ECAP615

Programming in Java

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Learning Outcomes

After this lecture, you will be able to

- Learn the basic concept DatagramSocket Class.
- Understand the various constructors and methods of DatagramSocket Class.
- Implementation of DatagramSocket Class.

Datagram

- Datagrams are collection of information sent from one device to another device via the established network.
- When the datagram is sent to the targeted device, there is no assurance that it will reach to the target device safely and completely.
- The UDP protocol is used to implement the datagrams in Java.

DatagramSocket class

- DatagramSocket class represents a connection-less socket for sending and receiving datagram packets.
- A datagram is basically an information but there is no guarantee of its content, arrival or arrival time.

DatagramSocket class

Every packet sent from a datagram socket is individually routed and delivered.

It can also be used for sending and receiving broadcast messages.

Datagram Sockets is the java's mechanism for providing network communication via UDP instead of TCP.

Constructors of DatagramSocket class

- DatagramSocket()
- DatagramSocket(DatagramSocketImpl impl)
- DatagramSocket(int port)

Constructors of DatagramSocket class

- DatagramSocket(int port, InetAddress laddr)
- DatagramSocket(SocketAddress bindaddr)

Methods of DatagramSocket class

- bind()
- connect()
- disconnect()
- isClosed()

Methods of DatagramSocket class

- getChannel()
- close()
- setBroadcast()
- getBroadcast()

Methods of DatagramSocket class

- setReuseAddress()
- setReceiveBufferSize()
- getReceiveBufferSize()
- setSOTimeout()
- getSoTimeout()

Methods of DatagramSocket class

- getLocalPort()
- getLocalAddress()
- receive()
- send()


That’s all for now…