SIMATS ENGINEERING

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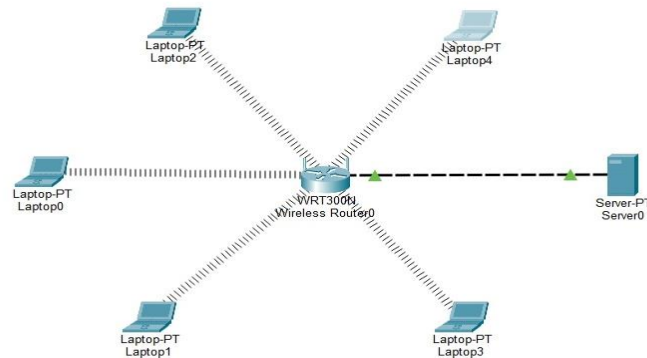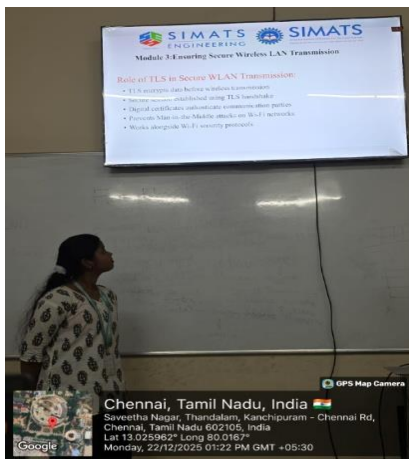
Course Code: CSA0764   **Slot:** C

Course Name: Computer Networks For Game Server

Course Faculty: DR. K. SENTHIL, DR. P. RAJARAM

Project Tittle: SECURE DATA COMMUNICATION IN WIRELESS LANS USING TRANSPORT LAYER SECURITY (TLS)"
Module Photographs: (3 photographs –Module Photo, Individual student contribution module work in the project and presentation image)
Project Description: (here you write what you did in this project (contribution) including Model Description; Wireless Local Area Networks (WLANs) are widely used due to their flexibility and cost-effectiveness, but their open nature makes them vulnerable to security threats. Attacks such as eavesdropping, spoofing, and man-in-the-middle attacks pose serious risks to data confidentiality. Transport Layer Security (TLS) is a widely adopted cryptographic protocol that ensures secure data communication over networks. This work focuses on implementing TLS to enhance security in Wireless LAN environments. TLS provides essential security services including confidentiality, integrity, and authentication. Encryption protects data from unauthorized access, while integrity mechanisms prevent data modification. Digital certificates are used to authenticate communicating entities. The TLS handshake establishes secure session keys between the client and server. After the handshake, all transmitted data is encrypted. Thus, TLS offers a robust and reliable solution for secure data communication in WLANs.

Student Signature   **Guide Signature**