

Shembull: Ndërtimi i aplikacionit hap pas hapi.

Në këtë pjesë do të tregohet si ndërtohet një aplikacioni i cili ka këto module:

- Moduli i kyçjes në aplikacion.
- Moduli i insertimit të të dhënave në databazë.
- Moduli i kërkimit të të dhënave nga Databaza.
- Moduli i ndërtimit të menyve.

Moduli i kyçjes (Log In)

Në këtë pjesë do të tregohet si bëhet ndërtimi i formës për kyçje në aplikacion. Do të ndërtohet një formë e cila ka dy fusha për tekst: Përdoruesi dhe Fjalëkalimi, gjithashtu dhe një buton cili ekzekuton urdhërin për verifikim të fjalëkalimit i cili mundsëon kyçjen ose refuzon kyçjen në aplikacion.

Kodi për ndërtimin e formës “Kyçja në aplikacion”:

```
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JTextField;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.ImageIcon;
import javax.swing.JButton;
import javax.swing.UIManager;
import java.awt.event.ActionListener;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import java.awt.event.ActionEvent;
import java.awt.Font;
import java.awt.Color;

public class LogIn extends JFrame {
    private static final long serialVersionUID = 1L;
    private JPanel contentPane;
    private JTextField textField;
    private JTextField textField_1;
    public String emri, passi;
    public String useri, pasvord;

    //Nisja e aplikacionit.
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
```

```
public void run() {
    try {
        Login frame = new Login();
        frame.setVisible(true);
    } catch (Exception e) {
        e.printStackTrace();
    }
}

// ndertimi i formes.
public Login() {
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setBounds(100, 100, 472, 300);
    contentPane = new JPanel();

    contentPane.setBackground(UIManager.getColor("TextArea.selectionBackground"));
});

contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
setContentPane(contentPane);
getContentPane().setLayout(null);
contentPane.setLayout(null);

textField = new JTextField();
textField.setFont(new Font("Arial", Font.PLAIN, 12));
textField.setBounds(167, 65, 157, 29);
contentPane.add(textField);
textField.setColumns(10);

textField_1 = new JTextField();
textField_1.setFont(new Font("Arial", Font.PLAIN, 12));
textField_1.setBounds(167, 104, 157, 29);
contentPane.add(textField_1);
textField_1.setColumns(10);

JLabel lblNewLabel = new JLabel("Perdoruesi");
lblNewLabel.setFont(new Font("Tahoma", Font.PLAIN, 12));
lblNewLabel.setBounds(62, 68, 95, 13);
contentPane.add(lblNewLabel);

JLabel lblNewLabel_1 = new JLabel("Fjalekalimi");
lblNewLabel_1.setFont(new Font("Tahoma", Font.PLAIN, 12));
lblNewLabel_1.setBounds(62, 107, 95, 13);
contentPane.add(lblNewLabel_1);

JButton btnNewButton = new JButton("Kycu");
btnNewButton.setBackground(Color.WHITE);
btnNewButton.setIcon(new ImageIcon("C:\\Program Files\\Java\\jdk-
13.0.2\\bin\\Image\\True.png"));
```

```

btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        useri= textField.getText();
        pasvord= textField_1.getText();
        passi();
        // komanda e kontrollit (IF) verifikon nese fusha eshte e plotesuar me
        shenim dhe eshte i sakte
        if (textField_1.getText().isEmpty())
        {
            String st = "Fusha duhet plotesuar";
            JOptionPane.showMessageDialog(null, st);
            // nse fjalekalimi eshte korrekt, hap aplikacionin dhe mbyll formen e
            kryes
        }
        else if (passi.equals(pasvord))
        {
            programi secondFrame = new programi();
            secondFrame.setVisible(true);
            dispose();
        }
        else if (passi.compareTo(pasvord) < 0)
        {
            // Nese fjalekalimi eshte jo korrekt, paraqit mesazhin per njoftim
            String st = "passwordi gabim!";
            JOptionPane.showMessageDialog(null, st);
        }
    }
});;
btnNewButton.setBounds(167, 181, 169, 49);
contentPane.add(btnNewButton);
setLocationRelativeTo(null);

}
private void passi()
{
    try
{
    Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
    String url = "jdbc:ucanaccess://D:/Kontaktet.mdb";
    Connection conctn = DriverManager.getConnection(url);
    Statement statmnt = conctn.createStatement();
    // Query per selektim nga tabela Kontakti
    String sql = ("SELECT emri,passi FROM Kontakti where emri = "+ "" + useri + "");
    ResultSet rsItSet = statmnt.executeQuery(sql);
    // Shoqerimi i variables emri dhe useri me te dhenat nga tabela Kontakti
}
}

