02/17/2022

Agenda:

- Scrum methodology for a distributed team
  - <mark>Merge a team in Coursys</mark>
  - <mark>Create github repo</mark>
  - Find a tool to build backlog and track ideas and works
  - Use github project Kanban to sync status of progress
  - Create four branches for each member
  - Meeting setup (Weekly meeting, MoM in Onenote or Google doc)
- Architecture
  - K8S cluster, AWS eks
  - Backend DB: DynamoDB
  - Gatling load test, Grafana and Prometheus monitor metrics
  - Three public micro-services (Music, User, Plus One)
  - Running markdown and test cases
- Interim Milestone
  - Report
- Report
  - How we apply scrum methodology
  - How we use Git
  - Process of developing cloud environment
  - Process of developing micro services
  - How we do load test and result
  - Exploring the failure modes of a system
  - Exploring various approaches to remediate such failures
- Video (20-30 mins) and Repo
  - A tour of the team's Github repo
  - A walk thru of a couple of issues/branches/PR to illustrate the collaboration between team members.
  - A deployment (e.g., a make -f k8s.mak provision or equivalent) of your system into an empty cluster.
  - A run of the load simulation on your system with no disturbance. As this run is long, you do not need to have it complete. About 5 minutes of run-time will suffice during which a narrator can point out any observations. If you have summary findings (e.g., Grafana summary reports) to present, collect those from a separate run.
  - A second run of the load simulation on your system during which there is some disturbance to the system: a change in load, a network fault (delays), a machine failure, introduction of a circuit breaker, etc. Include your follow-up actions to either re

Next:

- Check with George on following questions:
  - Ask if we can reuse assignment code
  - Exploring the failure modes of a system
  - Exploring various approaches to remediate such failures
  - Running markdown and test cases
- Decompose useable tasks to assignee

02/20/2022

2022年2月17日   21:27

Agenda:

- Check with George on following questions:
  - Ask if we can reuse assignment code
    Yes
  - Exploring the failure modes of a system
    Will discuss in later courses
  - Exploring various approaches to remediate such failures
    Will discuss in later courses
  - Running markdown and test cases
    No need to prepare AWS account for grading, no running markdown

  - No other project management tool, just use github issues and projects

- Decompose useable tasks to assignee
- How to Collaboration on eks cluster and dynamo db
- Plan:
  1. Lightweighted code: cluster,db,eks.mak, k8s.mak,loader, logs,mcli, profiles, s1,s2,tools

  2. Modify k8s.mak
     - Insert new service
     - Build new container
     - Modify namespace or not

  3. Code new image
  4. Code yaml script
  5. Create eks cluster
  6. Create gw, db, s1,s2, new service, loader, service mesh, (other gatling)
  7. Load Test

Next
Digging into existed service, learn how to write yaml and build up new app

02/24/2022

2022年2月24日   19:10

Agenda:

1. s1 s2 db loader services clear out

Next:

1. Dig into monitoring, gw, Service Mesh, Grafana, Prometheus, Gatling
2. Modify ns name
3. clear redundant files
4. test
5. Git push, write down guide how to run repo
6. Write new service
7. Question to George: s2 has two versions, can we counted s2-v2 as new service?
8. modify tools/shell.sh, copy /profiles
9. Kiali??

02/27/2022

2022年2月27日　　16:21

Agenda:

1. Dig into monitoring, gw, Service Mesh, Grafana, Prometheus, Gatling
2. Modify ns name
3. clear redundant files
4. test
5. Git push, write down guide how to run repo
6. modify tools/shell.sh, copy /profiles

Next:

