



**Marwadi**  
University

Bachelor of Technology  
Information and Communication Technology

# **Expense Tracker for Family**

**A PROJECT REPORT**

*Submitted by*

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**Sem – 2<sup>nd</sup>**

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**Marwadi**  
University

**Faculty of Technology Studies**

**Marwadi University, Rajkot**

**Project Definition:**

Suppose users want to check the monthly or weekly cost of their family members than the cost of every member of the family, like the cost of clothes, food, travel expenses, education cost, bus fees, vehicle insurance, family functions, Maintenance cost, child's pocket money. First, check how much money that family earned by their members.

If their neglected cost will improve its range then the warning will be shown in the display in the form of a PDF.

Also, check how much money will be wasted in every week or month that should be displayed.

**List of Functionality:**

1. All type of Bills
2. Fees
3. Grocery
4. All type of Bills

## Client Meeting

- In first meeting we discuss which classes need to do implement.
- Classes like Bill, Grocery, Fees, Functions

## Codes :-

### Frames

#### 1. Bill

```
import java.awt.*;
import java.awt.event.*;
import java.io.*;
import javax.swing.*;
import java.lang.*;
import java.awt.Color;

public class Bill extends JFrame
{
    JButton Light_bill, Gas_bill, House_rent, Back;
    JButton total_Bill;
    JTextField t1, t2, t3, t4;
    JLabel image_;
    ImageIcon img;

    MyActionListener ml = new MyActionListener(this);
    Bill()
```



{

```
setLayout(null);  
setBounds(0,0,1260,1000);  
setBackground(Color.CYAN);
```

```
t1=new JTextField();  
t2=new JTextField();  
t3=new JTextField();  
t4=new JTextField();
```

```
img = new ImageIcon("a.JPG");  
image_ = new JLabel(img);  
image_.setBounds(0,0,img.getIconWidth(),img.getIconHeight());  
image_.setVisible(true);
```

```
Light_bill =new JButton("Light_bill");  
Gas_bill =new JButton("Gas_bill");  
House_rent =new JButton("House_rent");  
total_Bill =new JButton("Total_Bill");  
Back =new JButton("Home");
```

```
Font f1 = new Font("Arial",Font.BOLD,20);
```

```
Light_bill.setFont(f1);  
Gas_bill.setFont(f1);  
House_rent.setFont(f1);  
total_Bill.setFont(f1);
```



```
Back.setFont(f1);
```

```
add(t1);
```

```
add(t2);
```

```
add(t3);
```

```
add(t4);
```

```
add(Light_bill);
```

```
add(Gas_bill);
```

```
add(House_rent);
```

```
add(total_Bill);
```

```
add(Back);
```

```
add(image_);
```

```
t1.setBounds(300,100,150,50);
```

```
t2.setBounds(300,200,150,50);
```

```
t3.setBounds(300,300,150,50);
```

```
t4.setBounds(650,400,150,50);
```

```
Light_bill.setBounds(100,100,150,50);
```

```
Gas_bill.setBounds(100,200,150,50);
```

```
House_rent.setBounds(100,300,150,50);
```

```
total_Bill.setBounds(400,400,200,50);
```

```
Back.setBounds(600,200,200,50);
```

```
/*Light_bill.addActionListener(ml);
```

```
Gas_bill.addActionListener(ml);
```

```
House_rent.addActionListener(ml);*/
```

```
total_Bill.addActionListener(ml);
```

```
Back.addActionListener(ml);
```

```
addWindowListener(new WindowAdapter())
```

```
{  
  
    public void windowClosing(WindowEvent we)  
    {  
  
        //System.exit(0);  
        setVisible(false);  
  
    }  
  
});  
  
}  
  
public static void main(String args[]) throws IOException  
{  
  
    Bill mf1 = new Bill();  
    mf1.setVisible(true);  
  
}  
  
}
```

