ENPM809J – Final

Version 2.1 – November 21st 2020

The Assignment and Requirements

After your successful pitch to the Cobra Kai leadership team on why they should move their application to the cloud (see your midterm project as well as my feedback on it) you have now been asked to submit a technical plan/road map for moving the application to the cloud.

Think about things like resiliency, identity and access management (IAM), protecting data, compliance, secure system administration and coding practices. Remember, this sample site does not actually provide video on demand services or credit card processing but pretend it does and you need to take into account handling large files and processing credit cards. (PCI)

What you submit should be a technical document or presentation outlining your detailed recommendations on **HOW** to implement your plan to migrate the Cobra Kai application to the cloud. In the document/presentation or as separate attachments you should include things like sample Security Group/NACL/firewall rule configurations, detailed IAM policies/roles, sample CloudFormation templates, etc. The target audience for this would be security architects/engineers and system admins/DevOps people so this should be a highly technical document.

If you need assistance with developing charts and diagrams for the final a list of online options is at the bottom of this page: https://aws.amazon.com/architecture/icons/ Many of those 3rd party tools have generic cloud options as well as options for Azure and GCP.

Virtual Machine (VM) / Code

A copy of the server that runs the Cobra Kai web app is in the **Finals** folder inside the **Files** section of ELMS. It has been saved as an OVA that you can import into VMWare or Virtual Box. (Note: I have only tested this on VMWare.)

To import in VMWare/VirtualBox in the menu: **File** -> **Import...** and follow the instructions in the wizards. Or see:

• VMware: https://pubs.vmware.com/workstation-9/topic/com.vmware.ws.using.doc/GUID-DDCBE9C0-0EC9-4D09-8042-18436DA62F7A.html
• VirtualBox: https://docs.oracle.com/cd/E26217_01/E26796/html/qs-import-vm.html

Login: **enpm809j** Password: **password**

The VM is set for DHCP. The VM will auto start the web server on port 80, as well as port 5000. You can easily access it in any web browser with http://ip.address.of.vm/ (replacing "ip.address.of.vm" with the IP address of your VM.

Inside the VM the code for the site is stored in **/home/enpm809j/project** The code is also available here: https://github.com/kts262/enpm809j

Due Date:

The project is due Friday December 18th @ 11:59pm EDT!

Review the syllabus for information on the class late policy. **Don't wait until the last minute to get started on this midterm project!**

Please do not forget to include your name and UID on the intro page/slide of what you submit and PROOFREAD YOUR WORK!