# KLASE DIAGRAMA
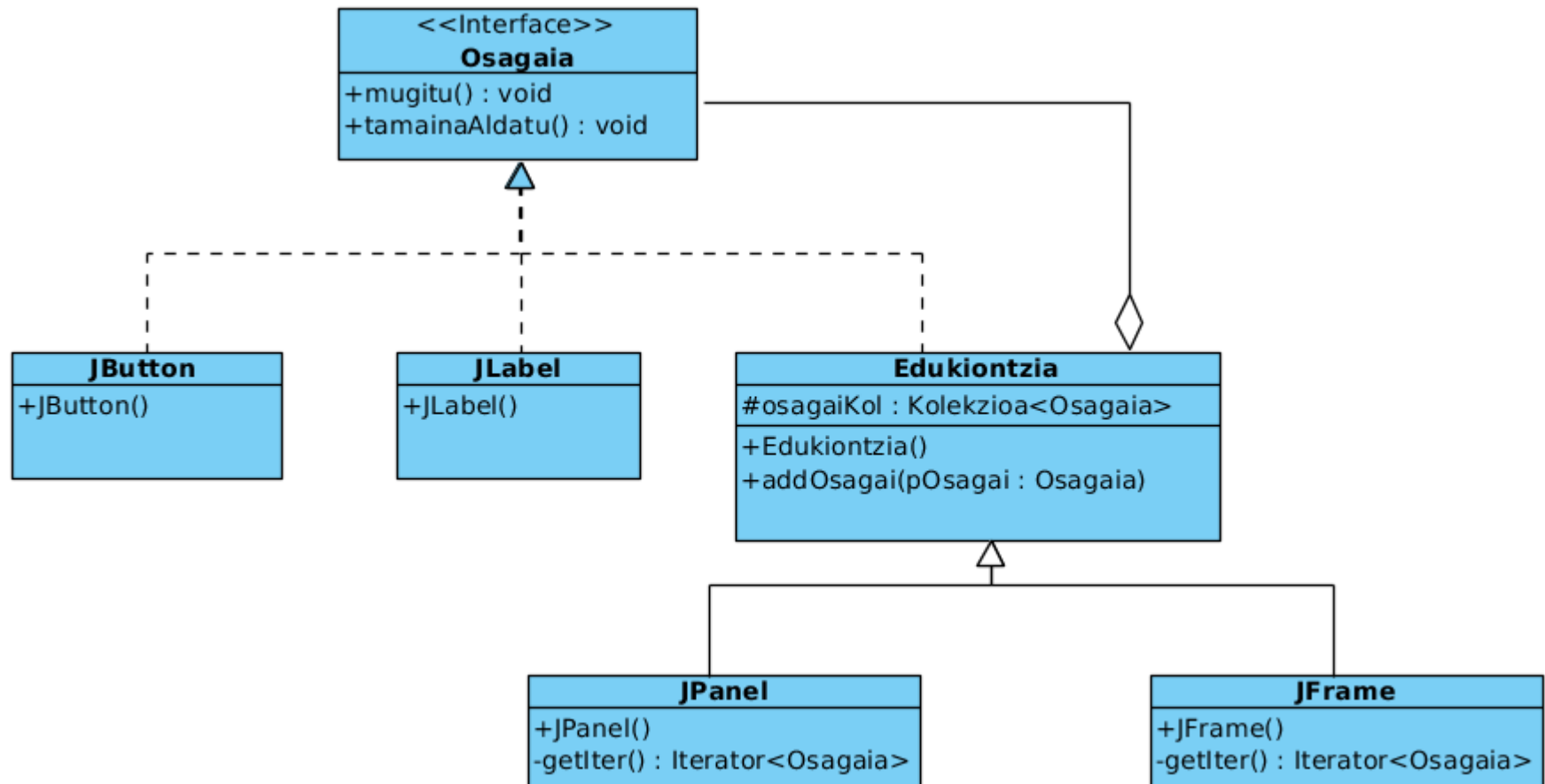
# KODEA

```java
public interface Osagaia {
    public void mugitu();
    public void tamainaAldatu();
}
```

```java
public class JLabel implements Osagaia{
    public void mugitu() {System.out.println("JLabel mugitzen!");}
    public void tamainaAldatu() {System.out.println("JLabel tamaina aldatzen!");}
}
```

**ELEMENTU KONPOSATUA**

```java
import java.util.*;

public abstract class Edukiontzia implements Osagaia{

    protected List<Osagaia> osagaiKol;

    public void addOsagai(Osagaia pOsagai) {
        osagaiKol.add(pOsagai);
    }
}
```

```java
import java.util.ArrayList;

public class JFrame extends Edukiontzia{

    public JFrame() {
        osagaiKol = new ArrayList<>();
    }

    public void mugitu() {
        System.out.println("JFrame mugitzen!");
        Iterator<Osagaia> itJF = getIter();

        while(itJF.hasNext()) {
            Osagaia momentukoJF = itJF.next();
            momentukoJF.mugitu();
        }
    }

    public void tamainaAldatu() {
        System.out.println("JFrame tamaina aldatzen!");
        Iterator<Osagaia> itJF = getIter();

        while(itJF.hasNext()) {
            Osagaia momentukoJP = itJF.next();
            momentukoJP.tamainaAldatu();
        }
    }

    private Iterator getIter() {
        return osagaiKol.iterator();
    }
}
```

```java
public class CompositeProba {

    public static void main(String[] args) {
        //HOSTOAK
        JLabel jl1 = new JLabel();
        JLabel jl2 = new JLabel();
        JButton jb1 = new JButton();
        JButton jb2 = new JButton();
        JButton jb3 = new JButton();
        //NODOAK
        JPanel jp1 = new JPanel();
        JPanel jp2 = new JPanel();
        JFrame jf = new JFrame();
        //HIERARKIA OSATU
        jp1.addOsagai(jl1);
        jp1.addOsagai(jl2);
        jp1.addOsagai(jb1);
        jp2.addOsagai(jb2);
        jp2.addOsagai(jb3);
        jf.addOsagai(jp1);
        jf.addOsagai(jp2);
        //JFrame mugitu
        jf.mugitu();
    }
}
```

**EXEKUZIOA**

```
JFrame mugitzen!
JPanel mugitzen!
JLabel mugitzen!
JLabel mugitzen!
JButton mugitzen!
JPanel mugitzen!
JButton mugitzen!
JButton mugitzen!
```