## **2. Grocery**

```
import java.awt.*;  
import java.awt.event.*;  
import java.io.*;  
import javax.swing.*;  
import java.lang.*;  
import java.awt.Color;  
  
public class Grocery extends JFrame  
{  
  
    JButton Rice,Wheat,Beans;
```



```
JButton total_Grocery,_Back;
```

```
JTextField t1,t2,t3,t4;
```

```
JLabel IMAGE;
```

```
ImageIcon img;
```

```
MyActionListener ml = new MyActionListener(this);
```

```
Grocery()
```

```
{
```

```
    setLayout(null);
```

```
    setBounds(0,0,1260,1000);
```

```
    setBackground(Color.RED);
```

```
    t1=new JTextField();
```

```
    t2=new JTextField();
```

```
    t3=new JTextField();
```

```
    t4=new JTextField();
```

```
    img = new ImageIcon("d.JPG");
```

```
    IMAGE = new JLabel(img);
```

```
    IMAGE.setBounds(0,0,img.getIconWidth(),img.getIconHeight());
```

```
    IMAGE.setVisible(true);
```

```
    Rice =new JButton("Rice");
```

```
    Wheat =new JButton("Wheat");
```

```
    Beans =new JButton("Beans");
```

```
    total_Grocery =new JButton("Total_Grocery");
```

```
    _Back =new JButton("Home_");
```

```
    Font f1 = new Font("Arial",Font.BOLD,20);
```



```
Rice.setFont(f1);
Wheat.setFont(f1);
Beans.setFont(f1);
total_Grocery.setFont(f1);
_Back.setFont(f1);

add(t1);
add(t2);
add(t3);
add(t4);
add(Rice);
add(Wheat);
add(Beans);
add(total_Grocery);
add(_Back);
add(IMAGE);

t1.setBounds(300,100,150,50);
t2.setBounds(300,200,150,50);
t3.setBounds(300,300,150,50);
t4.setBounds(650,400,200,50);
Rice.setBounds(100,100,150,50);
Wheat.setBounds(100,200,150,50);
Beans.setBounds(100,300,150,50);
total_Grocery.setBounds(400,400,200,50);
_Back.setBounds(600,200,200,50);

/*Rice.addActionListener(ml);
Wheat.addActionListener(ml);
```





```
Beans.addActionListener(ml);*/  
total_Grocery.addActionListener(ml);  
_Back.addActionListener(ml);
```

```
addWindowListener(new WindowAdapter()  
{  
    public void windowClosing(WindowEvent we)  
    {  
        //System.exit(0);  
        setVisible(false);  
    }  
});  
}  
public static void main(String args[])  
{  
    Grocery mf2 = new Grocery();  
    mf2.setVisible(true);  
}  
}
```

### 3. Fees

```
import java.awt.*;
import java.awt.event.*;
import java.io.*;
import javax.swing.*;
import java.lang.*;
import java.awt.Color;

public class Fees extends JFrame
{
    JButton School_Fees, Bus_Fees, Tuition_Fees, Back_;
    JButton total_Fees;
    JTextField t1, t2, t3, t4;
    JLabel IMAGE;
    ImageIcon img;

    MyActionListener ml = new MyActionListener(this);
    Fees()
    {
        setLayout(null);
        setBounds(0,0,1260,1000);
        setBackground(Color.GREEN);

        t1=new JTextField();
        t2=new JTextField();
```



```
t3=new JTextField();
```

```
t4=new JTextField();
```

```
img = new ImageIcon("abc.JPG");
```

```
IMAGe = new JLabel(img);
```

```
IMAGe.setBounds(0,0,img.getIconWidth(),img.getIconHeight());
```

```
IMAGe.setVisible(true);
```

```
School_Fees =new JButton("School_Fees");
```

```
Bus_Fees =new JButton("Bus_Fees");
```

```
Tuition_Fees =new JButton("Tuition_Fees");
```

```
total_Fees =new JButton("Total_Fees");
```

```
Back_ =new JButton("HOME");
```

```
Font f1 = new Font("Arial",Font.BOLD,20);
```

```
School_Fees.setFont(f1);
```

```
Bus_Fees.setFont(f1);
```

```
Tuition_Fees.setFont(f1);
```

```
total_Fees.setFont(f1);
```

```
Back_.setFont(f1);
```

```
add(t1);
```

```
add(t2);
```

```
add(t3);
```

```
add(t4);
```

```
add(School_Fees);
```

```
add(Bus_Fees);
```

```
add(Tuition_Fees);
```

```
add(total_Fees);
```



```
add(Back_);
```

```
add(IMAGE);
```

```
t1.setBounds(350,100,150,50);
```

```
t2.setBounds(350,200,150,50);
```

```
t3.setBounds(350,300,150,50);
```

```
t4.setBounds(650,400,150,50);
```

```
School_Fees.setBounds(100,100,200,50);
```

```
Bus_Fees.setBounds(100,200,150,50);
```

```
Tuition_Fees.setBounds(100,300,200,50);
```

```
total_Fees.setBounds(400,400,200,50);
```

```
Back_.setBounds(600,200,200,50);
```

```
/*School_Fees.addActionListener(ml);
```

```
Bus_Fees.addActionListener(ml);
```

```
Tuition_Fees.addActionListener(ml);*/
```

```
total_Fees.addActionListener(ml);
```

```
Back_.addActionListener(ml);
```

```
addWindowListener(new WindowAdapter()
```

```
{
```

```
    public void windowClosing(WindowEvent we)
```

```
    {
```

```
        //System.exit(0);
```

```
        setVisible(false);
```

```
    }
```

```
});
```

```
}
```

