

WEEK-20 GUI

CODES:

```
import javax.swing.JFrame;
import javax.swing.JRadioButton;
import javax.swing.JTextArea;
import javax.swing.JLabel;
import javax.swing.JMenu;
import javax.swing.JMenuBar;
import javax.swing.JMenuItem;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JTextField;
import javax.swing.event.AncestorListener;

import java.awt.Color;
import java.awt.Font;
import java.awt.GridLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.BorderFactory;
import javax.swing.ButtonGroup;
import javax.swing.JButton;
import javax.swing.JComboBox;
class Assignment
{
    JFrame frame;
    JLabel label1;
    JLabel label2;
    JTextField field1;
    JLabel label3;
    JLabel label4;
    JLabel label5;
    JLabel label6;
    JLabel label7;
    JLabel label8;
    JLabel label9;
    JLabel label10;
    JLabel label11;
    JComboBox combobox1;
    JComboBox combobox2;
    JComboBox combobox3;
    JRadioButton button1;
    JRadioButton button2;
    ButtonGroup group;
```

```

        JTextArea text;
        JTextField field2;
        JTextField field3;
        JTextField field4;
        JComboBox combobox4;
        JComboBox combobox5;
        JComboBox combobox6;
        JButton button3;
        JButton button4;
//    public void actionPerformed(ActionEvent obj)
//    {
//        if((obj.getActionCommand()).equals("Submit")){
//            String getName=field1.getText();
//            String getMN=field2.getText();
//            String getPass=field3.getText();
//            String getRepass=field4.getText();
//            String getAddress=text.getText();
//            String getGender=" ";
//            String getCombobox1=combobox1.getSelectedItem().toString();
//            String getCombobox2=combobox2.getSelectedItem().toString();
//            String getCombobox3=combobox3.getSelectedItem().toString();
//            String getCombobox4=combobox4.getSelectedItem().toString();
//            String getCombobox5=combobox5.getSelectedItem().toString();
//            String getCombobox6=combobox6.getSelectedItem().toString();

//            if(button1.isSelected())
//            {
//                getGender="Male";
//            }
//            else{
//                getGender="Female";
//            }
//            JOptionPane.showMessageDialog(frame,"Name: "+getName+"\nAddress:
"+getAddress+"\nMobile-num: "+getMN+"\nPassword: "+getPass+"\nRe-
pass:"+getRepass+"\nGender: "+getGender+"\nDob:
"+getCombobox1+", "+getCombobox2+", "+getCombobox3+"\nCourse:
"+getCombobox4+"\nCollege: "+getCombobox5+"\nSemester:
"+getCombobox6,"Information",JOptionPane.INFORMATION_MESSAGE);//frame error due
to JOptionPane.showMessageDialog error message
//        }

//    else{
//        //for reset button works
//        text.setText(" ");
//        field1.setText(" ");

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//     field2.setText(" ");
//     field3.setText(" ");
//     field4.setText(" ");
//     group.clearSelection();//only work for radio button groups
//     combobox1.setSelectedIndex(0);
//     combobox2.setSelectedIndex(0);
//     combobox3.setSelectedIndex(0);
//     combobox4.setSelectedIndex(0);
//     combobox5.setSelectedIndex(0);
//     combobox6.setSelectedIndex(0);
// }
// }
public Assignment(){

    frame=new JFrame();
    frame.setLayout(null);
    frame.setTitle("Student Register Form");
    frame.setSize(800,725);
    frame.setResizable(false);
    frame.setLocationRelativeTo(null);
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    //frame.getContentPane().setBackground(Color.yellow);

    JMenuBar menubar=new JMenuBar();
    frame.setJMenuBar(menubar);
    JMenu menu1=new JMenu("File");
    JMenu menu2=new JMenu();
    menu2.setText("Help");
    JMenu menu9=new JMenu("About");

    menubar.add(menu1);
    menubar.add(menu2);
    menubar.add(menu9);
    JMenuItem menu3=new JMenuItem("Open");//we can add menu inside menu but
cant add menu item inside menu item.
