Expt NO 01

USER INTERFACE FOR WELCOME PAGE

AIM:

To design a user interface for a Welcome Page.

PROGRAM:

```
public class Welcome extends javax.swing.JFrame {


    public Welcome() {
        initComponents();
    }
@SuppressWarnings("unchecked")
private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {
        char c = evt.getKeyChar();
        if(!Character.isDigit(c)){
            jTextField2.setEditable(false);
            JOptionPane.showMessageDialog(null,"Number only");
        }
        else{
            jTextField2.setEditable(true);
         }
    }
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        s_name=jTextField2.getText();
        s_dep=jTextField3.getText();
        jTextField4.setText("\t Welcome "+s_name+" of "+s_dep);
```

```
    }
public static void main(String args[]) {

        java.awt.EventQueue.invokeLater(new Runnable()
            { public void run() {
                new Welcome().setVisible(true);
            }
    }
String s_name,s_dep;
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.JLabel jLabel5;
private javax.swing.JTextField jTextField1;
private javax.swing.JTextField jTextField2;
private javax.swing.JTextField jTextField3;
private javax.swing.JTextField jTextField4;
private keeptoo.KGradientPanel
kGradientPanel1;
```

OUTPUT:

RESULT:

Therefore the user interface has been created successfully.

Expt NO:02

USER INTERFACE BY APPLYING DESIGN RULES FOR ASSIGNING A GRADE TO STUDENTS BASED ON THEIR SUBJECT MARKS

AIM:

To design a user interface by applying design rules for assigning a grade to students based on their subject marks.

PROGRAM:

```
public class grade extends javax.swing.JFrame { public grade() {
    initComponents();
  }
  @SuppressWarnings("unchecked")
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) { int s_id =
      Integer.parseInt(jTextField1.getText());
      double java = Double.parseDouble( jTextField2.getText()); double hci =
      Double.parseDouble(jTextField3.getText()); double maths =
      Double.parseDouble(jTextField4.getText()); double lifescience =
      Double.parseDouble(jTextField5.getText()); String grade1 = null;
      if(java>90){
        grade1 = "A";
      }
      else if((java>85)&&(java<90)){
        grade1 = "B";
      }
      else if((java>80)&&(java<85)){
```

