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Subject Code: OOP216D

Campus: South Campus

Group: C

Part 1:

Enter your UML class diagram in the space below.

tshetlho.tl.look.tshego1.Tshego1
- names: String - age: int - problem: String - price: double
+Tshego1() +Tshego1(String,int,String,double) +setNames(String):void +setAge(int):void +setProblem(String):void +setExplain(String):void +getNames():String +getAge():int +getProblem():String +getExplain():double +determinePrice():double

Paste the source code of your concrete class in the space below:

```
package tshetlho.tl.look;

public class Tshego1 {
    private String names;
```

```java
    private int age;
    private String problem;
    private double price;

public Tshego1(){
}

    public Tshego1(String names, int age, String problem, double price) {
        this.names = names;
        this.age = age;
        this.problem = problem;
        this.price = price;
    }

    public String getNames() {
        return names;
    }

    public void setNames(String names) {
        this.names = names;
    }

    public int getAge() {
        return age;
    }

    public void setAge(int age) {
        this.age = age;
    }

    public String getProblem() {
        return problem;
    }

    public void setProblem(String problem) {
        this.problem = problem;
    }
```
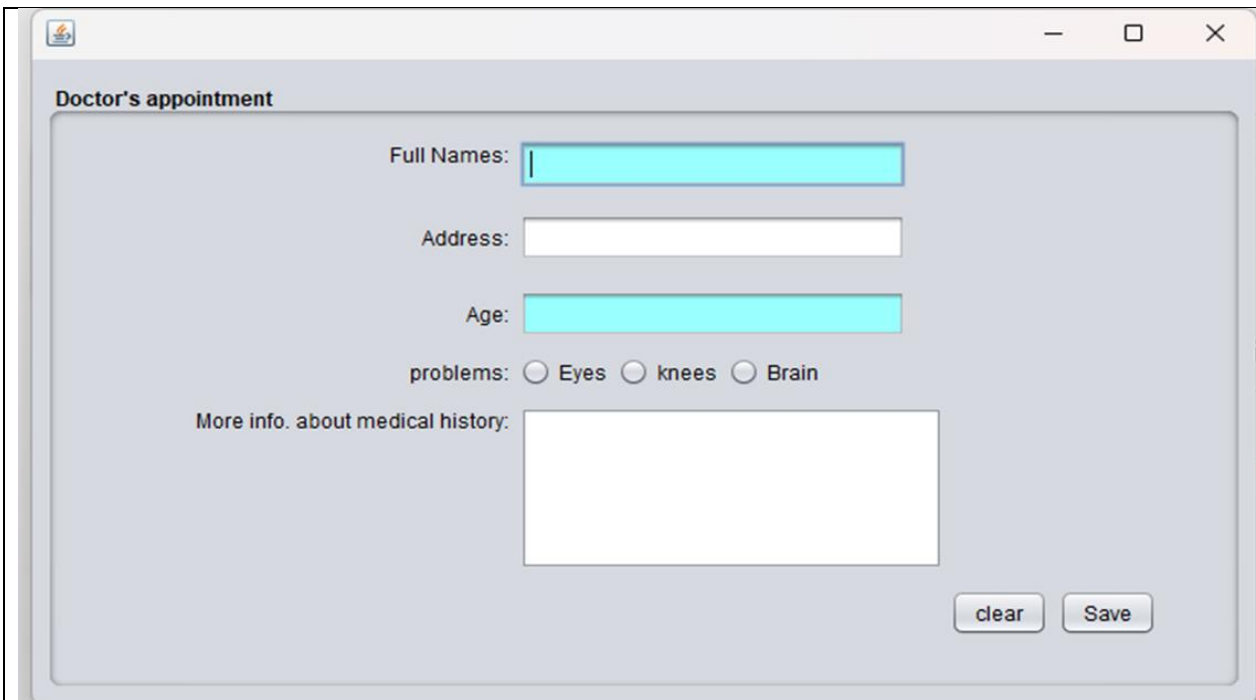
```java
    public double getExplain() {
        return price;
    }

    public void setExplain(String explain) {
        this.price = price;
    }
    public double determinePrice(String problem)
    {
        price =0.0;

        if(problem == "kneee")
        {
            price = 12000.00;

        }
        if(problem == "eye")
        {
            price = 120000.00;
        }
        if(problem == "brain")
        {
            price = 1000000.00;
        }

        return price;
    }
}
```

Part 2:

Make a screenshot of your GUI and paste it in the space below:

