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1  package ch19.sec07;
2
3  import java.io.DataInputStream;
4  import java.io.DataOutputStream;
5  import java.io.IOException;
6  import java.net.Socket;
7  import java.util.Scanner;
8
9  import org.json.JSONObject;
10
11 public class ChatClient {
12     //필드
13     Socket socket;
14     DataInputStream dis;
15     DataOutputStream dos;
16     String chatName;
17
18     //메소드: 서버 연결
19     public void connect() throws IOException {
20         socket = new Socket("localhost", 50001);
21         dis = new DataInputStream(socket.getInputStream());
22         dos = new DataOutputStream(socket.getOutputStream());
23         System.out.println("[클라이언트] 서버에 연결됨");
24     }
25
26     //메소드: JSON 받기
27     public void receive() {
28         Thread thread = new Thread(() -> {
29             try {
30                 while(true) {
31                     String json = dis.readUTF();
32                     JSONObject root = new JSONObject(json);
33                     String clientId = root.getString("clientId");
34                     String chatName = root.getString("chatName");
35                     String message = root.getString("message");
36                     System.out.println("<" + chatName + "@" + clientId + "> " +
37                                     message);
38                 }
39             } catch (Exception e1) {
40                 System.out.println("[클라이언트] 서버 연결 끊김");
41                 System.exit(0);
42             }
43         });
44         thread.start();
45     }
46
47     //메소드: JSON 보내기
48     public void send(String json) throws IOException {
49         dos.writeUTF(json);
50         dos.flush();
51     }
52
53     //메소드: 서버 연결 종료
54     public void unconnect() throws IOException {
55         socket.close();
56     }
57
58     //메소드: 메인
59     public static void main(String[] args) {
60         try {
61             ChatClient chatClient = new ChatClient();
62             chatClient.connect();
63
64             Scanner scanner = new Scanner(System.in);
65             System.out.println("대화명 입력: ");
66             chatClient.chatName = scanner.nextLine();
67
68             JSONObject jsonObject = new JSONObject();
69             jsonObject.put("command", "incoming");
70             jsonObject.put("data", chatClient.chatName);
71             String json = jsonObject.toString();
72             chatClient.send(json);

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73         chatClient.receive();
74
75         System.out.println("-----");
76         System.out.println("보낼 메시지를 입력하고 Enter");
77         System.out.println("채팅을 종료하려면 q 를 입력하고 Enter");
78         System.out.println("-----");
79         while(true) {
80             String message = scanner.nextLine();
81             if(message.toLowerCase().equals("q")) {
82                 break;
83             } else {
84                 jsonObject = new JSONObject();
85                 jsonObject.put("command", "message");
86                 jsonObject.put("data", message);
87                 json = jsonObject.toString();
88                 chatClient.send(json);
89             }
90         }
91         scanner.close();
92         chatClient.disconnect();
93     } catch(IOException e) {
94         System.out.println("[클라이언트] 서버 연결 안됨");
95     }
96 }
97 }
98
99
100
101

```