

Prepare a Chat Application using Client-Server.**serverChatform.java**

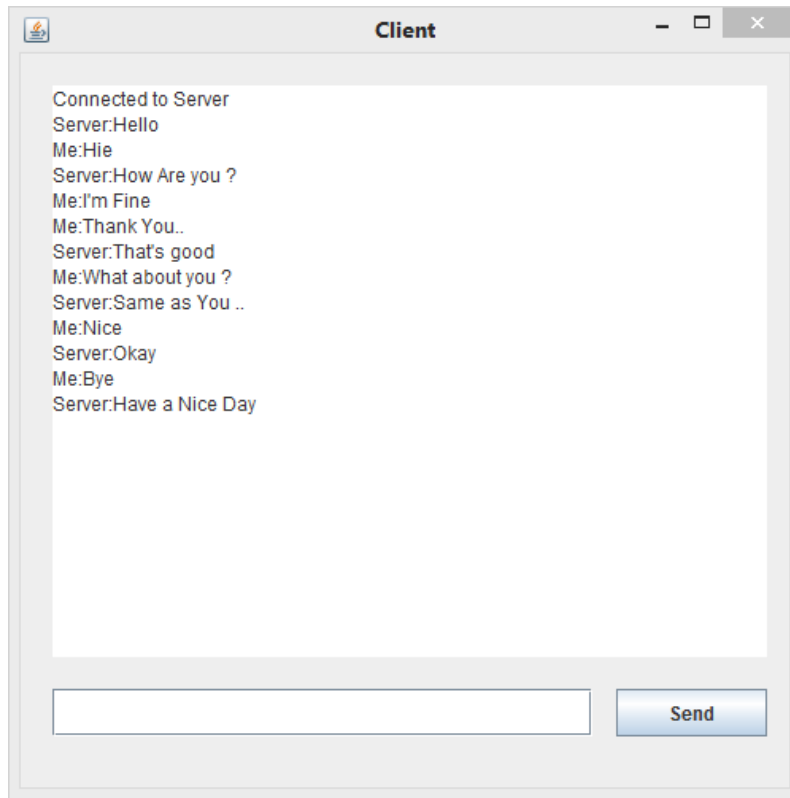
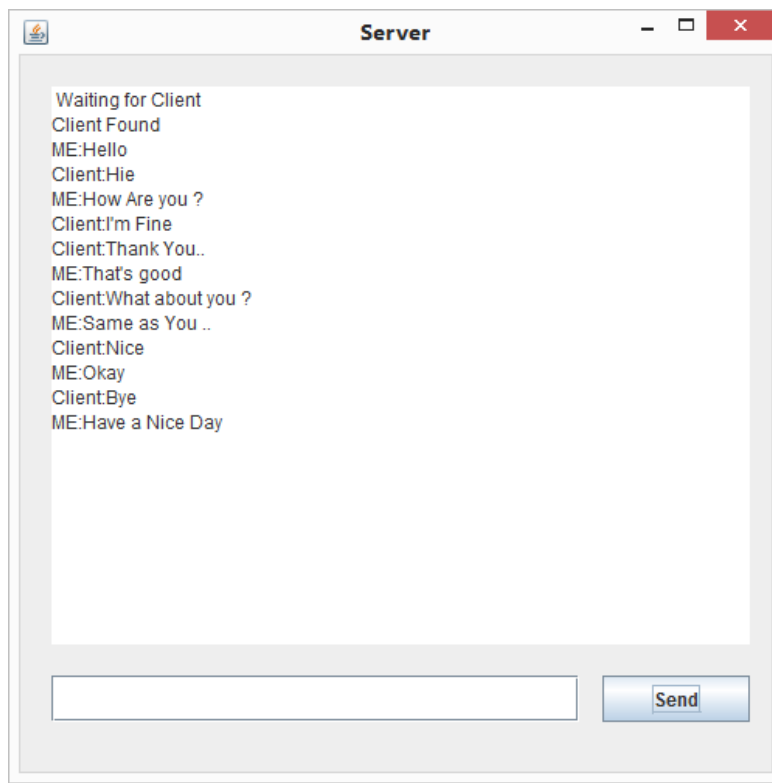
```
1. package chatapp;
2. import java.awt.event.*;
3. import java.io.*;
4. import java.net.*;
5. import javax.swing.*;
6.
7. public class serverChatform extends JFrame implements ActionListener
8. {
9.     static ServerSocket server;
10.    static Socket conn;
11.    JPanel panel;
12.    JTextField NewMsg;
13.    JTextArea ChatHistory;
14.    JButton Send;
15.    DataInputStream dis;
16.    DataOutputStream dos;
17.
18.    public serverChatform() throws UnknownHostException, IOException
19.    {
20.        panel = new JPanel();
21.        NewMsg = new JTextField();
22.        ChatHistory = new JTextArea();
23.        Send = new JButton("Send");
24.        this.setSize(500, 500);
25.        this.setVisible(true);
26.        panel.setLayout(null);
27.        this.add(panel);
28.        ChatHistory.setBounds(20, 20, 450, 360);
29.        panel.add(ChatHistory);
30.        NewMsg.setBounds(20, 400, 340, 30);
31.        panel.add(NewMsg);
32.        Send.setBounds(375, 400, 95, 30);
33.        panel.add(Send);
34.        this.setTitle("Server");
35.        Send.addActionListener(this);
36.        server = new ServerSocket(888);
37.        ChatHistory.setText("Waiting for Client");
38.        conn = server.accept();
39.        ChatHistory.setText(ChatHistory.getText() + "\n" + "Client Found");
40.        while (true)
41.        {
42.            try
43.            {
```

```
44.      DataInputStream dis = new DataInputStream(conn.getInputStream());
45.      String string = dis.readUTF();
46.      ChatHistory.setText(ChatHistory.getText() + '\n' + "Client:" + string);
47.  }
48.  catch (Exception e1)
49.  {
50.      ChatHistory.setText(ChatHistory.getText() + '\n' + "Message sending
fail:Network Error");
51.  }
52.  }
53.  }
54.
55.  @Override
56.  public void actionPerformed(ActionEvent e)
57.  {
58.      if ((e.getSource() == Send) && (NewMsg.getText() != ""))
59.      {
60.          ChatHistory.setText(ChatHistory.getText() + '\n' + "ME:" + NewMsg.getText());
61.          try
62.          {
63.              DataOutputStream dos = new DataOutputStream(
64.                  conn.getOutputStream());
65.              dos.writeUTF(NewMsg.getText());
66.          }
67.          catch (Exception e1)
68.          {
69.          }
70.          NewMsg.setText("");
71.      }
72.  }
73.
74.  public static void main(String[] args) throws UnknownHostException,IOException
75.  {
76.      new serverChatform();
77.  }
78. }
```

