PSDL MINI PROJECT : INTERNET SPEED TEST

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2. Problem Statement :

To create internet speed test checker which measures ping time, download speed and upload speed

3. Keywords :

a. Ping : Ping (latency is the technically more correct term) means the time it takes for a small data set to be transmitted from your device to a server on the Internet and back to your device again. The ping time is measured in milliseconds (ms).
b. Download : Download speed refers to the rate that digital data is transferred from the Internet to your computer. The download speed is measured in Megabits per seconds (Mbps).
c. Upload : Upload speed is the rate that online data is transferred from your computer to the Internet.The upload speed is measured in Megabits per second (Mbps).
d.Mbps:Megabits per second (Mbps) are units of measurement for network bandwidth and throughput. They are used to show how fast a network or internet connection is. Each Mbps represents the capacity to transfer 1 million bits each second, or roughly one small photo per second.
e.Ms:A millisecond (from milli- and second; symbol: ms) is a unit of time in the International System of Units (SI) equal to one thousandth of a second and to 1000 microseconds.

4. Abstract :

In this project, we have made an internet speed checker using python. It is a completely GUI tkinter project. Alongside this we have used speedtest-cli to create it. Speedtest measures speed between your device and the test server, using your device's internet connection.With the help of this tool you can simply check downloading speed, uploading speed and ping.

5. Module-wise description :

a. Speedtest : Speedtest-cli is a module that is used in the command-line interface for testing

internet bandwidth using speedtest.net. The speedtest module contains: Download – method to test the download speed.

Upload – method to test the upload speed of the selected network.

b. Tkinter: This framework provides Python users with a simple way to create GUI elements using the widgets found in the Tk toolkit. Tk widgets can be used to construct buttons, menus, data fields, etc. in a Python application. Once created, these graphical elements can be associated with or interact with features, functionality, methods, data or even other widgets. For example, a button widget can accept mouse clicks, and can also be programmed to perform some kind of action, such as exiting the application.

6.Technology used and Technology features covered:

We have used the tkinter library for developing the graphics of the internet speed checker i.e default window is made by using it.The tkinter package is the standard interface to the Tk GUI toolkit .Both Tk and tkinter are available on most UNIX platforms including macOS and windows system

Interface Implemented: Graphical User Interface

7.Reference:

https://youtu.be/duNlmdYXXVE

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