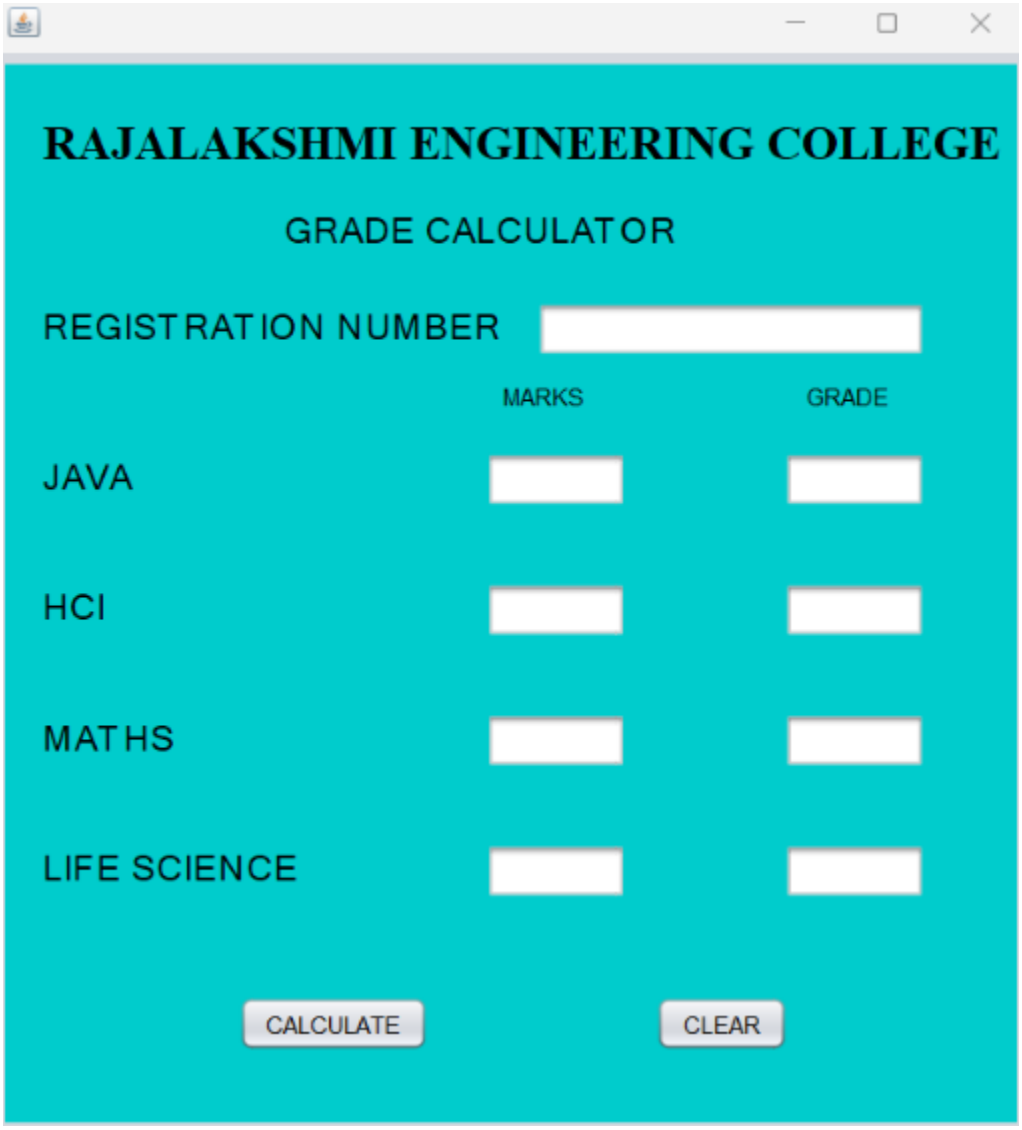
```
    grade1 = "C";
}
else if((java>70)&&(java<80)){ grade1 = "D";
}
else if((java>60)&&(java<70)){ grade1 = "E";
}
else{
    grade1 = "F";
}
jTextField6.setText("
"+grade1); String grade2 = null;
if(hci>90){
    grade2 = "A";
}
else if((hci>85)&&(hci<90)){
    grade2 = "B";
}
else if((hci>80)&&(hci<85)){
    grade2 = "C";
}
else if((hci>70)&&(hci<80)){
    grade2 = "D";
}
else if((hci>60)&&(hci<70)){
    grade2 = "E";
}
```

```
else{
   grade2 = "F";
}
jTextField7.setText(" "+grade2);
String grade3 = null;
if(maths>90){
   grade3 = "A";
}
else if((maths>85)&&(maths<90)){ grade3 = "B";
}
else if((maths>80)&&(maths<85)){
   grade3 = "C";
}
else if((maths>70)&&(maths<80)){
   grade3 = "D";
}
else if((maths>60)&&(maths<70)){
   grade3 = "E";
}
else{
   grade3 = "F";
}
jTextField8.setText(" "+grade3);
String grade4 = null;
if(lifescience>90){
   grade4 = "A";
}
```

```
        else if((lifescience>85)&&(lifescience<90)){ grade4 = "B";
        }
        else if((lifescience>80)&&(lifescience<85)){ grade4 = "C";
        }
        else if((lifescience>70)&&(lifescience<80)){ grade4 = "D";
        }
        else if((lifescience>60)&&(lifescience<70)){
           grade4 = "E";
        }
        else{
           grade4 = "F";
        }
        jTextField9.setText(" "+grade4);
    }
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        jTextField1.setText("");
        jTextField2.setText("");
        jTextField3.setText("");
        jTextField4.setText("");
        jTextField5.setText("");
        jTextField6.setText("");
        jTextField7.setText("");
        jTextField8.setText("");
        jTextField9.setText("");
 }
```

```
public static void main(String args[]) {
            java.awt.EventQueue.invokeLater(() ->
            {
 new grade().setVisible(true);
        });
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JLabel jLabel9;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JPanel jPanel2;
    private  javax.swing.JTextField  jTextField1;
    private  javax.swing.JTextField  jTextField2;
    private  javax.swing.JTextField  jTextField3;
    private  javax.swing.JTextField  jTextField4;
    private  javax.swing.JTextField  jTextField5;
    private  javax.swing.JTextField  jTextField6;
    private  javax.swing.JTextField  jTextField7;
    private  javax.swing.JTextField  jTextField8;
    private javax.swing.JTextField jTextField9; }
```

OUTPUT :



RESULT:

A user interface by applying design rules for assigning a grade to students based on the subject marks was successfully designed and implemented.