```

```
        while(rsItSet.next())
        {
            emri= rsItSet.getString("emri");
            passi = rsItSet.getString("passi");
        }
        conctn.close();
    }

    catch(Exception sqlExcptn)
    {
        String st = "Perdoruesi ose fjalekalimi gabim!";
        JOptionPane.showMessageDialog(null, st);
    }
}
```

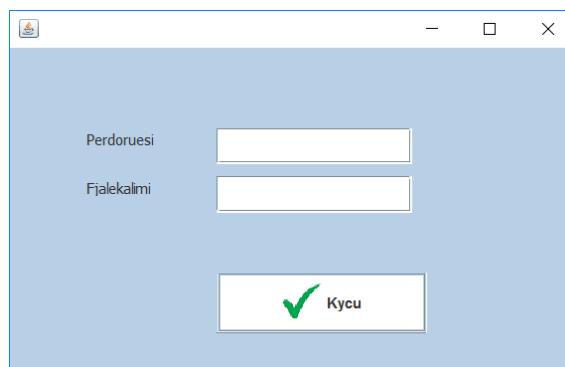


Figura 1 Forma e kycies në aplikacion

Moduli i Insertimit të të dhënave në databazë

Forma ka 4 fusha për tekst dhe një fushë për selektimin e datës (DataChooser) dhe tre buton: butoni për verifikimin e lidhjes me Databazë, butoni për insertimin e të dhënavë në Databazë dhe butoni për mbyllje të formës.

Kodi për ndërtimin e fomës për insertim të të dhënavë në databazë:

```
import java.awt.EventQueue;
import com.toedter.calendar.JDateChooser;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import java.awt.Font;
import java.awt.event.ActionEvent;
```

```

import java.awt.event.ActionListener;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.text.SimpleDateFormat;
import javax.swing.JTextField;
import javax.swing.SwingConstantsConstants;
import javax.swing.ImageIcon;
import javax.swing.JButton;
import java.awt.Color;

public class Kontaktet extends JFrame {

    private static final long serialVersionUID = 1L;
    private JPanel contentPane;
    private JTextField textField;
    private JTextField textField_1;
    private JTextField textField_2;
    private JTextField textField_3;
    private String data;

    // Nisja e plaikacionit.
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    Kontaktet frame = new Kontaktet();
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    // Ndertimi i formes
    public Kontaktet() {
        setDefaultCloseOperation(JFrame.DO_NOTHING_ON_CLOSE);
        setBounds(100, 100, 881, 528);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        contentPane.setLayout(null);
        getContentPane().setLayout(null);
        setLocationRelativeTo(null);

        JLabel lblNewLabel = new JLabel("Regjistriimi i
perdoruesve");
    }
}

