged",
"UpperDir": "/var/lib/docker/overlay2/ea5da4af97bd8638daa1ef670b6c1a6a000f2aab77dffcd09f168c9a17174408/merged",
"WorkDir": "/var/lib/docker/overlay2/ea5da4af97bd8638daa1ef670b6c1a6a000f2aab77dffcd09f168c9a17174408/mork"
                       "Mounts": [
                       .
"Type": "bind",
                      "Source": "/data",
                      "Destination": "/var/lib/postgresql/data",
                      "Mode": "",
                      "Propagation": "rprivate"
                      "Config": {
"Hostname": "afc39c0fe8ec",
                      "Domainname": "",
                      "AttachStdin": false.
                      "AttachStdout": false,
                      "AttachStderr": false,
                       'ExposedPorts": {
                      "5432/tcp": {}
                     },
"Tty": false,
                       "OpenStdin": false,
                      "StdinOnce": false,
                      "POSTGRES PASSWORD=ASSIGNMENT1",
                      "PGDATA=/var/lib/postgresql/data/pgdata",
                      "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/lib/postgresgl/17/bin",
                      "GOSU_VERSION=1.17",
                      "LANG=en US.utf8",
                      "PG_MAJOR=17",
"PG_VERSION=17.2-1.pgdg120+1"
                      "Cmd": [
                      "postgres"
                      "Image": "postgres",
"Volumes": {
                      "/var/lib/postgresql/data": {}
                      "WorkingDir": "",
                      "Entrypoint": [
                      "docker-entrypoint.sh"
                      "OnBuild": null,
                      "Labels": {},
"StopSignal": "SIGINT"
                      "NetworkSettings": {
                      "Bridge": "",
"SandboxID": "83b3c39ed876127333fcee9578fec77795c0273246f4120aa33f90138616ea47",
                      "SandboxKey": "/var/run/docker/netns/83b3c39ed876",
                      "Ports": {
                      "5432/tcp": [
                                           "HostIp": "0.0.0.0",
"HostPort": "5432"
                                           "HostIp": "::",
"HostPort": "5432"
                       ,,
"HairpinMode": false,
                      "LinkLocalIPv6Address": "",
                      "LinkLocalIPv6PrefixLen": 0,
                      "SecondaryIPAddresses": null,
                      "SecondaryIPv6Addresses": null,
                      "EndpointID": "",
                      "Gateway": "",
```

```
"GlobalIPv6Address": "'
                 "GlobalIPv6PrefixLen": 0,
                "IPAddress": ""
                 "IPPrefixLen": 0,
                "IPv6Gateway": "",
                "MacAddress": "",
                 "Networks": {
                "cs548-network": {
                                 "IPAMConfig": null,
                                 "Links": null,
"Aliases": [
                                 "afc39c0fe8ec"
                                 "MacAddress": "02:42:ac:12:00:03",
"NetworkID": "ce37ace22dc56f5973ald5fa910288a9496785caf984703a367bb34f39727d63",
"EndpointID": "c321fd78aba7856bd429a3a53da57712155589324e4661d6d5f040bd660d4770",
                                 "Gateway": "172.18.0.1",
"IPAddress": "172.18.0.3",
                                 "IPPrefixLen": 16,
"IPv6Gateway": "",
                                 "GlobalIPv6Address": "'
                                 "GlobalIPv6PrefixLen": 0,
                                 "DriverOpts": null,
                                 "DNSNames": [
                                 "cs548db"
                                 "afc39c0fe8ec'
[ec2-user@ip-172-31-39-74 ~]$
[ec2-user@ip-172-31-39-74 ~]$
```

Output for container "chat":