    menu3.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent e) {
            JFrame framehai=new JFrame("dimensions");
            framehai.setSize(800,700);
            framehai.setLayout(null);
            framehai.setResizable(false);
            framehai.setLocationRelativeTo(null);
            framehai.setLayout(new GridLayout(2,2));
            framehai.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

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JMenuBar men=new JMenuBar();
framehai.setJMenuBar(men);
JMenu itm=new JMenu("Go");
men.add(itm);
itm.add("Back");
// men.addAncestorListener((AncestorListener) new ActionListener(){
//     public void actionPerformed(ActionEvent e){
//         framehai.dispose();
//         frame.setOpen((frame));
//     }
// });
JPanel pn=new JPanel();
pn.setLayout(null);
pn.setBackground(Color.RED);
framehai.add(pn);
JLabel lb=new JLabel("Name");
lb.setBounds(20,80,40,20);
lb.setForeground(Color.BLUE);
JTextField fld=new JTextField();
fld.setBounds(100,80,100,20);
JButton bt=new JButton("Submit");
bt.setBounds(100,200,100,30);
pn.add(bt);
pn.add(fld);
pn.add(lb);

JPanel pn2=new JPanel();
pn2.setLayout(null);
pn2.setBackground(Color.BLUE);
framehai.add(pn2);
JLabel lb1=new JLabel("Cast");
lb1.setBounds(20,80,40,20);
lb1.setForeground(Color.RED);
JTextField fld1=new JTextField();
fld1.setBounds(100,80,100,20);
JButton bt1=new JButton("Submit");
bt1.setBounds(100,200,100,30);
pn2.add(bt1);
pn2.add(fld1);
pn2.add(lb1);

JPanel pn3=new JPanel();
pn3.setLayout(null);
pn3.setBackground(Color.ORANGE);
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        framehai.add(pn3);
        JLabel lb2=new JLabel("Address");
        lb2.setBounds(20,80,70,20);
        lb.setForeground(Color.PINK);
        JTextField fld2=new JTextField();
        fld2.setBounds(100,80,100,20);
        JButton bt2=new JButton("Submit");
        bt.setBounds(100,200,100,30);
        pn3.add(bt2);
        pn3.add(fld2);
        pn3.add(lb2);

        JPanel pn4=new JPanel();
        pn4.setLayout(null);
        pn4.setBackground(Color.PINK);
        framehai.add(pn4);
        JLabel lb3=new JLabel("Hoby");
        lb3.setBounds(20,80,40,20);
        lb3.setForeground(Color.BLACK);
        JTextField fld3=new JTextField();
        fld3.setBounds(100,80,100,20);
        JButton bt3=new JButton("Submit");
        bt3.setBounds(100,200,100,30);
        pn4.add(bt3);
        pn4.add(fld3);
        pn4.add(lb3);

        frame.dispose();
        framehai.setVisible(true);
    });
    JMenuItem menu4=new JMenuItem("Save");
    menu4.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent obj)
    {
        String getName=field1.getText();
        String getMN=field2.getText();
        String getPass=field3.getText();
        String getRepass=field4.getText();
        String getAddress=text.getText();
        String getGender=" ";
        String getCombobox1=combobox1.getSelectedItem().toString();
        String getCombobox2=combobox2.getSelectedItem().toString();
        String getCombobox3=combobox3.getSelectedItem().toString();
    }
}

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String getCombobox4=combobox4.getSelectedItem().toString();
String getCombobox5=combobox5.getSelectedItem().toString();
String getCombobox6=combobox6.getSelectedItem().toString();
if(button1.isSelected())
{
    getGender="Male";
}
else{
    getGender="Female";
}
JOptionPane.showMessageDialog(frame,"Name: "+getName+"\nAddress:
"+getAddress+"\nMobile-num: "+getMN+"\nPassword: "+getPass+"\nRe-
pass:"+getRepass+"\nGender: "+getGender+"\nDob:
"+getCombobox1+", "+getCombobox2+", "+getCombobox3+"\nCourse:
"+getCombobox4+"\nCollege: "+getCombobox5+"\nSemester:
"+getCombobox6,"Information",JOptionPane.INFORMATION_MESSAGE);//frame error due
to JOptionPane.showMessageDialog error message
}
});

JMenuItem menu5=new JMenuItem("New");
menu5.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        text.setText(" ");
        field1.setText(" ");
        field2.setText(" ");
        field3.setText(" ");
        field4.setText(" ");
        group.clearSelection();//only work for radio button groups
        combobox1.setSelectedIndex(0);
        combobox2.setSelectedIndex(0);
        combobox3.setSelectedIndex(0);
        combobox4.setSelectedIndex(0);
        combobox5.setSelectedIndex(0);
        combobox6.setSelectedIndex(0);
    }
});

JMenuItem menu6=new JMenuItem("Exit");
menu6.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        frame.dispose();
    }
});
menu1.add(menu3);
menu1.add(menu4);
menu1.add(menu5);

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        menu1.add(menu6);

//label1
label1 =new JLabel("Register a new Student");
label1.setFont(new Font("Arial",Font.BOLD,20));
label1.setForeground(Color.BLUE);
label1.setBounds(250,30,300,30);
frame.add(label1);
//label2
label2=new JLabel("Name:");
label2.setBounds(130,110,60,20);
label2.setFont(new Font("Arial",Font.BOLD,15));
label2.setForeground(Color.BLACK);
frame.add(label2);
//textfield
field1=new JTextField();
field1.setBounds(350,100,200,30);
field1.setBorder(BorderFactory.createLineBorder(Color.RED));
field1.setText("Your full Name");
frame.add(field1);
//label3
label3=new JLabel("DOB:");
label3.setBounds(130,160,40,20);
label3.setFont(new Font("Arial",Font.BOLD,15));
label3.setForeground(Color.BLACK);
frame.add(label3);
//comboboxs
combobox1=new JComboBox();
combobox1.setBounds(350,150,80,25);
frame.add(combobox1);
combobox1.addItem("Year:");
for(int i=2000;i<=2023;i++)
{
    combobox1.addItem(i);
}

combobox2=new JComboBox();
combobox2.setBounds(450,150,80,25);
frame.add(combobox2);
combobox2.addItem("Month:");
String
month[]={ "January", "February", "March", "April", "May", "June", "July", "August", "Septe
mber", "October", "November", "December"};
// for(String addmonth:month){

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//    combobox2.addItem(addmonth);
// }
for(int i=0;i<month.length;i++){
    combobox2.addItem(month[i]);
}

combobox3=new JComboBox();
combobox3.setBounds(550,150,80,25);
frame.add(combobox3);
combobox3.addItem("Day");
for(int i=1;i<=33;i++)
{
    combobox3.addItem(i);
}

label4=new JLabel("Gender:");
label4.setBounds(130,220,60,20);
label4.setFont(new Font("Arial",Font.BOLD,15));
label4.setForeground(Color.BLACK);
frame.add(label4);

    button1=new JRadioButton("Male");
    button1.setBounds(350,210,100,30);
    frame.add(button1);

    button2=new JRadioButton("Female");
    button2.setBounds(450,210,100,30);
    frame.add(button2);

    group=new ButtonGroup();
    group.add(button1);
    group.add(button2);

label5=new JLabel("Address:");
label5.setBounds(130,270,65,20);
label5.setFont(new Font("Arial",Font.BOLD,15));
label5.setForeground(Color.BLACK);
frame.add(label5);

text=new JTextArea();
text.setBounds(350,250,200,60);
text.setBorder(BorderFactory.createLineBorder(Color.RED));
text.setText("Your Address");
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```
frame.add(text);

label6=new JLabel("Mobile-number:");
label6.setBounds(130,340,120,20);
label6.setFont(new Font("Arial",Font.BOLD,15));
label6.setForeground(Color.BLACK);
frame.add(label6);

field2=new JTextField();
field2.setBounds(350,330,200,30);
field2.setBorder(BorderFactory.createLineBorder(Color.RED));
field2.setText("You'r Mobile num");
frame.add(field2);

label7=new JLabel("Password:");
label7.setBounds(130,390,100,20);
