

Computer Network Project Synopsis

Title : Wifi Calling.

Introduction :

As in Computer Network, “Communication” is a very essential thing. But sometimes some problems occur because of the faulty network connection that affects everything related to our work and many things.

Every time wired communication is not feasible. Due to various environmental conditions many times there are problems in wired connections. This condition is responsible for “Call Dropping”. So wireless communication provides a cutting edge over various other modes of communication.

Instead of using your carrier's network connection, you can make voice calls via a Wi-Fi network. That could mean using a Wi-Fi connection you have to set up at home, or whatever Wi-Fi hotspot you happen to be on when you're out and about, such as at a cafe, library or anywhere else. **Wi-Fi Calling** is a service that provides the ability to make and receive phone calls over a **Wi-Fi** connection which is having very fewer requirements.

Structure of project :

Wifi Calling is a methodology and group of technologies for the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet. **Voice over Internet Protocol** (also a **voice over IP, VoIP** or **IP telephony**) is a methodology for the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet.

The terms **Internet telephony, broadband telephony,** and **broadband phone service** specifically refer to the provisioning of communications services (voice, fax, SMS, voice-messaging) over the public Internet, rather than via the public switched telephone network (PSTN).

The basic idea of this project to establish a Local Area Network (LAN) by establishing a wireless connection between a client and a server. After getting connected, there will be the transfer of voice in the form of packets. Hence this will complete wireless communication.

Technology Used : Java

Software Requirements :

1. Operating System : Windows 7 or above.
2. Simulation Tool : Eclipse, NetBeans IDE
3. Programming Lang : JAVA

Hardware requirements :

1. Processor: Intel Core i3 or above.
2. RAM: 2 GB or higher.
3. Hard Disk: 300 GB or higher.
4. Input Devices: Mouse, Keyboard, and Microphone.
5. Output Devices: Monitor and Sound.
6. Mobile Phone(for Hotspot)
7. NIC card.

Application :

With the help of this system, we are able to call via Wi-Fi over wireless local area network (WLAN). Instead of using carrier's network connection, we can make voice calls via a Wi-Fi in particular network.

References :

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