```
[ec2-user@ip-172-31-39-74 ~]$ docker inspect chat
                "Id": "91fc803039ae4683b6b37e557236418639501693ad115b1309aae3e0243e9550",
               "Created": "2025-01-31T18:01:50.133342172Z",
"Path": "/bin/sh",
                "entrypoint.sh",
               "--contextroot",
               "chat".
               "/opt/payara/deployments/chat-webapp.war"
               ],
"State": {
               "Status": "running",
"Running": true,
"Paused": false,
               "Restarting": false,
"OOMKilled": false,
"Dead": false,
               "Pid": 3612,
"ExitCode": 0,
               "Error": "",
"StartedAt": "2025-01-31T19:18:27.970570948Z",
"FinishedAt": "2025-01-31T19:16:50.556093933Z"
               },
"Image": "sha256:64e2ff76315a04f45c9c35c62f024e2dbdd187c186d008506b11267993f8670f",
               "ResolvConffath": "/var/lib/docker/containers/91fc803039ae4683b6b37e557236418639501693ad115b1309aea3e0243e9550/resolv.conf", "HostnamePath": "/var/lib/docker/containers/91fc803039ae4683b6b37e557236418639501693ad115b1309aea3e0243e9550/hostname",
               "HostsPath": "/var/lib/docker/containers/91fc803039ae4683b6b37e557236418639501693ad115b1309aae3e0243e9550/hosts",
               "LogPath":
"/war/lib/docker/containers/91fc803039ae4683b6b37e557236418639501693ad115b1309aae3e0243e9550/91fc803039ae4683b6b37e557236418639501693ad115b1309aae3e0243
e9550-json.log",
"Name": "/chat",
               "RestartCount": 0,
               "Driver": "overlay2",
                "Platform": "linux",
               "MountLabel": "",
"ProcessLabel": "",
               "AppArmorProfile": "",
               "HostConfig": {
               "ContainerIDFile": "",
               "Type": "json-file",
"Config": {}
               "PortBindings": {
               "8080/tcp": [
                               "HostIp": "",
"HostPort": "8080"
               ],
"8181/tcp": [
                               "HostIp": "",
"HostPort": "8181"
```

```
},
"RestartPolicy": {
    """

                                 "Name": "no",
"MaximumRetryCount": 0
                                "AutoRemove": false,
"VolumeDriver": "",
"VolumesFrom": null,
"ConsoleSize": [
                                31.
                                 115
                               ],
"CapAdd": null,
                                 "CapDrop": null,
"CgroupnsMode": "host",
                                 "Dns": [],
                                 "DnsOptions": [],
                                "DnsOptions": [],
"DnsSearch": [],
"ExtraHosts": null,
"GroupAdd": null,
"IpcMode": "private",
"Cgroup": "",
"Links": null,
"OomScoreAdj": 0,
                                 "PidMode": "",
"Privileged": false,
                                 "PublishAllPorts": false,
"ReadonlyRootfs": false,
                                "ReadonlyRootfs": fal
"SecurityOpt": null,
"UTSMode": "",
"UsernsMode": "",
"ShmSize": 67108864,
"Runtime": "runc",
"Isolation": "",
"CpuShares": 0,
                                 "Memory": 0,
"NanoCpus": 0,
                                 "CgroupParent": "",
"BlkioWeight": 0,
                                "BlkioWeightDevice": [],
"BlkioDeviceReadBps": [],
"BlkioDeviceWriteBps": [],
"BlkioDeviceWriteBps": [],
                                 "BlkioDeviceWriteIOps": [],
                                 "CpuPeriod": 0,
"CpuQuota": 0,
                                  "CpuRealtimePeriod": 0,
                                "CpuRealtimePeriod": 0,
"CpuRealtimeRuntime": 0,
"CpusetCpus": "",
"CpusetMems": "",
"Devices": [],
                                 "DeviceCgroupRules": null,
"DeviceRequests": null,
                                 "MemoryReservation": 0.
                                  "MemorySwap": 0,
                                 "MemorySwappiness": null,
                                  "OomKillDisable": false,
                                 "PidsLimit": null,
                                 "Ulimits": [
                                                                "Name": "nofile",
"Hard": 65536,
"Soft": 32768
                                  "CpuCount": 0,
                                 "CpuPercent": 0,
"IOMaximumIOps": 0,
                                 "IOMaximumBandwidth": 0,
                                 "MaskedPaths": [
"/proc/asound",
                                 "/proc/acpi",
"/proc/kcore",
                                 "/proc/keys",
                                 "/proc/latency_stats",
"/proc/timer_list",
                                  "/proc/timer stats"
                                 "/proc/sched_debug",
"/proc/scsi",
                                 "/sys/firmware",
                                  "/sys/devices/virtual/powercap"
                                  "ReadonlyPaths": [
                                 "/proc/bus",
                                  "/proc/fs",
                                  "/proc/irg".
                                  "/proc/sys",
                                 "/proc/sysrq-trigger"
                                  "GraphDriver": {
                                 "Data": {
                                 "LowerDir":
  "/var/lib/docker/overlay2/407a627425b8ade5418f351475f7e85190129d0195a5e6c4d86688d139c08936-init/diff:/var/lib/docker/overlay2/1fjsdpmn1hmlk51v13iur3371/
\label{limited} \begin{tabular}{ll} $diff:/var/lib/docker/overlay2/dd5dcf1lbbff13fec373b02ac0e915b3b287d271f2e93c0af79a87f349e9f9d0/diff:/var/lib/docker/overlay2/475a2f79ff4fe7cd2a84f19ea88 \\ 49b00648a56e1435007e7a6d99d5e2bd6cbc6/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff:/var/lib/docker/overlay2/f11149ea9df14f0fc573bed42133c7a37cd3e5da2ad7f0b90ab3le16630e7487/diff.
```

r/overlay2/460d645bfbb9e07374071e83d7212e0b489a2222d009abf97a75dc85146a5578/diff:/var/lib/docker/overlay2/a4f31cb9e3f3d25e865614c9fbf202b01be9700d44ffe6