Paste the source code of the GUI class in the space below:

```
Package tshetlho.tl.look;

import java.io.File;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.BufferedWriter;
import javax.swing.JFileChooser;
import javax.swing.JOptionPane;
import java.io.IOException;
import java.io.PrintWriter;

/**
 *
 * @author tsheg
 */
```

```java
public class Create extends javax.swing.JFrame {


    JFileChooser saveFileChoose;

    /**
     * Creates new form Create
     */
    public Create() {
        initComponents();


        saveFileChoose = new JFileChooser();
    }

    /**
     * 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">
    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        fullNames = new javax.swing.JTextField();
        jLabel2 = new javax.swing.JLabel();
        age = new javax.swing.JTextField();
        save = new javax.swing.JButton();
        eye = new javax.swing.JRadioButton();
        knees = new javax.swing.JRadioButton();
        brain = new javax.swing.JRadioButton();
        problems = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();
        jLabel3 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
```

```java
description = new javax.swing.JTextArea();
jLabel4 = new javax.swing.JLabel();
address = new javax.swing.JTextField();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Doctor's appointment"));

jLabel1.setText("Full Names:");

fullNames.setBackground(new java.awt.Color(153, 255, 255));

jLabel2.setText("Age:");

age.setBackground(new java.awt.Color(153, 255, 255));

save.setText("Save");
save.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
      saveActionPerformed(evt);
   }
});

eye.setText("Eyes");
eye.addActionListener(new java.awt.event.ActionListener() {
   public void actionPerformed(java.awt.event.ActionEvent evt) {
      eyeActionPerformed(evt);
   }
});

knees.setText("knees");

brain.setText("Brain");

problems.setText("problems:");

jButton1.setText("clear");
```

```java
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jLabel3.setText("More info. about medical history:");

description.setColumns(20);
description.setRows(5);
jScrollPane1.setViewportView(description);

jLabel4.setText("Address:");

address.setCaretColor(new java.awt.Color(102, 255, 255));
address.setDisabledTextColor(new java.awt.Color(102, 255, 255));

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addContainerGap(72, Short.MAX_VALUE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel3, javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jLabel1, javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(problems, javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jLabel2, javax.swing.GroupLayout.Alignment.TRAILING)
                .addComponent(jLabel4, javax.swing.GroupLayout.Alignment.TRAILING))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```java
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addComponent(eye)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(knees)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(brain))
                    .addComponent(address, javax.swing.GroupLayout.PREFERRED_SIZE, 217,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,
false)
                        .addComponent(age, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, 217, Short.MAX_VALUE)
                        .addComponent(fullNames, javax.swing.GroupLayout.Alignment.LEADING))
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(156, 156, 156))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
                .addComponent(jButton1)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(save)
                .addGap(36, 36, 36))))
    );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addContainerGap()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel1)
                .addComponent(fullNames, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(0, 16, Short.MAX_VALUE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
```

```java
            .addComponent(jLabel4)
            .addComponent(address, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
          .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(age, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel2))
          .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(eye)
            .addComponent(knees)
            .addComponent(brain)
            .addComponent(problems))
          .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel3)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
          .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jButton1)
            .addComponent(save))
          .addGap(22, 22, 22))
    );

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
      layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
      .addGroup(layout.createSequentialGroup()
        .addContainerGap()
```

```java
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(15, 15, 15)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );

    pack();
  }// </editor-fold>

  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    fullNames.setText("");
    age.setText("");
    address.setText("");
    eye.setSelected(false);
    knees.setSelected(false);
    brain.setSelected(false);
    description.setText("");

  }

  private void eyeActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

  }

  private void saveActionPerformed(java.awt.event.ActionEvent evt) {


    int returnValue = saveFileChoose.showSaveDialog(this);
```

```java
        //File fold = new File("attempt1.txt");
        if (fullNames.getText().isEmpty() || age.getText().isEmpty() || description.getText().isEmpty())
{

            JOptionPane.showMessageDialog(null, "Please Enter all fields");

        } else if (returnValue == JFileChooser.APPROVE_OPTION) {
          try {

              File save = saveFileChoose.getSelectedFile();
              PrintWriter outputPW = new PrintWriter(save);


              String name = fullNames.getText().trim();
              String  age1 = age.getText();
              String des = description.getText().trim();
              String adre = address.getText().trim();

              String brains ="";

              if (brain.isSelected() == true ) {

                  brains = "Problem is:"+brain.getText();


              }
              else if(eye.isSelected() == true)
              {
               brains = "Problem is:"+eye.getText();
              }
              else if(knees.isSelected() == true)
              {
                 brains = "Problem is:"+knees.getText();

              }else
              {
                 brains = "\nSelect above the ones we provided";
```

```java
            }

            String output = "";
            String output1 = "";

            output1 = "==============Here are your saved details===============\n";
            output = "Name: " + name + "\nYour address is as follows: "+adre+"\n Your age is: " +
age1 +"\n"+brains+"\nYour medical history is: "+ des;
            String appointment = "Your appointment have been submitted succesfully";


            JOptionPane.showMessageDialog(null, output);
            JOptionPane.showMessageDialog(null, appointment);

            outputPW.write(output1);
            outputPW.write(output);

            outputPW.close();

            JOptionPane.showMessageDialog(null, "File found succesfully");

        } catch (IOException e) {
            JOptionPane.showMessageDialog(null, "Error writting file");
        }
    } else {
        JOptionPane.showMessageDialog(null, "no file choosen");
    }


}

/**
 * @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) ">
```

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

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

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

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

java.util.logging.Logger.getLogger(Create.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 Create().setVisible(true);
        }
    });
}
```

```java
    // Variables declaration - do not modify
    private javax.swing.JTextField address;
    private javax.swing.JTextField age;
    private javax.swing.JRadioButton brain;
    private javax.swing.JTextArea description;
    private javax.swing.JRadioButton eye;
    private javax.swing.JTextField fullNames;
    private javax.swing.JButton jButton1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JRadioButton knees;
    private javax.swing.JLabel problems;
    private javax.swing.JButton save;
    // End of variables declaration
}
```

Content of your text file used in the application:

```
==============Here are your saved details===============
Name: Tshegofatso Leah Tshetlho
Your address is as follows: Soshanguve VV 0631 Phetogo Street
Your age is: 23 K
Problem is: Eyes
 Your medical history is: I went on few surgery because of the accident I had .
Now my eye is so swollen I can't see.
I think I have an infection.
```