February 19, 2025 (120 Minute Meeting)

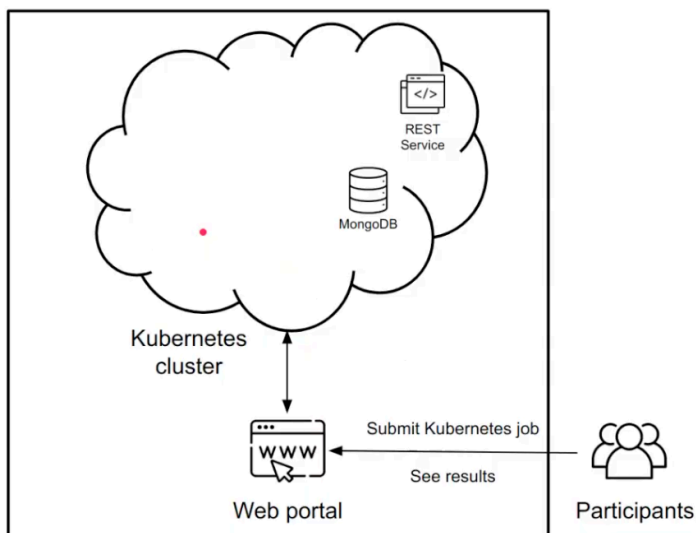To load the example, log in to docker and run docker image load -i gc25cdocker.tar using a terminal before running the BASH script.

Current Challenger Details + Architecture:

Challenger 2.0

- Transmission protocol
  - REST
    - Bigger reach
- Database
  - MongoDB
    - Better performance
    - Reduce maintenance time
- Evaluation Infrastructure
  - Kubernetes cluster
    - Dynamic resource allocation removes the limit on number of participants
    - Fault-tolerance evaluations*

Challenger 2.0 - Architecture

- Develop solutions locally
- Containerize the solution
- Submit Kubernetes job
- Uses namespaces to sandbox solutions
- Defines ResourceQuotas and LimitRanges to ensure fair evaluations
- Reclaims resources

End Points to know for the script:

/create Create a benchmark
/start Start the evaluation
/next_batch Get the next batch of data
/result Submit the result of a batch
/end End benchmark

Create Script → Dockerize the Solution → Create Kubernetes Job

★ Owen sent an email to Luca and CC'd the others for help sorting out difficulties with sample solution local evaluation environment.