Building with 3 floors with 2 department in each floor.

**First floor:** Sales and Marketing Department with 120users expected.

Humans Recourses and Logistic Department 120 users expected)

**Second Floor:**  Finance and Accounts Department 120 users expected.

Administration and Public Relations Department 120 users expected.

**Third Floor:** ICT 120 users expected. Server Room 12 Devices expected.

Things we use to build this network:

* Cisco Packertracer
* hierarchical model to provide redundancy
* ISP to provide redundancy
* Wireless network to each department.
* Different Vlans for each department
* VLSM Subnetting network
* We use a PAT translation to connect to a public internet providers
* Configuration of basic setting (hostname, console password, enable password, banner messages, disable ip domain loop up)
* Communication between Vlans inter-Vlan Routing with a Multilayers Switch
* The multilayers Switches have Routing and Switching functionalities
* DHCP server connection.
* Devices in the server room are to be allocated IP address statically
* We use OSPF as routing protocol
* SSH to remote login
* Port-security for Finance and Accounts department. Sticky method to obtain mac-address and violation shut down.
* **PAT**  to use the respective outbound roouter interface ipv4 address. With its necessary ACL Rule.
* **Test Communications.**