Донецкий Национальный Технический Университет

Лабораторная работа № 4

Напишите программу взаимодействия клиента и сервера на базе TCP соединения

Выполнил:

ст. группы ИПЗ -13

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Проверила:

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Сlient.java

**package** Source;  
  
**import** javax.swing.\*;  
**import** java.io.IOException;  
**import** java.io.ObjectInputStream;  
**import** java.io.ObjectOutputStream;  
**import** java.net.InetAddress;  
**import** java.net.Socket;  
**import** java.net.UnknownHostException;  
  
**public class** Client **implements** Runnable  
{  
 **static private** Socket *connection*;  
 **static private** ObjectOutputStream *output*;  
 **static private** ObjectInputStream *input*;  
 **public void** run()  
 {  
 **try** {  
 **while**(**true**)  
 {  
 *connection* = **new** Socket(InetAddress.*getByName*(**"127.0.0.1"**),5100);  
 *output* = **new** ObjectOutputStream(*connection*.getOutputStream());  
 *input* = **new** ObjectInputStream(*connection*.getInputStream());  
 JOptionPane.*showMessageDialog*(**null**, *input*.readObject());  
 }  
 } **catch** (UnknownHostException e)  
 { e.printStackTrace();  
 } **catch** (IOException e)  
 { e.printStackTrace();  
 } **catch** (ClassNotFoundException e)  
 { e.printStackTrace();  
 }  
 }  
 **public static void** sendData(Object obj) **throws** IOException  
 {  
 *output*.flush();  
 *output*.writeObject(obj);  
 }  
}

Server.java

**package** Source;  
  
**import** java.io.IOException;  
**import** java.io.ObjectInputStream;  
**import** java.io.ObjectOutputStream;  
**import** java.net.ServerSocket;  
**import** java.net.Socket;  
**import** java.net.UnknownHostException;  
  
**public class** Server **implements** Runnable  
{  
 **static private** ServerSocket *server*;  
 **static private** Socket *connection*;  
 **static private** ObjectOutputStream *output*;  
 **static private** ObjectInputStream *input*;  
 **public void** run()  
 {  
 **try** {  
 *server* = **new** ServerSocket(5100,10);  
 **while**(**true**)  
 {  
 *connection* = *server*.accept();  
 *output* = **new** ObjectOutputStream(*connection*.getOutputStream());  
 *input* = **new** ObjectInputStream(*connection*.getInputStream());  
 *output*.writeObject(**"Вы прислали:"** + (String) *input*.readObject());  
 }  
 } **catch** (UnknownHostException e)  
 { e.printStackTrace();  
 } **catch** (IOException e)  
 { e.printStackTrace();  
 } **catch** (ClassNotFoundException e)  
 { e.printStackTrace();  
 }  
 }  
}

Source.java

**package** Source;  
**public class** Source  
{  
 **public static void** main(String[] args)  
 {  
 **new** Frame();  
 **new** Thread(**new** Client()).start();  
 **new** Thread(**new** Server()).start();  
 }  
}