**Name:** Hemant Jain

**Lab Progress Report Due Date:** 03/22/2021

**Current Week Since Start Date:** Week 9 (03/23/2021– 03/30/2021)

**Reporting Week:** From Mar 16, 2021 to Mar 22, 2021

**Summary about the TestOut Module-9 Learning:**

From the TestOut LabSim, I learnt about the Virtualization, Cloud Security, and Securing Mobile Devices. Continuing the coursework, I studied about the different physical network in the virtual network. The most important responsibility of the physical networking devices in forwarding the packets, and providing an intelligent abstraction making it easy to deploy and control the network services and service layer infrastructure.

There exists mainly three layers inside the Software Defined Networking (SDN’s) namely Application Layer, Control Layer, Physical Layer. The application layer communicates with the control layer using the northbound interface while control layer then passes that information to the physical layer along with its configurations and instructions. The physical layer then communicates in response back to the control layer using the southbound interface.

Learning about the various advantages and disadvantages comes in while you are using the SDN gives you an overall insight about the use or not-to-use scenarios.

Continuing the topic on the Cloud Computing Platform with the definition of Cloud and Cloud Computing and the various types of cloud computing platforms and when and when to choose on specifically from Public, Private, Community and Hybrid Cloud with the real-time example scenarios in the Quiz were interesting to apply all the knowledge learnt above in practical.

Discussing about the various Cloud Computing Models like IaaS, PaaS, SaaS, SECaaS was new learning to me from this module.

And how to overcome the security risks in the Cloud Platform which is openly available for the highly suspicious threat attacks. Started the new module with the Cloud Storage and how it can easily replace out the offline and hardware devices at the users-end with the virtual one-click cloud service storage on-demand mechanism which comes with both advantages and disadvantages.

Security in the Cloud with the various new term explore like Cloud Access Security Broker, Virtual Networks, Segmentation, Security Group, Virtual Private Cloud Endpoint, Container, Cloud-based firewall and many more. Cloud Security Concepts in detail discussion on the High Availability across zones, Integration, Encryption, Instance awareness, VPC endpoint, Cloud Security Infrastructure, Cloud auditing, API inspection and integration.

At last, the ending discussion on the Mobile Devices and the various mechanism and tools available. Various Mobile App Security Issues like App Control, Authentication and Credential Management, App whitelisting, Geo-tagging. Offering of the Network Virtualization from the different vendors like VMware, Microsoft, Citrix.

**Progress Embedded Image of Progress Report from LabSim:**