```
09d56542395ed8073f/diff:/var/lib/docker/overlay2/617cbcccb803aae860468e716a22bacfe43b06bccaa0b3ed2c15c3dea3830e1a/diff",
                "MergedDir": "/var/lib/docker/overlay2/407a627425b8ade5418f351475f7e85190129d0195a5e6c4d86688d139c08936/dmerged",
"UpperDir": "/var/lib/docker/overlay2/407a627425b8ade5418f351475f7e85190129d0195a5e6c4d86688d139c08936/diff",
                 "WorkDir": "/var/lib/docker/overlay2/407a627425b8ade5418f351475f7e85190129d0195a5e6c4d86688d139c08936/work"
                },
"Name": "overlay2"
                "Mounts": [],
"Config": {
"Hostname": "91fc803039ae",
"Domainname": "",
                "User": "payara",
"AttachStdin": false,
"AttachStdout": false,
"AttachStderr": false,
                "ExposedPorts": {
                "6900/tcp": {},
"8080/tcp": {},
                "8181/tcp": {}
                },
"Tty": false,
"OpenStdin": false,
                "StdinOnce": false,
                 "Env": [
                "DATABASE=cs548",
"DATABASE_HOST=cs548db",
                "DATABASE USERNAME=cs548user",
"DATABASE PASSWORD=cs548",
"PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin",
                 "LANG=en_US.UTF-8",
                "LANGUAGE=en US:en".
                "LC_ALL=en_US.UTF-8",
                "TZ=Etc/UTC",
                 "JAVA_HOME=/usr/lib/jvm/zulu21",
                "PAYARA_HOME=/opt/payara",
"HOME_DIR=/opt/payara",
"PAYARA_DIR=/opt/payara",
                "SCRIPT_DIR=/opt/payara",
"DEPLOY_DIR=/opt/payara/deployments",
                "JVM_ARGS=-Djdk.util.zip.disableZip64ExtraFieldValidation=true",
"MEM_MAX_RAM_PERCENTAGE=70.0",
                "MEM_XSS=512k"
                 "Cmd": [
                "--contextroot",
                "chat",
                 "--deploy",
                "/opt/payara/deployments/chat-webapp.war"
                 "Image": "cs548/chat",
                "Volumes": null,
"WorkingDir": "/opt/payara",
"Entrypoint": [
                "/bin/sh",
"entrypoint.sh"
                ],
"OnBuild": null,
"Labels": {}
                "NetworkSettings": {
                "Bridge": "",
"SandboxID": "8221d3d4fe833c67ccad567e92b77f5400a9bbc1ea32b790df5ce36e29a7fda4",
                 "SandboxKey": "/var/run/docker/netns/8221d3d4fe83",
                "Ports": {
"6900/tcp": null,
                 "8080/tcp": [
                                 "HostIp": "0.0.0.0",
                                 "HostPort": "8080"
                                 },
                                  "HostIp": "::",
                                 "HostPort": "8080"
                ],
"8181/tcp": [
                                 "HostIp": "0.0.0.0",
                                 "HostPort": "8181"
                                 "HostIp": "::",
"HostPort": "8181"
                },
"HairpinMode": false,
                "LinkLocalIPv6Address": ""
                 "LinkLocalIPv6PrefixLen": 0,
                "SecondaryIPAddresses": null,
                "SecondaryIPv6Addresses": null,
                "EndpointID": "",
"Gateway": "",
"GlobalIPv6Address": "",
                 "GlobalIPv6PrefixLen": 0,
                 "IPAddress": "",
                "IPPrefixLen": 0,
"IPv6Gateway": "",
                "MacAddress": ""
```

4) Video demonstration of local browser window showing the "chatwebapp" application deploying and running in your instance.

Google Drive Link: UI

5) Video showing the log for the application container, from successful deployment through logging of background operations while interacting with the web application.

Google Drive Link: Full Video

Full Demo of App Deployment where I restarted EC2 Instance which shows automatic restart of all services - Full Video

One Drive Link: Full Video