label7.setFont(new Font("Arial",Font.BOLD,15));
label7.setForeground(Color.BLACK);
frame.add(label7);

field3=new JTextField();
field3.setBounds(350,380,200,30);
field3.setBorder(BorderFactory.createLineBorder(Color.RED));
field3.setText("Your Passord");
frame.add(field3);

label8=new JLabel("Re-Password:");
label8.setBounds(130,440,100,20);
label8.setFont(new Font("Arial",Font.BOLD,15));
label8.setForeground(Color.BLACK);
frame.add(label8);

field4=new JTextField();
field4.setBounds(350,430,200,30);
field4.setBorder(BorderFactory.createLineBorder(Color.RED));
field4.setText("Re-Type pass");
frame.add(field4);

label9=new JLabel("Courses:");
label9.setBounds(130,490,70,20);
label9.setFont(new Font("Arial",Font.BOLD,15));
label9.setForeground(Color.BLACK);
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frame.add(label9);

combobox4=new JComboBox();
combobox4.setBounds(350,480,200,30);
combobox4.addItem("Bsc Hons Computing");
combobox4.addItem("Bsc Hons BBA");
frame.add(combobox4);

label10=new JLabel("College:");
label10.setBounds(130,540,60,20);
label10.setFont(new Font("Arial",Font.BOLD,15));
label10.setForeground(Color.BLACK);
frame.add(label10);

combobox5=new JComboBox();
combobox5.setBounds(350,530,200,30);
combobox5.addItem("Itahari International College");
frame.add(combobox5);

label11=new JLabel("Semester:");
label11.setBounds(130,580,80,20);
label11.setFont(new Font("Arial",Font.BOLD,15));
label11.setForeground(Color.BLACK);
frame.add(label11);

combobox6=new JComboBox();
combobox6.setBounds(350,570,200,30);
combobox6.addItem("1");
combobox6.addItem("2");
combobox6.addItem("3");
frame.add(combobox6);

button3=new JButton();
button3.setText("Submit");
button3.setBounds(440,610,100,30);
frame.add(button3);
button3.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent obj)
    {
        String getName=field1.getText();
        String getMN=field2.getText();
        String getPass=field3.getText();
        String getRepass=field4.getText();
        String getAddress=text.getText();
        String getGender=" ";
    }
}

```

```

        String getCombobox1=combobox1.getSelectedItem().toString();
        String getCombobox2=combobox2.getSelectedItem().toString();
        String getCombobox3=combobox3.getSelectedItem().toString();
        String getCombobox4=combobox4.getSelectedItem().toString();
        String getCombobox5=combobox5.getSelectedItem().toString();
        String getCombobox6=combobox6.getSelectedItem().toString();
        if(button1.isSelected())
        {
            getGender="Male";
        }
        else{
            getGender="Female";
        }
        JOptionPane.showMessageDialog(frame,"Name: "+getName+"\nAddress:
"+getAddress+"\nMobile-num: "+getMN+"\nPassword: "+getPass+"\nRe-
pass:"+getRepass+"\nGender: "+getGender+"\nDob:
"+getCombobox1+", "+getCombobox2+", "+getCombobox3+"\nCourse:
"+getCombobox4+"\nCollege: "+getCombobox5+"\nSemester:
"+getCombobox6,"Information",JOptionPane.INFORMATION_MESSAGE);//frame error due
to JOptionPane.showMessageDialog error message
    }
});

button4=new JButton();
button4.setText("Reset");
button4.setBounds(600,610,100,30);
frame.add(button4);
button4.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent obj)
    {
        text.setText(" ");
        field1.setText(" ");
        field2.setText(" ");
        field3.setText(" ");
        field4.setText(" ");
        group.clearSelection();//only work for radio button groups
        combobox1.setSelectedIndex(0);
        combobox2.setSelectedIndex(0);
        combobox3.setSelectedIndex(0);
        combobox4.setSelectedIndex(0);
        combobox5.setSelectedIndex(0);
        combobox6.setSelectedIndex(0);
    }
});

JButton button5=new JButton();