Expt NO:03

USER INTERFACE WITH LAYOUTS FOR PRINTING THE NUMBERS IN

ASCENDING ORDER AND DESCENDING ORDER

AIM:

To design a user interface with layouts for printing the numbers in ascending order and descending order.

PROGRAM:

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Collections;
import java.util.Comparator;


public class sortdesign extends javax.swing.JFrame { public sortdesign() {
        initComponents();
    }
@SuppressWarnings("unchecked")
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        String arr[]=jTextArea1.getText().split(" ");
        int[] numbers=new int[arr.length];
        for (int i=0;i<numbers.length;i++){
            numbers[i]=Integer.parseInt(arr[i]);
        }
        for(int i=0;i<numbers.length;i++){
            for(int j=0;j<numbers.length-1;j++){
                if(numbers[j]>numbers[j+1]){
```

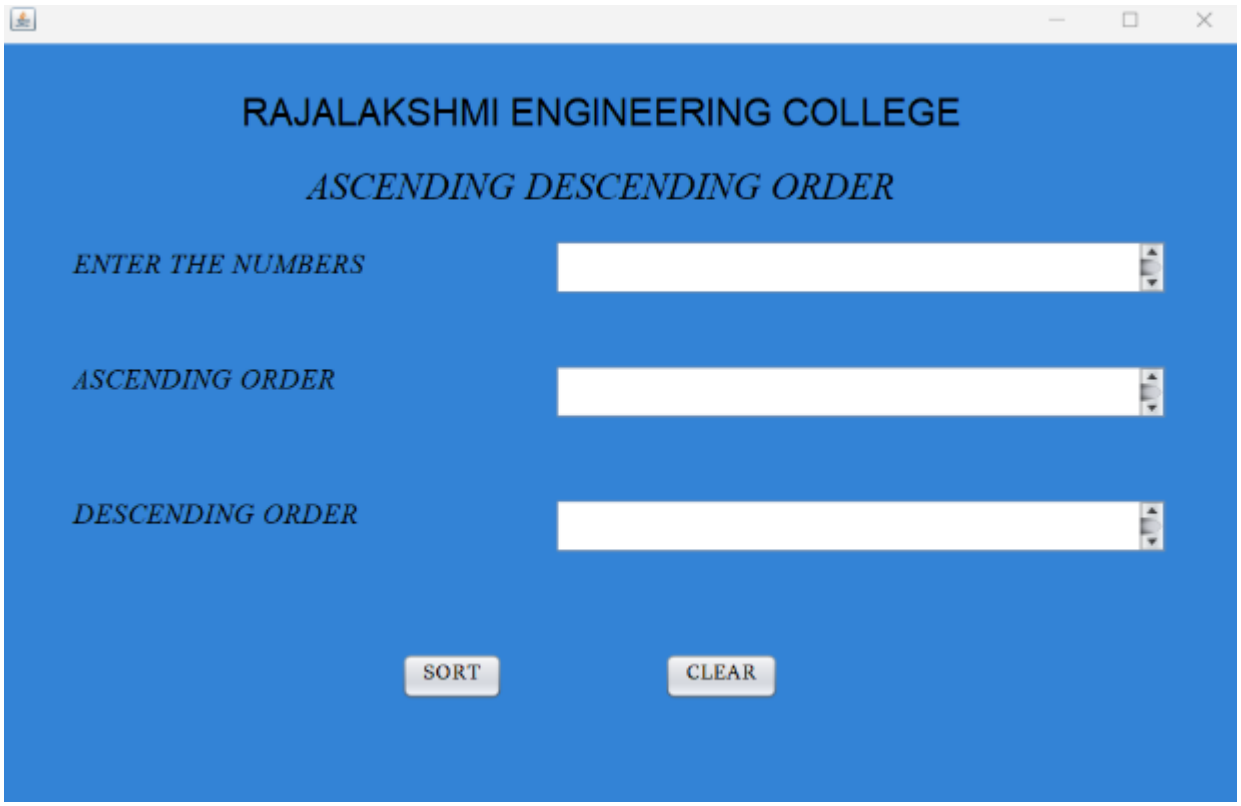
```
            int temp;
            temp = numbers[j];
            numbers[j]=numbers[j+1];
            numbers[j+1]=temp;
        }
    }

    for(int k=0;k<numbers.length;k++){
        jTextArea3.append(numbers[k]+" ");
    }

