Through Terraform code I provision in my free-tier AWS account:

* 1 VPC
* 2 subnets
* 1 internet gateway
* 1 route table & 2 route table association
* 2 security groups
* 2 network interfaces & 2 elastic IPs
* 2 EC2 instances
* 1 application load balancer
* 1 load balancer target group
* 1 load balancer listener group
* 2 target group attachments
* 1 CloudWatch metric alarm (to meet the “*Include service monitoring in the automation*” requirement)
* 1 launch configuration & 1 autoscaling group (to meet the “*Automate service-fail-over, e.g. auto-restart of failing service*” requirement)

Along with start, my EC2 instance(s) install docker and run a container, which is an nginx web server, exposing port 80. Then the (edited)index webpage is available at:  
<http://ec2instanceip/index.html>  
A MongoDB database is also created as a container on the EC2 instance(s).  
This meets the “*Automate provision of an Application stack*” requirement.

This document server as a solution to the “*Document the steps and commit your Infrastructure-as-a-code in the git repo*” requirement.

A (private) Youtube video includes a demo of running the terraform apply command and showing all the provisioned resources. Link is below:  
*Disclaimer: Upon upload video quality decreased. Let me know if I need to show something in detail.*

**https://www.youtube.com/watch?v=D9w1cNfzNcQ**

*(terraform apply command runs between 0:21 and 4:00, you may skip it)*