

CS-470: Final Reflection

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October 9, 2023

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<https://youtu.be/uR7ypoN42wo>

Final Reflection

- ▶ CS-470: Full Stack Development II (23EW1)
- ▶ Task: bare-metal stack migration to AWS' IaaS

Experiences

- ▶ I am now familiar with AWS' PaaS toolbox:
 - ▶ DynamoDB: including migration of MongoDB to DynamoDB
 - ▶ S3: including deployment of Docker images into public buckets
 - ▶ Lambda functions
 - ▶ Built and deployed 5 functions
 - ▶ API Gateway
 - ▶ Set up CORS manually
 - ▶ Enabled GET, POST, DELETE methods
 - ▶ Linked Lambda functions as method controller
- ▶ Troubleshooting API connections and deployment issues

Strengths

- ▶ Debugging and profiling
 - ▶ Successfully deployed my own stack before anyone else
 - ▶ Helped to identify class workarounds due to changes in AWS' implementation
- ▶ Teamwork
 - ▶ Answered and guided 11 students through their deployment issue
- ▶ Time commitment and ability to plan
 - ▶ I was able to deploy my working website 4 weeks sooner than expected

Planning for Growth

- ▶ AWS already helps to accommodate elasticity in many SaaS offerings, but stacks should go one step further and enable *AWS Auto Scaling*
- ▶ API and other services need monitoring, enabling *Amazon CloudWatch* to collect and visualize real-time logs, metrics, and event data
- ▶ While AWS can help to lower costs (over bare-metal) through elasticity, *Rightsizing* is still needed:
 - ▶ *AWS Application Cost Profiler*
 - ▶ *AWS Cost Anomaly Detection*
- ▶ Being green is also possible using *Customer Carbon Footprint Tool*