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    jTextArea3.setText("");

privatejavax.swing.JScrollPanejScrollPane1;
privatejavax.swing.JScrollPanejScrollPane2;
privatejavax.swing.JScrollPanejScrollPane3;
private javax.swing.JTextArea jTextArea1;
private javax.swing.JTextArea jTextArea2;
private javax.swing.JTextArea jTextArea3;
```

OUTPUT:



RESULT:

Thus the user interface for printing the numbers in ascending order and descending order has been successfully created and executed.

Expt NO 04

USER INTERFACE BY USING TASK ANALYSIS FOR CALCULATOR

AIM:

To design a user interface by using task analysis for calculator.

PROGRAM:

```
public class calculator extends javax.swing.JFrame{

public calculator() {

      initComponents();

   }

private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {

      // TODO add your handling code here:

   }


   private void jb1ActionPerformed(java.awt.event.ActionEvent evt) {

      String number=jTextField1.getText()+jb1.getText();

      jTextField1.setText(number);

// TODO add your handling code here:

   }


   private void jb2ActionPerformed(java.awt.event.ActionEvent evt) {


// TODO add your handling code here:
```

```
String number=jTextField1.getText()+jb2.getText();
        jTextField1.setText(number);
    }

    private void jb3ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        String number=jTextField1.getText()+jb3.getText();
        jTextField1.setText(number);
    }

    private void jb4ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        String number=jTextField1.getText()+jb4.getText();
        jTextField1.setText(number);
    }

    private void jb5ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        String number=jTextField1.getText()+jb5.getText();
        jTextField1.setText(number);
    }

    private void jb6ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    // TODO add your handling code here:
    String number=jTextField1.getText()+jb6.getText();
    jTextField1.setText(number);
}

private void jb8ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String number=jTextField1.getText()+jb8.getText();
    jTextField1.setText(number);
}

private void jb9ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String number=jTextField1.getText()+jb9.getText();
    jTextField1.setText(number);
}

private void jb0ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String number=jTextField1.getText()+jb0.getText();
    jTextField1.setText(number);
}
```

```
private void jb00ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String answer;
    second=Double.parseDouble(jTextField1.getText());
    if(operation=="+"){
        result=first+second;
        answer=String.format("%f",result );
        jTextField1.setText(answer);
    }
    else if(operation=="-"){
        result=first-second;
        answer=String.format("%f",result );
        jTextField1.setText(answer);
    }
    else if(operation=="x"){
        result=first*second;
        answer=String.format("%f",result );
        jTextField1.setText(answer);
    }
    else if(operation=="/"){
        result=first/second;
        answer=String.format("%.2f",result );
        jTextField1.setText(answer);
```

```
    }
}

private void jbcActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    jTextField1.setText("");
}

private void jbsumActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    first =
    Double.parseDouble(jTextField1.getText());
    jTextField1.setText("");
    operation="+";

}

private void jbdifActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    first = Double.parseDouble(jTextField1.getText());
    jTextField1.setText("");
    operation="-";
}
```

```
private void jbmulActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    first =
    Double.parseDouble(jTextField1.getText());
    jTextField1.setText("");
    operation="x";
}

private void jbdivActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    first =
    Double.parseDouble(jTextField1.getText());
    jTextField1.setText("");
    operation="/";
}

private void jb7ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    String number=jTextField1.getText()+jb7.getText();
    jTextField1.setText(number);
}
public static void main(String args[]) {
double first;
double second;
double result;
```

```
String operation;
String answer;