```

```

button5.setText("New_Frame");
button5.setBounds(200,610,150,30);
frame.add(button5);
button5.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        JFrame framehai=new JFrame("dimensions");
        framehai.setSize(800,700);
        framehai.setLayout(null);
        framehai.setResizable(false);
        framehai.setLocationRelativeTo(null);
        framehai.setLayout(new GridLayout(2,2));
        framehai.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        JMenuBar men=new JMenuBar();
        framehai.setJMenuBar(men);
        JMenu itm=new JMenu("Go");
        men.add(itm);
        itm.add("Back");
        // men.addAncestorListener((AncestorListener) new ActionListener(){
        //     public void actionPerformed(ActionEvent e){
        //         framehai.dispose();
        //         frame.setOpen((frame));
        //     }
        // });
        JPanel pn=new JPanel();
        pn.setLayout(null);
        pn.setBackground(Color.RED);
        framehai.add(pn);
        JLabel lb=new JLabel("Name");
        lb.setBounds(20,80,40,20);
        lb.setForeground(Color.BLUE);
        JTextField fld=new JTextField();
        fld.setBounds(100,80,100,20);
        JButton bt=new JButton("Submit");
        bt.setBounds(100,200,100,30);
        pn.add(bt);
        pn.add(fld);
        pn.add(lb);

        JPanel pn2=new JPanel();
        pn2.setLayout(null);
        pn2.setBackground(Color.BLUE);
        framehai.add(pn2);
        JLabel lb1=new JLabel("Cast");
        lb1.setBounds(20,80,40,20);

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```
lb1.setForeground(Color.RED);
JTextField fld1=new JTextField();
fld1.setBounds(100,80,100,20);
JButton bt1=new JButton("Submit");
bt1.setBounds(100,200,100,30);
pn2.add(bt1);
pn2.add(fld1);
pn2.add(lb1);
```

```
JPanel pn3=new JPanel();
pn3.setLayout(null);
pn3.setBackground(Color.ORANGE);
framehai.add(pn3);
JLabel lb2=new JLabel("Address");
lb2.setBounds(20,80,70,20);
lb2.setForeground(Color.PINK);
JTextField fld2=new JTextField();
fld2.setBounds(100,80,100,20);
JButton bt2=new JButton("Submit");
bt2.setBounds(100,200,100,30);
pn3.add(bt2);
pn3.add(fld2);
pn3.add(lb2);
```

```
JPanel pn4=new JPanel();
pn4.setLayout(null);
pn4.setBackground(Color.PINK);
framehai.add(pn4);
JLabel lb3=new JLabel("Hoby");
lb3.setBounds(20,80,40,20);
lb3.setForeground(Color.BLACK);
JTextField fld3=new JTextField();
fld3.setBounds(100,80,100,20);
JButton bt3=new JButton("Submit");
bt3.setBounds(100,200,100,30);
pn4.add(bt3);
pn4.add(fld3);
pn4.add(lb3);
```

```
frame.dispose();
framehai.setVisible(true);
```

```

    }
    });

    frame.setVisible(true);
}

public static void main(String args[]){
    new Assignment();
}
}

```

The screenshot shows a Java IDE with a 'Student Register Form' window. The form is titled 'Register a new Student' and contains the following fields and options:

- Name:** Text input field with placeholder 'Your full Name'.
- DOB:** Three dropdown menus for Year, Month, and Day.
- Gender:** Radio buttons for Male and Female.
- Address:** Text input field with placeholder 'Your Address'.
- Mobile-number:** Text input field with placeholder 'Your Mobile num'.
- Password:** Text input field with placeholder 'Your Passord'.
- Re-Password:** Text input field with placeholder 'Re-Type pass'.
- Courses:** Dropdown menu with 'Bsc Hons Computing' selected.
- College:** Dropdown menu with 'Itahari International College' selected.
- Semester:** Dropdown menu with '1' selected.

At the bottom of the form are three buttons: 'New_Frame', 'Submit', and 'Reset'. The background shows a code editor with Java code for an 'Assignment' class, including a 'main' method and a 'GUI' class.



