Wireless Network Analysis Labs Guide

# Lab 1: Using the NetSYour Application

1. Turn on your computer.
2. Connect to a wireless network:  
   - Open Wi-Fi settings.  
   - Select your preferred network.  
   - Enter the password if prompted.
3. Open the NetSYour application.
4. Log in using your username and password.
5. Once logged in, navigate to the Dashboard.
6. In the Dashboard, locate and open the following features:  
   - AP Timecourse  
   - AP Differential  
   - Channel Usage  
   - Channel Timecourse  
   - Channel Heatmap  
   - Channel Spectrogram
7. View the visualizations and monitor the wireless data.
8. Use the available export options to save graphs or logs if necessary.
9. When finished, log out of the application.
10. Close the application.

# Lab 2: Wireless Network Scanning and Packet Observation

1. Open a terminal and enter superuser mode:  
    sudo su
2. Navigate to your home directory:  
    cd
3. Check network interfaces:  
    ifconfig
4. Start monitoring mode:  
    airmon-ng start
5. Kill conflicting processes:  
    airmon-ng check kill
6. Scan for available networks:  
    wash -i wlan0mon  
    (Note: Replace wlan0mon with your actual interface if different)
7. Launch Wireshark for packet observation:  
    - Navigate to Pentesting → Information Gathering → Wireshark  
    - Open Wireshark  
    - Start capturing on the wireless interface (e.g., wlan0mon)
8. Connect to a wireless network for live analysis.

# Lab 3: Advanced Wireless Monitoring

1. Start monitoring mode:  
    airmon-ng start
2. Switch to superuser (if not already):  
    sudo su
3. Kill interfering processes:  
    airmon-ng check kill
4. Start monitoring on the wireless interface:  
    airmon-ng start wlan0