

# IMMERSIVE LEARNING ENVIRONMENT

## LAB: THREWAY HANDSHAKE

### LEARNING OBJECTIVE

The objective of this lab is for students to gain knowledge on Three-way handshake.

### DESCRIPTION

A three-way handshake is also known as TCP handshake. It is a method used in TCP/IP network to create a connection between a local host/client and server. It is a three-step method that requires both client and server to exchange SYN and ACK packets before actual data communication begins.

Transmission Control Protocol (TCP) is a connection-oriented, end-to-end reliable protocol. In typical TCP connection, each device maintains its state and the corresponding sequence number to track the incoming sequence of packets. When an end-host device receives a new packet, it will send back and ACK (Acknowledgement) packet, containing an acknowledgement number, which means the device has successfully received the data and is waiting further incoming data as the number indicates.

### COMPONENT SECTIONS

- Game file/folder name: Game
- Movie file name: movie
- Power Point file name: Three-way Handshake.ppt
- Assessment file name: Three-way Handshake Quiz.doc

## WHAT TO SUBMIT

Submit the quiz document by answering all the questions.

