Using the method of your choice, write automation to create the following web application stack. You should submit your automation assets that we can run to provision the environment. If you have any questions then just make your best guess at our intent and note any assumptions you've made when submitting your assets.

- 1. Create an ELB
  - a. Listen on
    - i. HTTP Port 80
    - ii. HTTPS Port 443
      - 1. Terminate SSL here
- 2. Create 3 "t2.micro" EC2 instances
  - a. use ami-5e63d13e
    - i. uses "ubuntu" as user name for ssh
  - b. in us-west-2 region
  - c. 2 of the instances must be configured as a web server using web server software of your choice:
    - i. apache
    - ii. nginx
    - iii. node.js
    - iv. tomcat
    - v. tornado
    - vi. etc
  - d. The 3<sup>rd</sup> instance must be configured as a web server using different software from the other 2 (e.g. if the first 2 use apache, this one uses nginx)
  - e. All 3 web servers must be configured as follows
    - i. listen on port 8900 for HTTP
    - ii. Web access logs configured to write to /var/log/tdcustom/accesslogs/
    - iii. Web servers must not be running as root
    - iv. Web servers must return a "hello world!" type page
- 3. Register all 3 EC2 web servers with ELB created in step 1
- 4. Networking:
  - a. ssh/ELB available on
    - i. your public IP range/32
    - ii. 141.206.246.10/32
    - iii. ELB and Instances need to be able to communicate on port 8900
  - b. Nothing else should be open

## Additional instructions:

• There is no access to the web console (just CLI/API)