```

```
lblNewLabel.setFont(new Font("Arial", Font.PLAIN,
15));
lblNewLabel.setBounds(257, 28, 370, 36);
contentPane.add(lblNewLabel);

textField = new JTextField();
textField.setBounds(222, 103, 240, 19);
contentPane.add(textField);
textField.setColumns(10);

textField_1 = new JTextField();
textField_1.setColumns(10);
textField_1.setBounds(222, 132, 240, 19);
contentPane.add(textField_1);

textField_2 = new JTextField();
textField_2.setBounds(222, 161, 240, 19);
contentPane.add(textField_2);
textField_2.setColumns(10);

textField_3 = new JTextField();
textField_3.setBounds(222, 190, 240, 19);
contentPane.add(textField_3);
textField_3.setColumns(10);

JDateChooser dateChooser = new JDateChooser();
dateChooser.setBounds(222, 236, 139, 19);
contentPane.add(dateChooser);
dateChooser.setDateFormatString("dd-MM-yyyy");

dateChooser.addMouseListener(new MouseAdapter() {
    @Override
    public void mouseClicked(MouseEvent e) {

    }
});

JLabel lblNewLabel_1 = new JLabel("Emri");
lblNewLabel_1.setFont(new Font("Tahoma", Font.PLAIN,
15));
lblNewLabel_1.setBounds(103, 106, 108, 13);
contentPane.add(lblNewLabel_1);

JLabel lblNewLabel_2 = new JLabel("Mbiemri");
lblNewLabel_2.setFont(new Font("Tahoma", Font.PLAIN,
15));
lblNewLabel_2.setBounds(103, 135, 108, 13);
contentPane.add(lblNewLabel_2);

JLabel lblNewLabel_3 = new JLabel("Adresa");
lblNewLabel_3.setFont(new Font("Tahoma", Font.PLAIN,
15));
```



```

        else
    {
        SimpleDateFormat sdf = new
SimpleDateFormat("yyyy-MM-dd");
        data= sdf.format(dateChooser.getDate());

        DBSave();
        btnNewButton_1.setEnabled(false);
    }
}

JButton btnNewButton_2 = new JButton("Mbyll");
btnNewButton_2.setBackground(Color.WHITE);

btnNewButton_2.setHorizontalAlignment(SwingConstants.LEFT);
btnNewButton_2.setIcon(new ImageIcon("C:\\Program
Files\\Java\\jdk-13.0.2\\bin\\Image\\Dalja.png"));
btnNewButton_2.addActionListener(new ActionListener()
{
    public void actionPerformed(ActionEvent e) {
        dispose();
    }
});
btnNewButton_2.setBounds(565, 384, 133, 45);
contentPane.add(btnNewButton_2);
}
public void DBConnect() {

    try
    {

        // Driver-i qe mundeson lidhjen me DB
        Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        String url = "jdbc:ucanaccess://D:/Kontaktet.mdb";
        Connection conctn = DriverManager.getConnection(url);

        String st = "Lidhja me databazen u realizua me
sukses!!!";
        JOptionPane.showMessageDialog(null, st);

        conctn.close();
    }
    catch(Exception sqlExcptn)
    {
        // Shtypja e informacionit nese lidhja nuk vendoset
        String st = "Lidhja me databazen Deshtoi!!!";
        JOptionPane.showMessageDialog(null, st);
    }
}
public void DBSave() {

```

```
String emr,mbr,adr,tel;

emr= textField.getText();
mbr= textField_1.getText();
adr= textField_2.getText();
tel= textField_3.getText();

try{

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
    Connection
con=DriverManager.getConnection("jdbc:ucanaccess://D:/Kontaktet.mdb
");
    String sql = "INSERT INTO
Kontakti(emri,mbiemri,Adresa,Tel,Datelindja) VALUES(?,?,?,?,?)";
    PreparedStatement pstmt = con.prepareStatement(sql);
    pstmt.setString(1,emr);
    pstmt.setString(2,mbr);
    pstmt.setString(3,adr);
    pstmt.setString(4,tel);
    pstmt.setDate(5, java.sql.Date.valueOf(data));

    pstmt.executeUpdate();
    con.close();

    String st = "Ruajtja u Realizua me
sukses";
    JOptionPane.showMessageDialog(null, st);

}catch(Exception r){
    JOptionPane.showMessageDialog(null,r);
    System.out.println(r);
}

}
```

Moduli i selektimit të të dhënave nga databaza

Moduli i selektimit të të dhënave ka 6 fusha për tekst dhe dy buton. Një buton për selektim të të dhënave në bazë të kriterit të vendosur në fushën për tekst dhe butoni tjetër për mbyllje të formës.