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

```
{
```



```
Fees mf3 = new Fees();  
mf3.setVisible(true);  
}  
}
```

#### **4. Functions**

```
import java.awt.*;  
import java.awt.event.*;  
import java.io.*;  
import javax.swing.*;  
import java.lang.*;  
import java.awt.Color;  
  
public class Functions extends JFrame  
{  
    JButton Birthday,Marriage,Festival,Family_Tour,BACK;  
    JButton total_Functions;  
    JTextField t1,t2,t3,t4,t5;  
    JLabel IMAGE;  
    ImageIcon img;  
  
    MyActionListener ml = new MyActionListener(this);  
    Functions()  
    {  
        setLayout(null);  
        setBounds(0,0,1260,1000);  
        setBackground(Color.BLUE);
```



```
t1=new JTextField();  
t2=new JTextField();  
t3=new JTextField();  
t4=new JTextField();  
t5=new JTextField();
```

```
img = new ImageIcon("c.JPG");  
IMAGe = new JLabel(img);  
IMAGe.setBounds(0,0,img.getIconWidth(),img.getIconHeight());  
IMAGe.setVisible(true);
```

```
Birthday =new JButton("Birthday");  
Marriage =new JButton("Marriage");  
Festival =new JButton("Festival");  
Family_Tour =new JButton("Family_Tour");  
total_Functions =new JButton("Total_");  
BACK =new JButton("_HOME");
```

```
Font f1 = new Font("Arial",Font.BOLD,20);
```

```
Birthday.setFont(f1);  
Marriage.setFont(f1);  
Festival.setFont(f1);  
Family_Tour.setFont(f1);  
total_Functions.setFont(f1);  
BACK.setFont(f1);
```

```
add(t1);  
add(t2);  
add(t3);
```



```
add(t4);
add(t5);
add(Birthday);
add(Marriage);
add(Festival);
add(Family_Tour);
add(total_Functions);
add(BACK);
add(IMAGE);

t1.setBounds(300,100,150,50);
t2.setBounds(300,200,150,50);
t3.setBounds(300,300,150,50);
t4.setBounds(300,400,150,50);
t5.setBounds(650,500,150,50);
Birthday.setBounds(100,100,150,50);
Marriage.setBounds(100,200,150,50);
Festival.setBounds(100,300,150,50);
Family_Tour.setBounds(100,400,180,50);
total_Functions.setBounds(400,500,200,50);
BACK.setBounds(600,200,200,50);

/*Birthday.addActionListener(ml);
Marriage.addActionListener(ml);
Festival.addActionListener(ml);
Family_Tour.addActionListener(ml);*/
total_Functions.addActionListener(ml);
BACK.addActionListener(ml);
```



```
        addWindowListener(new WindowAdapter()
        {
            public void windowClosing(WindowEvent we)
            {
                //System.exit(0);
                setVisible(false);
            }
        });
    }

    public static void main(String args[])
    {
        Functions mf4 = new Functions();
        mf4.setVisible(true);
    }
}
```

## **Main Frame**

```
import java.awt.*;
import java.awt.event.*;
import java.io.*;
import javax.swing.*;
import java.lang.*;
import java.awt.Color;
import javax.swing.JFrame;
```

```
public class MyFrame extends JFrame
```





```
{
```

```
JButton Bill,Grocery,Fees,Functions;
```

```
JLabel image;
```

```
ImageIcon img;
```

```
MyActionListener ml = new MyActionListener(this);
```

```
MyFrame()
```

```
{
```

```
    setLayout(null);
```

```
    setBounds(0,0,1460,1000);
```

```
    setBackground(Color.DARK_GRAY);
```

```
    img = new ImageIcon("ab.JPG");
```

```
    image = new JLabel(img);
```

```
    image.setBounds(0,0,img.getIconWidth(),img.getIconHeight());
```

```
    image.setVisible(true);
```

```
    Font f1 = new Font("Arial",Font.BOLD,30);
```

```
    Bill = new JButton("Bill");
```

```
    Grocery = new JButton("Grocery");
```

```
    Fees = new JButton("Fees");
```

```
    Functions = new JButton("Functions");
```

```
    add(Bill);
```



```
add(Grocery);  
add(Fees);  
add(Functions);  
add(image);
```

```
Bill.setBounds(100,100,200,65);  
Grocery.setBounds(350,100,200,65);  
Fees.setBounds(600,100,200,65);  
Functions.setBounds(850,100,200,65);
```

```
Bill.setFont(f1);  
Grocery.setFont(f1);  
Fees.setFont(f1);  
Functions.setFont(f1);
```

```
Bill.addActionListener(ml);  
Grocery.addActionListener(ml);  
Fees.addActionListener(ml);  
Functions.addActionListener(ml);
```

```
addWindowListener(new WindowAdapter()  
{  
    public void windowClosing(WindowEvent we)  
    {  
        System.exit(0);  
    }  
});  
}
```



```
public static void main(String args[])  
{  
    MyFrame mf = new MyFrame();  
    //JFrame f = new JFrame();  
    //f.add(mf);  
    mf.setVisible(true);  
}  
}
```

