* Network topology for a startup group that consist of 7 members.
* This is a IT startup group that creates web and mobile apps.

Network Topology:

* **Internet Connection/ISP**
* **Router:** Devices like computers, game consoles and etc can be connected to a router wirelessly or through network cables.
* **Hardware Firewall**
* **Software Firewall:** network security solution designed to filter the traffic entering or leaving a protected network or endpoint
* **Antivirus Software:** endpoint protection for each device.
* **Switch:** switch is restricted to wired network connections
* **Wireless Access Point (WAP):**connect through a wireless standard, including [Wi-Fi](https://www.techopedia.com/definition/10035/wireless-fidelity-wi-fi) or Bluetooth.
* **Laptop Workstations (5)**
* **Printer/Scanner**
* **Cloud Storage** device connected to a network that allows storage and retrieval of data from a central location for authorized network users and varied clients. *For shared storage of project files and backups.*
* **Git/Github:** Version Control System
* **Cables:** Ethernet Cables (Cat6 or Cat6a), Power Cables, USB Cables, HDMI/DisplayPort Cables, etc…
* **Collaboration Tools:** Tools like Slack or Microsoft Teams for communication.
* **Smartphones**

**OSI Model**

**Layer 7 Application Layer**: Devices/Protocols: Development environments, collaboration tools, project management software, version control systems (e.g., Git). Antivirus software, Laptop workstations

**Layer 6 Presentation Layer:** Encryption Protocols: Relevant Devices/Protocols: SSL/TLS for secure communication.

**Layer 5 Session Layer:** Devices/Protocols: Virtual Private Network (VPN) for secure remote access.

**Layer 4 Transport Layer:** Devices/Protocols: Software and Hardware Firewall

**Layer 3 Network Layer:** Devices/Protocols: Router for network routing

**Layer 2 Data Link Layer:** Devices/Protocols: Switch and **Wireless Access Point (WAP):**for local network connectivity.

**Layer 1 Physical Layer:** Devices/Protocols: Cabling

OSI model is a conceptual framework, and not every piece of hardware or software neatly fits into a single layer. Instead, different components may operate at multiple layers to provide end-to-end communication and services within the network.

Notes:

* Antivirus software typically operates at the **Application Layer** of the OSI model. The primary function of antivirus software is to detect, prevent, and remove malicious software (malware) from computer systems.
* A Wireless Access Point (WAP) primarily operates at the **Data Link Layer (Layer 2)** of the OSI model. The Data Link Layer is responsible for the reliable transmission of data frames between nodes on the same local network. In the case of a WAP, its primary function is to provide wireless connectivity and act as a bridge between the wireless network and the existing wired network infrastructure.
* Laptop workstations, like other end-user devices such as desktop computers, fit into the **Application Layer (Layer 7)** of the OSI model. The Application Layer is the top layer of the OSI model and is responsible for providing network services directly to end-users or applications.

**NOTE:** Keep in mind that the company that I am making is a startup with very limited resources. It is similar to groups like CITE and SPARK, the resources are limited but the passion is strong.

**Introduction:**

Welcome to "TechVista Innovations," a cutting-edge IT startup poised to revolutionize the world of technology. At TechVista, we're not just creating software; we're crafting digital experiences that empower and inspire. Our dynamic team of talented individuals is on a mission to push the boundaries of innovation, delivering solutions that transform ideas into reality.

**Description:**

**TechVista Innovations: Pioneering Tomorrow's Technology Today**

At TechVista Innovations, we embark on a journey fueled by passion, creativity, and a relentless pursuit of excellence. Established in 2023, our startup is founded on the belief that technology has the power to reshape industries, enhance lives, and propel society forward.

*Core Values:*

1. **Innovation:** We thrive on the spirit of innovation, constantly exploring new possibilities and pushing beyond conventional boundaries.
2. **Collaboration:** Our success is a collective effort. We foster a culture of collaboration, valuing the unique skills and perspectives each team member brings to the table.
3. **Quality:** TechVista is committed to delivering products and services of the highest quality. We believe in setting the standard for excellence in every endeavor.
4. **Customer-Centricity:** Our customers are at the heart of what we do. We are dedicated to understanding their needs and exceeding their expectations.

*Our Expertise:*

TechVista specializes in web and mobile app development, leveraging the latest technologies to create seamless, intuitive, and visually stunning digital solutions. Whether it's crafting robust web applications, developing cutting-edge mobile apps, or architecting scalable software solutions, we thrive on challenges that demand innovation.

*Key Offerings:*

1. **Custom Software Development:** Tailored solutions to meet the unique needs of our clients, from concept to deployment.
2. **Mobile App Development:** Innovative and user-friendly mobile applications that captivate and engage users.
3. **Web Application Development:** Robust web applications that deliver unparalleled performance and functionality.
4. **IT Consulting:** Strategic guidance to help businesses navigate the ever-evolving landscape of technology.
5. **Digital Transformation:** Assisting businesses in their journey toward digital transformation through innovative solutions.

*Why Choose TechVista?*

* **Expertise:** Our team comprises seasoned professionals with diverse skills and expertise in the latest technologies.
* **Agility:** As a startup, we embrace agility, adapting swiftly to industry trends and evolving client needs.
* **Passion:** Passion drives us to go the extra mile, turning challenges into opportunities for growth and innovation.
* **Client-Centric Approach:** We prioritize understanding our clients' goals, ensuring that our solutions align with their vision and objectives.

Join us on this exciting adventure at TechVista Innovations, where we're not just writing code; we're crafting the future of technology. Explore with us, innovate with us, and together, let's build a world where technology knows no bounds.