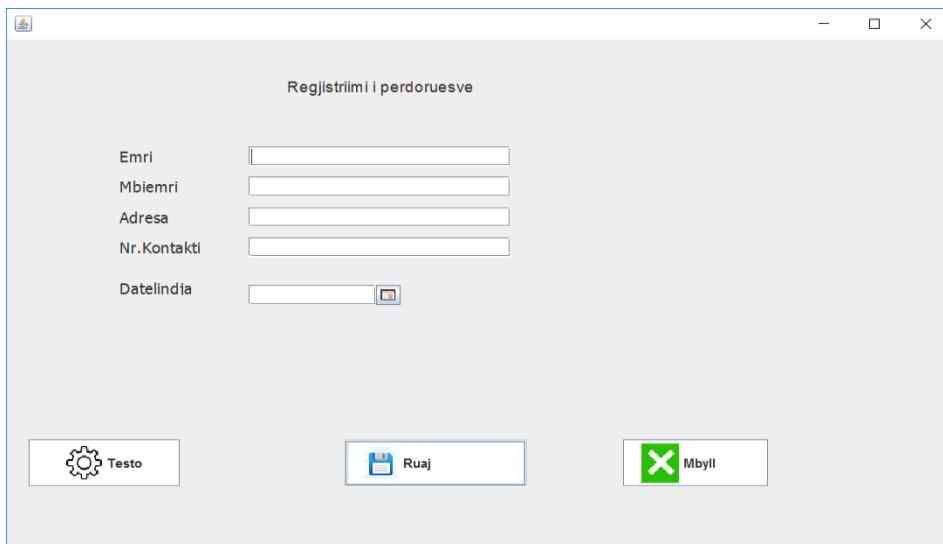


Figura 2 Forma për insertim të të dhënave në databazë

Kodi për selektim të të dhënave nga databaza:

```

import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.JTextField;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.ImageIcon;
import javax.swing.JButton;
import java.awt.Font;
import java.awt.event.ActionListener;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import java.awt.event.ActionEvent;
import java.awt.Color;
import javax.swing.border.LineBorder;

public class Kerkimi extends JFrame {
    private static final long serialVersionUID = 1L;

    private JPanel contentPane;
    private JTextField textField;

```

```

private JTextField textField_1;
private JTextField textField_2;
private JTextField textField_3;
private JTextField textField_4;
public String Id;
private JTextField textField_5;
// Nisja e aplikacionit.
public static void main(String[] args) {
    EventQueue.invokeLater(new Runnable() {
        public void run() {
            try {
                Kerkimi frame = new Kerkimi();
                frame.setVisible(true);
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    });
}
// Ndertimi i formes
public Kerkimi() {
    setType(Type.POPUP);
    setResizable(false);
    setBackground(Color.WHITE);
    setDefaultCloseOperation(JFrame.DO_NOTHING_ON_CLOSE);
    setBounds(100, 100, 931, 630);
    contentPane = new JPanel();
    contentPane.setBackground(new Color(240, 255, 240));
    contentPane.setBorder(new LineBorder(new Color(0, 0,
0)));
    setContentPane(contentPane);
    contentPane.setLayout(null);

    textField = new JTextField();
    textField.setFont(new Font("Tahoma", Font.PLAIN, 14));
    textField.setBounds(394, 98, 96, 19);
    contentPane.add(textField);
    textField.setColumns(10);

    JLabel lblNewLabel = new JLabel("Vendos nr.Id");
    lblNewLabel.setFont(new Font("Tahoma", Font.PLAIN,
14));
    lblNewLabel.setBounds(302, 99, 82, 17);
    contentPane.add(lblNewLabel);

    JButton btnNewButton = new JButton("Kerko");
    btnNewButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            Id= textField.getText();
            gjej();
        }
    });
}

