for classe client we have :
classe oh interface homme machine ..
```java
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package client;

import entite.*;
import java.util.ArrayList;
import javax.swing.table.DefaultTableModel;

/**
 *
 * @author bouaa
 */
public class IHM extends javax.swing.JFrame {

    /**
     * Creates new form IHM
     */
    public IHM() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated
Code">//GEN-BEGIN:initComponents
    private void initComponents() {

        jLabel2 = new javax.swing.JLabel();
        jLabel1 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        table = new javax.swing.JTable();
        cbF = new javax.swing.JComboBox();
        cmdOK = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        addWindowListener(new java.awt.event.WindowAdapter() {
            public void windowOpened(java.awt.event.WindowEvent evt) {
                formWindowOpened(evt);
            }
        });
```

```java
        jLabel2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        jLabel2.setText("Filiere");

        jLabel1.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N
        jLabel1.setText("Gestion des étudiants");

        table.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null}
            },
            new String [] {
                "Title 1", "Title 2", "Title 3", "Title 4"
            }
        ));
        jScrollPane1.setViewportView(table);

        cbF.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
        cbF.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "Item 1",
"Item 2", "Item 3", "Item 4" }));
        cbF.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                cbFMouseClicked(evt);
            }
        });
        cbF.addItemListener(new java.awt.event.ItemListener() {
            public void itemStateChanged(java.awt.event.ItemEvent evt) {
                cbFItemStateChanged(evt);
            }
        });
        cbF.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                cbFActionPerformed(evt);
            }
        });

        cmdOK.setText("OK");
        cmdOK.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                cmdOKActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
```

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                layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(26, 26, 26)
                        .addComponent(jLabel2)
                        .addGap(58, 58, 58)
                        .addComponent(cbF, javax.swing.GroupLayout.PREFERRED_SIZE,
240, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(18, 18, 18)
                        .addComponent(cmdOK))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(131, 131, 131)
                        .addComponent(jLabel1))
                    .addGroup(layout.createSequentialGroup()
                        .addContainerGap()
                        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 437,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addContainerGap(11, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(25, 25, 25)
                .addComponent(jLabel1)
                .addGap(23, 23, 23)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel2)
                    .addComponent(cbF, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(cmdOK))
                .addGap(18, 18, 18)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
142, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );

        pack();
    }// </editor-fold>//GEN-END:initComponents

    private void formWindowOpened(java.awt.event.WindowEvent evt)
{//GEN-FIRST:event_formWindowOpened
        cl=new Client("localhost",4000);
         cbF.removeAllItems();
        tf=cl.getFilieres();
        cbF.addItem("All");
```

```java
            for(Filiere f:tf) cbF.addItem(f.getNomf());
            DefaultTableModel m=new DefaultTableModel();
            m.setColumnIdentifiers(new String[]{"Code","Nom","Prénom"});
            table.setModel(m);
    }//GEN-LAST:event_formWindowOpened

    private void cbFActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_cbFActionPerformed

    }//GEN-LAST:event_cbFActionPerformed

    private void cbFMouseClicked(java.awt.event.MouseEvent evt)
{//GEN-FIRST:event_cbFMouseClicked

    }//GEN-LAST:event_cbFMouseClicked

    private void cbFItemStateChanged(java.awt.event.ItemEvent evt)
{//GEN-FIRST:event_cbFItemStateChanged

    }//GEN-LAST:event_cbFItemStateChanged

    private void cmdOKActionPerformed(java.awt.event.ActionEvent evt)
{//GEN-FIRST:event_cmdOKActionPerformed
         ArrayList<Etudiant> te;
        int index;
         DefaultTableModel m=new DefaultTableModel();
        m.setColumnIdentifiers(new String[]{"Code","Nom","Prénom"});
        index=cbF.getSelectedIndex();
        if(index==0) te=cl.getAllEtds();
        else te=cl.getEtudiants(tf.get(index-1).getCodef());
        for(Etudiant e:te)
            m.addRow(new Object[]{e.getCode(),e.getNom(),e.getPrenom()});
        table.setModel(m);
    }//GEN-LAST:event_cmdOKActionPerformed

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code
(optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the
default look and feel.
         * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
```

```java
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(IHM.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(IHM.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(IHM.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(IHM.class.getName()).log(java.util.logging.Level.
SEVERE, null, ex);
        }
        //</editor-fold>

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new IHM().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JComboBox cbF;
    private javax.swing.JButton cmdOK;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable table;
    // End of variables declaration//GEN-END:variables
Client cl;
private ArrayList<Filiere> tf;
}

for classe CLIENT  ..

package client;
import entite.*;
import java.io.IOException;
import java.io.*;
```

```java
import java.net.*;
import java.util.ArrayList;
import javax.swing.JOptionPane;

public class Client {
private Socket s;
private ObjectInputStream in;
private PrintWriter out;
    public Client(String IP,int port) {
    try {
        s=new Socket(IP,port);
        in=new ObjectInputStream(s.getInputStream());
        out=new PrintWriter(s.getOutputStream(),true);
    } catch (IOException ex) {
        JOptionPane.showMessageDialog(null,ex.getMessage());
    }

    }
public ArrayList<Etudiant> getAllEtds()
{
    try {
        out.println(0);
        return (ArrayList<Etudiant>)in.readObject();
    } catch (Exception e) {
        return null;
    }
}
public ArrayList<Filiere> getFilieres()
{
    try {
        out.println(-1);
        return (ArrayList<Filiere>)in.readObject();
    } catch (Exception e) {
        return null;
    }
}
public ArrayList<Etudiant> getEtudiants(int cf)
{
    try {
        out.println(cf);
        return (ArrayList<Etudiant>)in.readObject();
    } catch (Exception e) {
        return null;
    }
}


}
 fin documentation ..
```