SDN Project Proposal

**Firewall Application**

The primary functionality of this project is to add a firewall on the POX controller that specifies which IP addresses need to be blocked. We will be having a small network setup on the virtual machine, with mininet installed. This network will contains 6 switches each with a host. The firewall algorithm will be started along with the POX controller which works in accordance with the firewall policies which would indicate what all IP address need to be blocked .So, when a packet is received by the switch from an IP address address, it is sent to the POX, which will comply with the firewall module and push down a 'drop' flow entry to the switch for the packets to be blocked. So, switch will block any further packets from that source. The rest of the packets from the IP address are managed solely by the switches, without the need to send the packets to the POX controllers, thus complying with the principles of software defined network.

**Technology**

Network Simulation tool – Mininet with Oracle VM

Controller – POX controller

Coding in Python

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