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**Project Idea**

**Campus Area Network (CAN)**

**Week 1: ( Build internal network )**

* **Tasks:**
  + Install internal network using cisco Switches, Routers, Devices and servers
* **Deliverables:**
* Using Cisco packet tracer
* Design Contain (3Routers \_2 DSW \_ 5 ASW \_ 20 PC\_3 servers)

**Week 2: Configuration for Access &Distribution Switches**

* **Tasks:**
* **Configuration for Access switches**:
  + manually make a configuration for five Access layer switches
* **Configuration for Distribution switches**:
  + manually make a configuration for two Distribution switches
  + **Deliverables:**
* Basic configuration
  + Hostname
  + Enable secret and VTY password (cisco)
  + Welcome Message
  + Encrypt all password
  + Create VLAN 10 (sales), VLAN 20 (IT), VLAN 30 (HR), VLAN 40 (Manger) and Vlan 50 (Servers)
  + Assign port to VLAN at access SW
  + Config trunk port
  + Config ether channel using PAgP
  + Config DSW 1 as Root bridge for all vlan 1,10,20 & Config it as Root primary
  + Config DSW 2 as Root bridge for all vlan 30,40,50 & Config it as Root primary
  + Config access port as portfast at Access SW
  + Protect Access port from receive unexpected PBDU
  + Config port security at access SW

**Week 3: Configuration for Routers:**

* **Tasks:**
* **Configuration for Routers:**
* manually make a configuration for 3 Routers
* **Deliverables:**
* Basic configuration
* Hostname
* Enable secret and VTY password (cisco)
* Welcome Message
* Encrypt all password
* Config sub interface
* Ip address for serial port
* Config DHCP for Sales, IT, HR and Manger network

**Week 4: Configuration for redundancy, services &Final presentation**

* **Tasks:**
* **Configuration for Redundancy and Services**:
* choose whois protocol that you used on redundant topology &and what services that you need.
* **Deliverables:**
* Config ACL to permit SSH from IT department only.
* Config HSRP as Redundant protocol.
* Track interfaces that connect to ISP.
* Config all Routers to send Syslog Messages to the Log server.
* Final report and presentation