## ActionListener

```
//set classpath=pdfbox-app-2.0.26.jar,;  
import java.io.IOException;  
import org.apache.pdfbox.pdmodel.PDDocument;  
import org.apache.pdfbox.pdmodel.PDPage;  
import org.apache.pdfbox.pdmodel.font.PDFont;  
import org.apache.pdfbox.pdmodel.font.PDType1Font;  
import org.apache.pdfbox.pdmodel.font.PDType0Font;  
import org.apache.pdfbox.pdmodel.PDPageContentStream;  
import org.apache.pdfbox.pdmodel.common.PDRectangle;  
//package p1;  
import java.awt.*;  
import java.awt.event.*;  
import java.io.*;  
import javax.swing.*;  
import java.lang.*;  
//import java.util.*;  
  
public class MyActionListener implements ActionListener
```

```
{  
    MyFrame mf;  
    Bill mf1;  
    Grocery mf2;  
    Fees mf3;  
    Functions mf4;  
  
    MyActionListener(MyFrame m)  
    {  
        this.mf = m;  
    }  
  
    // ActionListener for Bill  
    MyActionListener(Bill m)  
    {  
        this.mf1 = m;  
    }  
  
    // ActionListener for Grocery  
    MyActionListener(Grocery m)  
    {  
        this.mf2 = m;  
    }  
  
    // ActionListener for Fees  
    MyActionListener(Fees m)  
    {  
        this.mf3 = m;  
    }  
}
```



```
// ActionListener for Functions

MyActionListener(Functions m)
{
    this.mf4 = m;
}

public void actionPerformed(ActionEvent e)
{

    System.out.println(e);

    if(e.getActionCommand().equals("Home"))
    {
        mf1.setVisible(false);
        mf.setVisible(true);
    }

    if(e.getActionCommand().equals("Home_"))
    {
        mf2.setVisible(false);
        mf.setVisible(true);
    }

    if(e.getActionCommand().equals("HOME"))
    {
        mf3.setVisible(false);
        mf.setVisible(true);
    }
}
```



```
if(e.getActionCommand().equals("_HOME"))
{
    mf4.setVisible(false);
    mf.setVisible(true);
}

if(e.getActionCommand().equals("Total_Bill"))
{
    try
    {
        Integer num1 = Integer.parseInt(this.mf1.t1.getText());
        Integer num2 = Integer.parseInt(this.mf1.t2.getText());
        Integer num3 = Integer.parseInt(this.mf1.t3.getText());
        Integer sum = num1+num2+num3;
        this.mf1.t4.setText(sum.toString());
        System.out.println(sum);
        try{
            FileWriter fw = new FileWriter("bill.txt",true);
            fw.write(sum.toString()+"#");
            fw.close();
        }
        catch(Exception excp)
        {
            System.out.println(excp);
        }

        PDDocument document = new PDDocument();

        PDPage page = new PDPage();
        document.addPage(page);
```

```
        PDPageContentStream contentStream = new
PDPageContentStream(document, page);

        contentStream.beginText();

        contentStream.setFont(PDType1Font.TIMES_BOLD, 18);

        contentStream.newLineAtOffset(0, 20);
        contentStream.showText("My Bill");
        contentStream.newLineAtOffset(0, 20);
        contentStream.showText(sum.toString()+"Ruppes");

        contentStream.endText();

        System.out.println("Content added");
        contentStream.close();
        document.save("Bill.pdf");
        document.close();
    }
    catch(Exception e1){}

}

if(e.getActionCommand().equals("Total_Grocery"))
//if(e.getSource().equals(this.mf2.Total_Grocery))
{
try
{
```



```
Integer num1 = Integer.parseInt(this.mf2.t1.getText());
Integer num2 = Integer.parseInt(this.mf2.t2.getText());
Integer num3 = Integer.parseInt(this.mf2.t3.getText());
Integer sum = num1+num2+num3;
this.mf2.t4.setText(sum.toString());
System.out.println(sum);

try{
    FileWriter fw = new FileWriter("Grocery.txt",true);
    fw.write(sum.toString()+"#");
    fw.close();
}
catch(Exception excp)
{
    System.out.println(excp);
}

PDDocument document = new PDDocument();

PDPage page = new PDPage();
