


Advanced Java Programming

Part 10

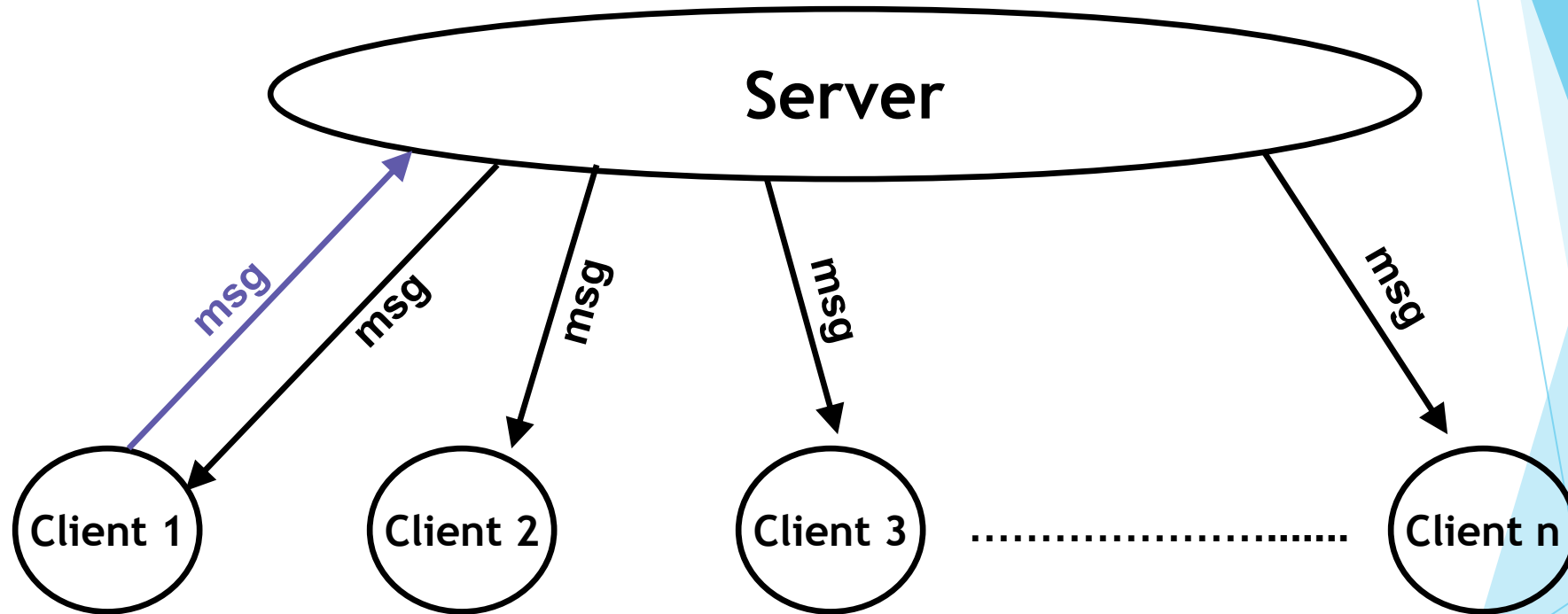
Presented By
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Networking in Java

Part II

Chat Room GUI Application Example



Chat Room GUI Application cont'd

- ▶ The following code sample represents a server side application that holds a chat room that several clients can connect to and chat with each other. The server application is divided into two classes: ChatServer and ChatHandler:

```
public class ChatServer {  
    ServerSocket serverSocket;  
    public ChatServer() {  
        serverSocket = new ServerSocket(5005);  
        while(true) {  
            Socket s = serverSocket.accept();  
            new ChatHandler(s);  
        }  
    }  
    public static void main(String[] args) {  
        new ChatServer();  
    }  
}
```

Chat Room GUI Application cont'd

```
class ChatHandler extends Thread {  
    DataInputStream dis;  
    PrintStream ps;  
    static Vector<ChatHandler> clientsVector =  
        new Vector<ChatHandler>();  
  
    public ChatHandler(Socket cs) {  
        dis = new DataInputStream(cs.getInputStream());  
        ps = new PrintStream(cs.getOutputStream());  
        clientsVector.add(this);  
        start();  
    }  
}
```

Chat Room GUI Application cont'd

```
public void run() {  
    while(true) {  
        String str = dis.readLine();  
        sendMessageToAll(str);  
    }  
}  
  
void sendMessageToAll(String msg) {  
    for(ChatHandler ch : clientsVector) {  
        ch.ps.println(msg);  
    }  
}  
}
```

Chat Room GUI Application cont'd

- ▶ General Guidelines for building the client side GUI application:
 - Construct GUI and Borderpane.
 - Create Socket and Streams
 - Register the Send Button Listener
 - Create and start the Reader Thread

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Demo

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Lab

Assignments

- ▶ Write the simple client/server application.
- ▶ Complete the GUI client side application of the Chat room Application.
- ▶ Remember to handle all thrown exceptions and to replace any deprecated methods with new ones.

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Q & A

Final Project