AWS Group Project Chapter 8

Note: This project may be completed as in individual or as part of a group

The application you built as part of the RDS chapter lab (or equivalent*) needs to be maintained following DevOps principles and therefore the code updates should be done using automated code pipelines and should NOT be done manually.

*You can change the database structure and code from Chapter 8 lab 2 to be something slightly different (e.g. change from conference venues to donut flavors) to fulfill the requirements of this project.

Requirements
EC2 Instances (aka virtual machines)
Required (for an A or 23.25 points out of a possible 25): 1. **Create a code pipeline for your web application. The components should include: CodePipeline, CodeDeploy, and GitHub, EC2, RDS, VPC, subnets, security groups, Internet Gateway, etc. The application does not have to be built with any of your previous stacks of resources. (23.25 points, est. 4-5 hours).** **Additional Options:** 2. **Application runs on infrastructure created with IaC, including an RDS instance. This may require updates to your Chapter 6 IaC code (1 point). Estimated 2-4 hours.** 3. **Application is not based on Node (meaning you could not leverage Lab 2 from Chapter 8). This could require heavy CodeDeploy research for your favorite language. (1 point). Estimated 2-4 hours.** 4. **EC2 instances are launched into an auto scaling group (.5 points). Est. 2 hours.** 5. **EC2 instances in auto scaling group are behind a load balancer that is created by IaC (.5 points). Est. 1 hour.** 6. **Alternative but equivalent technology to CodePipeline/CodeDeploy is used (1 point)** 7. **Other enhancements that support the principles of using a code pipeline.**

Rubric

25 points are possible for this milestone, as follows:

Milestone 3 Features	
Create a code pipeline for your application	/23.25
Application runs on infrastructure from IaC, including an RDS instance	/1
Application is NOT based on Node	/1
EC2 instances are launched into an auto scaling group	/.5
EC2 instances in auto scaling group are behind a load balancer created by IaC	/.5
Alternative but equivalent technology to CodePipeline/CodeDeploy is used	/1
Other enhancements that support the principles of using a code pipeline	TBD
Total	**/25 (max)**

Deliverables

To demonstrate completion of your project, fill out the Group Project Chapter 8 submission document and then upload the document.

Tips

- You can discuss your projects online or in person with other groups liberally, but you may not use (copy/paste) their code.