ClientChatForm.java

```
1.  package chatapp;
2.  import java.awt.event.*;
3.  import java.io.*;
4.  import java.net.*;
5.
6.  import javax.swing.*;
7.
8.  public class ClientChatForm extends JFrame implements ActionListener
9.  {
10.     static Socket conn;
11.     JPanel panel;
12.     JTextField NewMsg;
13.     JTextArea ChatHistory;
14.     JButton Send;
15.
16.     public ClientChatForm() throws UnknownHostException, IOException
17.     {
18.         panel = new JPanel();
19.         NewMsg = new JTextField();
20.         ChatHistory = new JTextArea();
21.         Send = new JButton("Send");
22.         this.setSize(500, 500);
23.         this.setVisible(true);
24.         panel.setLayout(null);
25.         this.add(panel);
26.         ChatHistory.setBounds(20, 20, 450, 360);
27.         panel.add(ChatHistory);
28.         NewMsg.setBounds(20, 400, 340, 30);
29.         panel.add(NewMsg);
30.         Send.setBounds(375, 400, 95, 30);
31.         panel.add(Send);
32.         Send.addActionListener(this);
33.         conn = new Socket("localhost", 888);
34.         ChatHistory.setText("Connected to Server");
35.         this.setTitle("Client");
36.         while (true)
37.         {
38.             try
39.             {
40.                 DataInputStream dis = new DataInputStream(conn.getInputStream());
41.                 String string = dis.readUTF();
42.                 ChatHistory.setText(ChatHistory.getText() + "\n" + "Server:" + string);
43.             }
44.             catch (Exception e1)
45.             {
```

```
46.         ChatHistory.setText(ChatHistory.getText() + '\n' + "Message sending
fail:Network Error");
47.     }
48. }
49. }
50.
51. @Override
52. public void actionPerformed(ActionEvent e)
53. {
54.     if ((e.getSource() == Send) && (NewMsg.getText() != ""))
55.     {
56.
57.         ChatHistory.setText(ChatHistory.getText() + '\n' + "Me:" + NewMsg.getText());
58.         try
59.         {
60.             DataOutputStream dos = new DataOutputStream(
61.                 conn.getOutputStream());
62.             dos.writeUTF(NewMsg.getText());
63.         }
64.         catch (Exception e1)
65.         {
66.             ChatHistory.setText(ChatHistory.getText() + '\n' + "Message sending
fail:Network Error");
67.         }
68.         NewMsg.setText("");
69.     }
70. }
71.
72. public static void main(String[] args) throws UnknownHostException, IOException
73. {
74.     ClientChatForm chatForm = new ClientChatForm();
75. }
76. }
```

OUTPUT**Client****Server**