// Variables declaration
private javax.swing.JPanel jPanel1;
private javax.swing.JTextField
jTextField1; private javax.swing.JButton
jb0;
private javax.swing.JButton jb00;
 private javax.swing.JButton jb1;
 private javax.swing.JButton jb2;
 private javax.swing.JButton jb3;
 private javax.swing.JButton jb4;
 private javax.swing.JButton jb5;
 private javax.swing.JButton jb6;
 private javax.swing.JButton jb7;
 private javax.swing.JButton jb8;
 private javax.swing.JButton jb9;
 private javax.swing.JButton jbc;
private javax.swing.JButton jbdif;
private javax.swing.JButton jbdiv;
private javax.swing.JButton jbmul;
private javax.swing.JButton jbsum;
```

OUTPUT:

RESULT:

Thus the user interface by using task analysis for calculator has been created successfully.

Expt NO:05

USER INTERFACE WITH DIRECT SELECTION OF REGISTRATION OF STUDENT

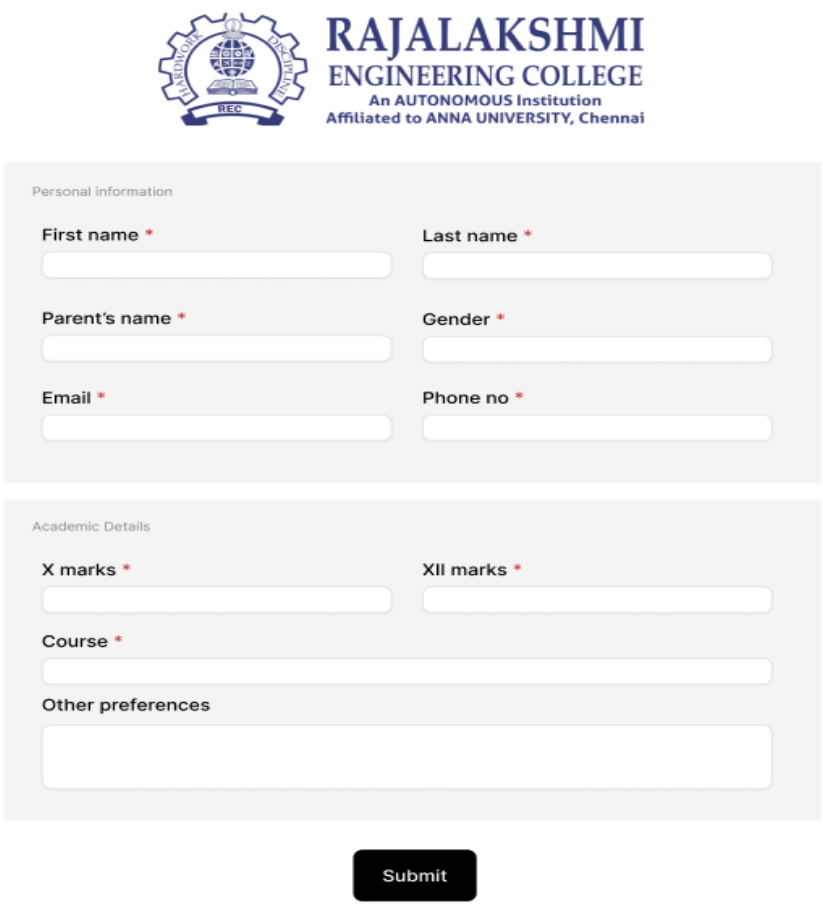
AIM:

To design an user interface with direct selection for registration of a student.

FIGMA FILE LINK:

https://www.figma.com/design/HOK5zLMhoB2UHBfB7VKzkl/expt-5?node-id=0-1&t=v3y7oa7fIf3ppz7A-1

OUTPUT:



RESULT:

Thus the user interface with direct selection for registration of a student for admission has been created successfully.

Expt NO:06

USER INTERFACE FOR PHOTO COLOR

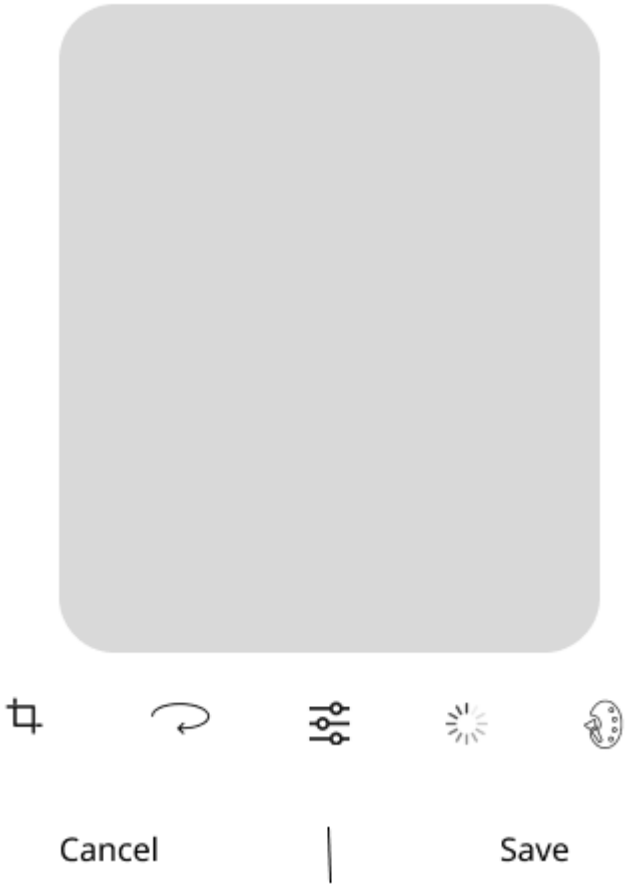
AIM:

To design a user interface by using colours for displaying and changing of picture on the form.

FIGMA FILE LINK:

https://www.figma.com/design/YrUrdXWlt1hl2kYbqYnskI/expt-06?node-id=0-1&t=CP7PPpFL8p5Lll2l-1

OUTPUT:



RESULT:

The user interface by using colours for displaying and changing of picture on the form has been created successfully.

Expt NO: 07

USER INTERFACE WITH WIDGETS FOR END SEMESTER EXAMINATION REGISTRATIONS

AIM:

To design an user interface with widgets for end semester examination registrations.

FIGMA FILE LINK:

https://www.figma.com/design/lxj63M3aAPJyoHliyKdgnb/expt-07?t=CP7PPpFL8p5LlI2l-1

OUTPUT:

RESULT:

Thus the user interface with widgets for end semester examination registration of a student has been created successfully.

Expt NO: 08

USER INTERFACE BY USING DRAG AND DROP FOR CREATING FORMS

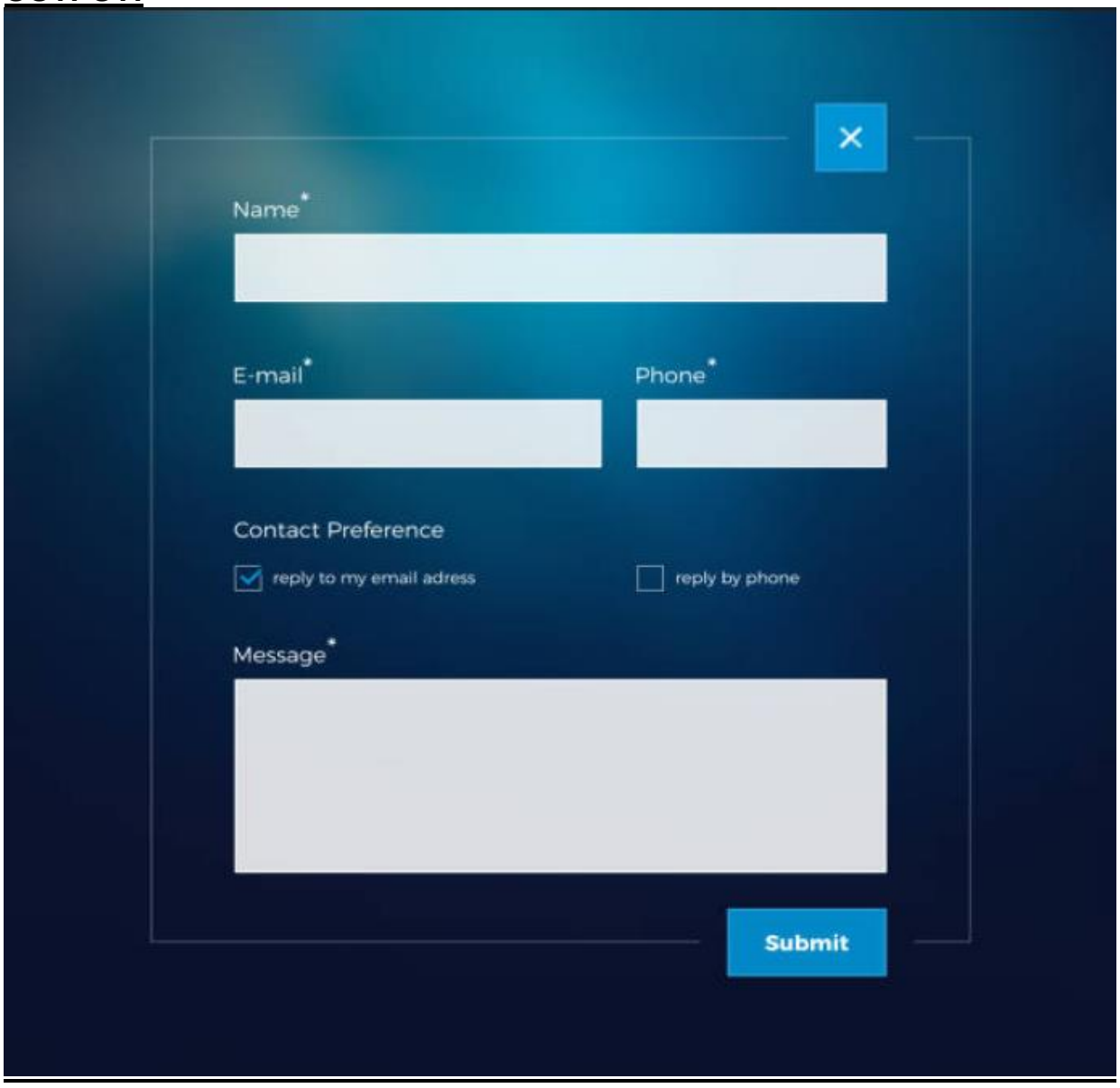
AIM:

To design a user interface with overlays and inlays for menu-based programs.

FIGMA FILE LINK:

https://www.figma.com/design/7qGT3lwp6DXjVGiJDLz8NB/expt-08?t=oKIvb0keM2vgxPtH-1

OUTPUT:



RESULT:

To design a user interface by using drag and drop for creating forms was completed successfully.

Expt NO: 09

USER INTERFACE WITH OVERLAY AND INLAY FOR MENU BASED PROGRAMS

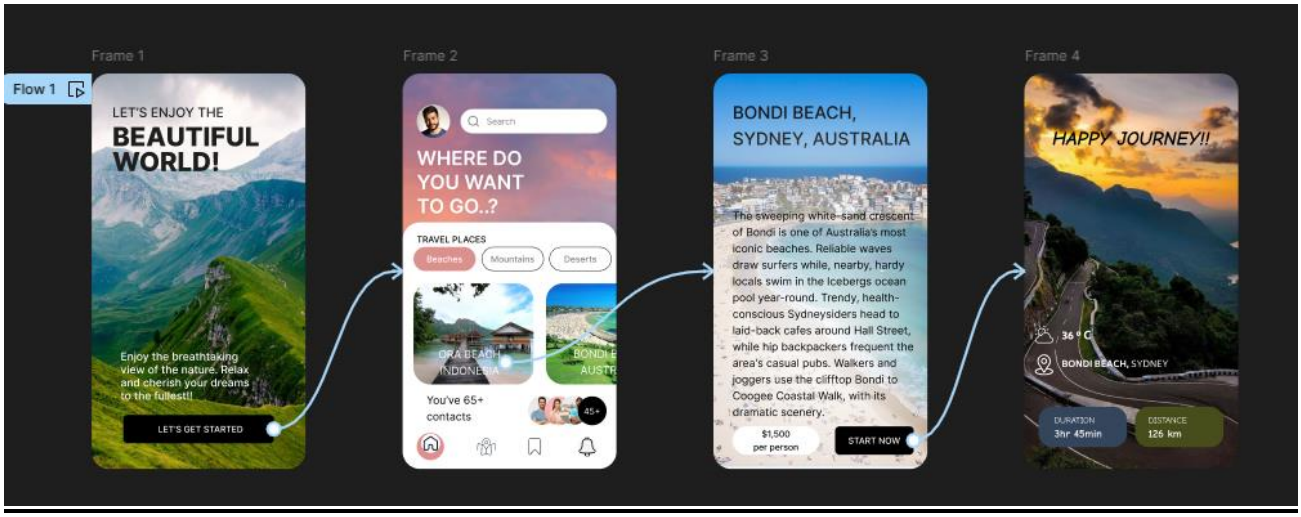
AIM:

To design a user interface with overlays and inlays for menu-based programs.

FIGMA FILE LINK:

https://www.figma.com/proto/IL1qzT9x4LOs9GUCTM8G6Y/expt-09?node-id=3-13&t=Ep2ogG0Y42AeX9J1-1&scaling=min-zoom&page-id=0%3A1&starting-point-node-id=3%3A13

OUTPUT:



RESULT:

Thus the user interface with overlays and inlays for menu-based program has been designed successfully.