```

```
    });
    btnNewButton.setBounds(500, 97, 96, 21);
    contentPane.add(btnNewButton);

    textField_1 = new JTextField();
    textField_1.setFont(new Font("Tahoma", Font.PLAIN,
14));
    textField_1.setBounds(325, 216, 234, 19);
    contentPane.add(textField_1);
    textField_1.setColumns(10);

    textField_2 = new JTextField();
    textField_2.setFont(new Font("Tahoma", Font.PLAIN,
14));
    textField_2.setBounds(325, 245, 234, 19);
    contentPane.add(textField_2);
    textField_2.setColumns(10);

    textField_3 = new JTextField();
    textField_3.setFont(new Font("Tahoma", Font.PLAIN,
14));
    textField_3.setBounds(325, 274, 234, 19);
    contentPane.add(textField_3);
    textField_3.setColumns(10);

    textField_4 = new JTextField();
    textField_4.setFont(new Font("Tahoma", Font.PLAIN,
14));
    textField_4.setBounds(325, 303, 234, 19);
    contentPane.add(textField_4);
    textField_4.setColumns(10);

    JLabel lblNewLabel_1 = new JLabel("Emri");
    lblNewLabel_1.setFont(new Font("Tahoma", Font.PLAIN,
14));
    lblNewLabel_1.setBounds(214, 219, 28, 17);
    contentPane.add(lblNewLabel_1);

    JLabel lblNewLabel_2 = new JLabel("Mbiemri");
    lblNewLabel_2.setFont(new Font("Tahoma", Font.PLAIN,
14));
    lblNewLabel_2.setBounds(214, 248, 50, 17);
    contentPane.add(lblNewLabel_2);

    JLabel lblNewLabel_3 = new JLabel("Adresa");
    lblNewLabel_3.setFont(new Font("Tahoma", Font.PLAIN,
14));
    lblNewLabel_3.setBounds(214, 277, 42, 17);
    contentPane.add(lblNewLabel_3);

    JLabel lblNewLabel_4 = new JLabel("Nr.Kontakti");
```

```

        lblNewLabel_4.setFont(new Font("Tahoma", Font.PLAIN,
14));
        lblNewLabel_4.setBounds(214, 306, 70, 17);
        contentPane.add(lblNewLabel_4);

        JLabel lblNewLabel_5 = new JLabel("Datelindja");
        lblNewLabel_5.setFont(new Font("Tahoma", Font.PLAIN,
14));
        lblNewLabel_5.setBounds(214, 338, 62, 17);
        contentPane.add(lblNewLabel_5);

        JLabel lblNewLabel_6 = new JLabel("Kerkimi i te
dhenave");
        lblNewLabel_6.setFont(new Font("Arial", Font.PLAIN,
19));
        lblNewLabel_6.setBounds(264, 10, 174, 23);
        contentPane.add(lblNewLabel_6);

        textField_5 = new JTextField();
        textField_5.setBounds(325, 332, 234, 19);
        contentPane.add(textField_5);
        textField_5.setColumns(10);

        JButton btnNewButton_1 = new JButton("");
        btnNewButton_1.addActionListener(new ActionListener()
{
            public void actionPerformed(ActionEvent e) {
                dispose();
            }
        });
        btnNewButton_1.setToolTipText("Mbyll dritaren");
        btnNewButton_1.setIcon(new ImageIcon("C:\\Program
Files\\Java\\jdk-13.0.2\\bin\\Image\\Dalja.png"));
        btnNewButton_1.setBounds(865, 10, 42, 45);
        contentPane.add(btnNewButton_1);

    }

private void gjej() {

    try
    {

        Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        String url = "jdbc:ucanaccess://D:/Kontaktet.mdb";
        Connection conctn = DriverManager.getConnection(url);
        Statement statmnt = conctn.createStatement();
        String sql = ("SELECT * FROM Kontakti where Id = "+ """
+ Id + """);
        ResultSet rs1Set = statmnt.executeQuery(sql);

        while(rs1Set.next())
    }
}
```

```
        textField_1.setText((rs1tSet.getString("emri")));
        textField_2.setText((rs1tSet.getString("mbiemri")));
        textField_3.setText((rs1tSet.getString("adresa")));
        textField_4.setText((rs1tSet.getString("tel")));

        java.sql.Date date = rs1tSet.getDate("datelindja");
        String dateStr =date.toString();
        textField_5.setText((dateStr));

    }

    if (textField_1.getText().isEmpty())

    {

        String st = "Te dhenat nuk jane gjetur";
        JOptionPane.showMessageDialog(null, st);
    }
    concn.close();

}

catch(Exception sqlExcptn)
{
    String st = "Gabim !!!";
    JOptionPane.showMessageDialog(null, st);

}
}
```



Figura 3 Forma e selektimit të të dhënave

Moduli i formës kryesore të aplikacionit (Main)

Kjo është forma kryesore e aplikacionit. Është një ndërsaqe përmes të cilës mundësohet hapja e ndërafqeve tjera të aplikacionit. Përdoruesi mund të shohë dhe të punojë me dritare të ndryshme, psh: dritaren e regjistrimit ose dritaren e selektimit, etj.

