**Advanced Java - D387**

**Cloud Deployment**

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To deploy this current multithreaded Spring application to the cloud I will be using Amazon Web Service (AWS). I recently got my AWS Cloud Practitioner certification and am the most familiar with this service. In order to do this, the first step is to sign up for an AWS account. AWS offers a free tier that allows exploration and various AWS services.

Once signed up, I would set up the environment. There are a couple options here, but I would us Amazon’s Elastic Container Service (ECS) in order to host my application. The ECS service is simple to use. First, navigate to the ECS service and create a new ECS cluster. Here, I need to pick my launch type. I can choose between Fargate (serverless) or EC2. I will pick there EC2 instance to run this program.

Next, I will deploy the application in my new EC2 instance. This is where I will define the task for the instance. Here I will pull the Docker image and container settings, and set the container port to 8080. I will also create a service in the ECS that runs this task and make sure that the application is always running.

AWS makes it easy to manage and monitor the application as well. Once the instance is up and running, I can check the health and performance of the application through the AWS Management Console. Amazon CloudWatch can also provide me with more detailed metrics and logs as well. Here I can even set up alerts and automated scaling setting to make sure the application can handle varying loads.

Lastly, this service is nice because AWS has a lot of documentation and I can always contact AWS support if I run into any problems.