1. Write new service (including db, s3, client, container file, k8s yamls)
2. Fix mcli client(read all, support all microservices)
3. Kiali?? commented out from k8s.mak provision, # Nov 2021: Kiali is causing problems so do not deploy, test not working
4. Gatling running problem   java.lang.ClassNotFoundException: proj756.ReadMusicSim

```bash
#!/usr/bin/env bash
docker container run --rm \
    -v ${PWD}/gatling/results:/opt/gatling/results \
    -v ${PWD}/gatling:/opt/gatling/user-files \
    -v ${PWD}/gatling/target:/opt/gatling/target \
    -e CLUSTER_IP=`tools/getip.sh kubectl istio-system svc/istio-ingressgateway` \
    -e USERS=1 \
    -e SIM_NAME=ReadMusicSim \
    --label gatling \
    ghcr.io/scp-2021-jan-cmpt-756/gatling:3.4.2 \
    -s proj756.ReadMusicSim
~
~
```

5. Gating test

03/03/2022

2022年3月3日   20:01

Agenda:

1. Write new service (including db, s3, client, container file, k8s yamls)
   <mark>Playlist app done, yaml done</mark>
2. Fix mcli client(read all, support all microservices)
   <mark>Support user and music, playlist tbd</mark>
3. Kiali?? commented out from k8s.mak provision, # Nov 2021: Kiali is causing problems so do not deploy, test not working
   <mark>Still need Kiali</mark>
4. Gatling running problem   java.lang.ClassNotFoundException: proj756.ReadMusicSim
   <mark>Gatling can run now</mark>

5. Keys and token leakage

6. Gating test

Next step:

1. Get rid of tools container
2. Fix logic problem of playlist
3. Extend mcli functionality
4. Load test guide follow-up
5. Report

03/06/2022

Agenda:
1. Get rid of tools container
Chaucer Done, <mark>only gatling left</mark>
2. Complete playlist dev
<mark>Done</mark>
3. Extend mcli functionality
<mark>Done</mark>
4. Load test guide follow-up
Not done

5. Interim Report
Not done

Next step:
1. <mark>Follow up on all open issues in git repo</mark>
2. <mark>Do we need gatling for playlist? Scala script?</mark>
3. Load test guide follow-up
4. <mark>Interim Report</mark>

03/13/2022

2022年3月14日   23:12

Agenda:
1. <mark>Gatling scripts done</mark>
2. <mark>Load test guide follow-up</mark>
3. <mark>Interim Report in progress</mark>

Next step:
1. Complete interim report
2. everyone get rid of tools container
3. Complete guide 3
4. Complete load test
5. Finish all the issues left

03/20/2022

Agenda:

- Interim report done

To Do:

1. Running guide
2. Clean other version of s2
3. load test
4. upload mom

03/24/2022

Agenda:

1. Load test in progress - can handle 1800 rps now
2. Guide 3 completed

Next step:

1. Ask for AWS vCPU quota
2. everyone get rid of tools container
3. Failure remediation
4. Complete load test
5. Finish all the issues left
6. Video and report

03/27/2022

Agenda:

1. Report done, smooth the grammar
2. Load test and failure remediation done
3. Work assignment for video

1. A tour of the team's Github repo. Narrate the structure and content of the repo.　← Carl

2. A walk thru of a couple of issues/branches/PR to illustrate the collaboration between team members.　← Bofei

3. A deployment (e.g., a `make -f k8s.mak provision` or equivalent) of your system into an empty cluster. You may want to start up a cluster prior to the meeting/recording to reduce waiting within the recording. Take care that screen sharing is setup and that the terminal window is legible.　← Lily

4. A run of the load simulation on your system with no disturbance. As this run is long, you do not need to have it complete. About 5 minutes of run-time will suffice during which a narrator can point out any observations. If you have summary findings (e.g., Grafana summary reports) to present, collect those from a separate run.　← Chaucer

5. A second run of the load simulation on your system during which there is some disturbance to the system: a change in load, a network fault (delays), a machine failure, introduction of a circuit breaker, etc. Include your follow-up actions to either remediate or to understand the behaviour of the system.

4. Clear out all the issues

03/31/2022

2022年3月31日　　18:04

1. Video for part 4 and part 5 in progress
2. Report needs fix

04/07/2022

1. Video for part 4 and part 5 done
2. Report done

Next:
1. Complete other parts of video
2. Clear out all issues

04/10/2022

2022年4月6日 14:12

Everything done
Submit to coursys