Kodi për ndërtimin e dritares kryesore.

```

import java.awt.EventQueue;
import javax.swing.ImageIcon;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JMenuBar;
import javax.swing.JMenuItem;
import javax.swing.JMenu;
import java.awt.Color;
import java.awt.Font;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;

public class programi extends JFrame {
    private static final long serialVersionUID = 1L;

    JPanel contentPane;
    public static void main(String[] args) {

        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    programi frame = new programi();

                    frame.getContentPane().setLayout(null);
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    public programi() {
        setTitle("Aplikacioni im");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 1021, 600);
        contentPane = new JPanel();
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);
        getContentPane().setLayout(null);
        contentPane.setLayout(null);
        JPanel panel = new JPanel();
    }
}

```

```
panel.setBounds(0, 0, 1021, 30);
contentPane.add(panel);
panel.setLayout(null);
JMenuBar menuBar = new JMenuBar();
menuBar.setEnabled(false);
menuBar.setBorderPainted(false);
menuBar.setBounds(0, 0, 1021, 30);
panel.add(menuBar);
menuBar.setFont(new Font("Segoe UI", Font.PLAIN, 13));
menuBar.setBackground(Color.ORANGE);

JMenu menu1 = new JMenu("File");
JMenu menu2 = new JMenu("Edit");
JMenu menu3 = new JMenu("View");
JMenu menu4 = new JMenu("Print");
menuBar.add(menu1);
menuBar.add(menu2);
menuBar.add(menu3);
menuBar.add(menu4);
JMenuItem artikulli1 = new JMenuItem("Regjistrimi");
artikulli1.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        Kontaktet secondFrame = new Kontaktet();
        secondFrame.setVisible(true);
    }
});

JMenuItem artikulli2 = new JMenuItem("Kerkimi ");
artikulli2.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        Kerkimi secondFrame = new Kerkimi();
        secondFrame.setVisible(true);
    }
});
JMenuItem artikulli3 = new JMenuItem("Dalja", new
ImageIcon("c:/dalja.png"));
artikulli3.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        System.exit(0);
    }
});

menu1.add(artikulli1);
menu1.add(artikulli2);
menu1.add(artikulli3);
}
}
```

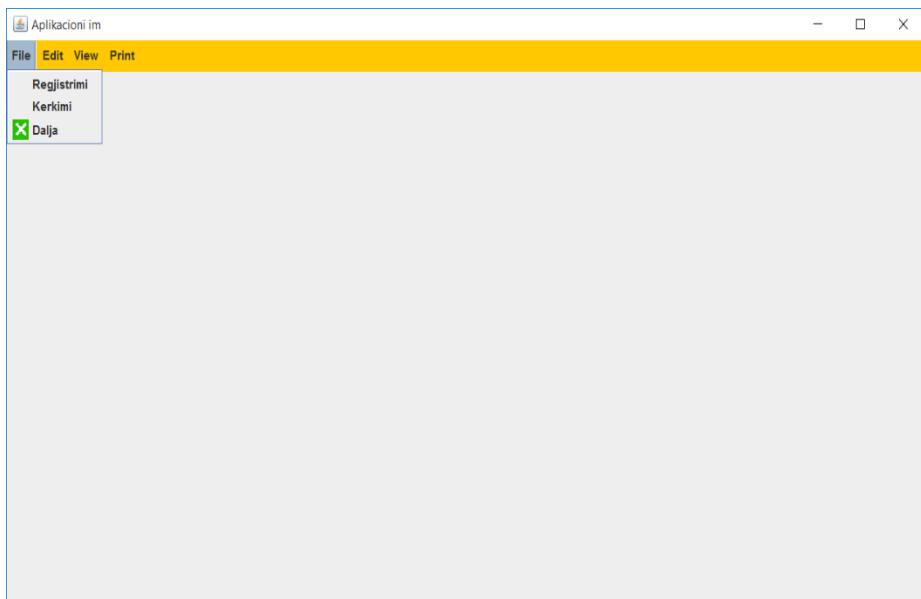


Figure 4 Dritarja e menysë kryesore