document.addPage(page);

PDPageContentStream contentStream = new
PDPageContentStream(document, page);

contentStream.beginText();

contentStream.setFont(PDType1Font.TIMES_BOLD, 18);

contentStream.newLineAtOffset(0, 20);
contentStream.showText("My Grocery");
contentStream.newLineAtOffset(0, 20);
contentStream.showText(sum.toString());
```





```
        contentStream.endText();

        System.out.println("Content added");
        contentStream.close();
        document.save("Grocery.pdf");
        document.close();
    }
    catch(Exception excp){ }
}

if(e.getActionCommand().equals("Total_Fees"))
//if(e.getSource().equals(this.mf3.total))
{
    try
    {

Integer num1 = Integer.parseInt(this.mf3.t1.getText());
        Integer num2 = Integer.parseInt(this.mf3.t2.getText());
        Integer num3 = Integer.parseInt(this.mf3.t3.getText());
        Integer sum = num1+num2+num3;
        this.mf3.t4.setText(sum.toString());
        System.out.println(sum);
        try{
            FileWriter fw = new FileWriter("Fees.txt",true);
            fw.write(sum.toString()+"#");
            fw.close();
        }
        catch(Exception excp)
```



```
{  
    System.out.println(excp);  
}  
PDDocument document = new PDDocument();  
  
PDPage page = new PDPage();  
document.addPage(page);  
  
PDPageContentStream contentStream = new  
PDPageContentStream(document, page);  
contentStream.beginText();  
  
contentStream.setFont(PDType1Font.TIMES_BOLD, 18);  
  
contentStream.newLineAtOffset(0, 20);  
contentStream.showText("My Fees");  
contentStream.newLineAtOffset(0, 20);  
contentStream.showText(sum.toString());  
  
contentStream.endText();  
  
System.out.println("Content added");  
contentStream.close();  
document.save("Fees.pdf");  
document.close();  
}  
catch(Exception excp){}  
}  
  
//if(e.getSource().equals(this.mf4.Total_Functions))  
if(e.getActionCommand().equals("Total_"))
```



```
{  
try  
{
```

```
Integer num1 = Integer.parseInt(this.mf4.t1.getText());  
  
Integer num2 = Integer.parseInt(this.mf4.t2.getText());  
Integer num3 = Integer.parseInt(this.mf4.t3.getText());  
Integer num4 = Integer.parseInt(this.mf4.t4.getText());  
Integer sum = num1+num2+num3+num4;  
this.mf4.t5.setText(sum.toString());  
System.out.println(sum);  
  
try{  
    FileWriter fw = new FileWriter("Function.txt",true);  
    fw.write(sum.toString()+"#");  
    fw.close();  
}  
catch(Exception excp)  
{  
    System.out.println(excp);  
}  
PDDocument document = new PDDocument();  
  
PDPage page = new PDPage();  
document.addPage(page);  
  
PDPageContentStream contentStream = new  
PDPageContentStream(document, page);  
contentStream.beginText();
```



```
        contentStream.setFont(PDType1Font.TIMES_BOLD, 18);

        contentStream.newLineAtOffset(0, 20);
        contentStream.showText("My Function");
        contentStream.newLineAtOffset(0, 20);
        contentStream.showText(sum.toString());

        contentStream.endText();

        System.out.println("Content added");
        contentStream.close();
        document.save("Function.pdf");
        document.close();
    }
    catch(Exception excp){}
}

if(e.getActionCommand().equals("Bill"))
//if(e.getSource().equals(this.mf.Bill))
{
    this.mf1 = new Bill();
    this.mf1.setVisible(true);
}

//if(e.getActionCommand().equals("Grocery"))
if(e.getSource().equals(this.mf.Grocery))
{
    mf2 = new Grocery();
    this.mf2.setVisible(true);
}
```



```
//if(e.getActionCommand().equals("Fees"))
if(e.getSource().equals(this.mf.Fees))
{
    mf3 = new Fees();
    this.mf3.setVisible(true);
}

//if(e.getActionCommand().equals("Functions"))
if(e.getSource().equals(this.mf.Functions))
{
    mf4 = new Functions();
    this.mf4.setVisible(true);
}
}
}
```