MP8

How’s it going?

Final Autograder run:
- Tonight ~8pm
- Tomorrow ~3pm

- Due tomorrow at 11:59 pm.
- Latest Commit to the repo at the time will be graded.
- Last Office Hours today after the lecture until 7pm.
Final Project Presentation Groups

- **Monday 4/22**
  - Me_irl, taksumbong, Victory Dance, BigNet

- **Wednesday 4/25**
  - collegeanalysis, mcmc, Team DAAL, tql, 404, spicy

- **Monday 4/30**
  - CleverTeamName, deatheaters, newbies, jjts, meh, CloudyWithAChanceOfClusterFailure
Scalable Cloud Infrastructure
Problem Statement
Kubernetes

An open-source system for automating deployment, scaling, and management of containerized applications
Recap on Containerization
Clusters
Nodes

- Node
- Pod
- Volume
- Containerized app
- Node processes
- Kubernetes
  - Docker
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-deployment
spec:
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
      - name: nginx
        image: nginx:1.7.9
        ports:
          - containerPort: 80
Scalability
When to use Kubernetes

- ... as a container platform
- ... as a microservices platform
- ... as a portable cloud platform
Disclaimer

Just because we can use a distributed system does not mean we should use it for everything.
MP9 (Last MP!)

Kubernetes

This MP will run on individual GCP. Please read the documentation.

Due Next Tuesday

Hand Graded (No Autograder)