**Week 10 – Challenge Lab: Creating a Scalable and Highly Available Environment for the Café**

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**Task 1: Task 1: Inspecting your environment**

**Task 2: Updating a network to work across multiple Availability Zones**

**Task 2.1: Creating a NAT gateway for the second Availability Zone**

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Figure 1: Create NAT gateway in the second Availability Zone.

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Figure 2: Attach NAT Gateway to Private Route Table 2.

**Task 3: Creating a launch templateA screenshot of a computer

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Figure 3: Launch template created.

**Task 4: Creating an Auto Scaling group**

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Figure 4: Create Auto Scaling Group

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Figure 5: 2 instances are running.

**Task 5: Creating a load balancerA screenshot of a computer

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Figure 6: Load Balancer created.

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Figure 7: Include Load Balancer into ASG.

**Task 6: Testing load balancing and automatic scaling**

**Task 6.1: Testing the web application without load**

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Figure 8: Access the web application from ELB.

**Task 6.2: Testing automatic scaling under load**

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Figure 9: Create stress test.

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Figure 9: Score after submission.

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Figure 10: Submission report.