

A Report for the ETE of Capstone Design -I
Savings Tracker-BT4256

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ABSTRACT

Savings Tracker is a daily Savings management system which is specially designed for non- salaried and salaried personnel for keeping track of their daily expenditure with easy and effective way through computerized system which tends to eliminate manual paper works. It will also manage records in systematic way and user can access the stored data conveniently.

We have tried to design the window application in such way that user may not have any difficulty in using this application without much effort. This software can be really used by end user who have Window running devices with them. The language that we use to develop this system is Java(Apache Netbeans 11.3) and MySQL Workbench 8.0 CE for database.

This application is GUI(Graphics User Interface) based Application. If you are a Window user you can download the application and work according to it. This system will be used by any person to control their Income-Savings from Day-to-Day to Yearly Basics. And to keep a watch on their Savings. This application is very easy to use and it is mutli-lingual. The main feature of this applications is that you can keep track by the day wise and the category wise also. You can use it as per your choice of category.

Keywords : Literature review, Problem Formulation, Tools used for implementation, Features, Merits of Proposed System, Architecture Design for Purpose method, Implementation and Description of Project Modules, Progress Plan, References.

CHAPTER I

LITERATURE REVIEW

Tracking daily Savings is not so innovative. Many traditional and technological approach is found to track our Savings and budget with their own functionality. From decades ago and today we have been writing our expenditure in a register to calculate the profit or saving. Not only this many desktop and mobile applications has been developed for this purpose. Quicken and Microsoft money were the first desktop applications was developed decades ago but was not so familiar with the users. Personal capital and dollar bird application were used to visualize the Savings in chart or graphs with the calendar system. QuickBooks were the application for the small business holder to wrap up their whole business. YNAB and Penny were the latest application which were embedded with AI and applicable for importing Savings automatically. However, Mint was the one which was widely used and trusted.

Explaining about the latest application built in this category, YNAB is an Savings tracker that gives the automatic tracking of our Savings through our bank account or credit cards. We can also define Savings that may take place in future so that we do

not go out of bound. This application is mobile friendly and is emerging since 2013. This application is embedded with AI to define and manage our daily Savings.

This application does not give any detail information about our Savings while our window application will get those information via text.

PROBLEM FORMULATION

Every earning people are mostly obsessed at the end of the month as the they cannot remember where all of their money have gone when they have spent and ultimately have to sustain in little money minimizing their essential needs. There is no as such complete solution present easily or we should say free of cost which enables a person to keep a track of its daily expenditure easily and notify them if they are going to have money shortage. To do so a person has to keep a log in a diary or in a computer, also all the calculations needs to be done by the user which may sometimes results in errors leading to losses. Due to lack of a complete tracking system, there is a constant overload to rely on the daily entry of the expenditure and total estimation till the end of the month.

By this application, you can easily manage or formulate your Savings by saving data in database ,whenever you want just have a look into it.

TOOLS USED FOR IMPLEMENTATION

Front End Tools

Apache NetBeans IDE 11.3 :

NetBeans is an open source and a free software development tool written in Java that develops world-class web, mobile, and desktop applications easily and quickly. It is an integrated development environment (IDE) for Java. NetBeans allows applications to be developed from a set of modular software components called modules.

It runs on Windows, macOS, Linux and Solaris. In addition to Java development, it has extensions for other languages like PHP, C, C++, HTML5 and JavaScript. Applications based on NetBeans, including the NetBeans IDE, can be extended by third party developers.

NetBeans IDE supports development of all Java application types (Java SE (including JavaFX), Java ME, web, EJB and mobile applications) out of the box.

Among other features are an Ant-based project system, Maven support, refactorings, version control (supporting CVS, Subversion, Git, Mercurial and

It lets us quickly and easily develop Java desktop, Java EE, and web applications, as well as HTML5 applications with HTML, JavaScript, and CSS.

The IDE also provides a great set of tools for PHP and C/C++ developers. It is free and open source and has a large community of users and developers around the world.

It requires Java 8 or later Java Development Kit installed.

Back End Tools

JAVA:

Java is a general-purpose computer-programming language that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible. As the back end tools java is used to provide functionality to the attributes displaying in UI. NetBeans IDE offers first-class tools for Java web, enterprise, desktop, and mobile application development.

It is consistently the first IDE to support the latest versions of the JDK, Java EE, and JavaFX.

It provides smart overviews to help you understand and manage your applications, including out-of-the-box support for popular technologies such as Maven.

With its end-to-end application development features, constantly improving Java Editor, and continual speed and performance enhancements,

NetBeans IDE sets the standard for application development with cutting edge technologies out of the box.

Thus, it is very much clear that java along with netbeans IDE will provide us integrated and one of the best environment regarding our project.

MySQL Workbench 8.0 CE :- MySQL Workbench is a visual database design tool that integrates SQL development, administration, database design, creation and maintenance into a single integrated development environment for the MySQL database system. It is the successor to DB-Designer 4 from fabFORCE.net, and replaces the previous package of software, MySQL GUI Tools Bundle.

MySQL Workbench delivers visual tools for creating, executing, and optimizing SQL queries. The SQL Editor provides color syntax highlighting, auto-complete, reuse of SQL snippets, and execution history of SQL. The Database Connections Panel enables developers to easily manage standard database connections, including MySQL Fabric. The Object Browser provides instant access to database schema and objects .

FEATURES

The features of this application is that it is a window application ,and it is very easy to use .As it is a window application ,it contain four frames with different work

1.Main Window

A Starting page with welcome note appears at the first page and the window where user can add the Savings.

2.Add Category

The system shall allow the user to add category as per his/her choice.

3.Category Combo Box

This Combo Box contains all the category added by the user.

4.Remove Button

This Button delete any entry of last 20 days Savings.

5.Add Category Window

This window helps the user to easily interact with the category, where user can add and remove the category as per his choice.

6.Calender

The system shall allow users to add the date to their Savings

7.View Savings Day wise/Category wise Window

This window allows the user to interact with the Savings according to day wise as well as category wise.

8.Menu option

This allows user to interact with other pages by just clicking on the menu option.

9.Search button

This allows user to search their Savings according to category as well as date wise by clicking on the search button.

10.Refresh button

By clicking on this button user have to update the category.

MERITS OF PROPOSED SYSTEM

We have divided the merits in two ways :-

In Normal or Technical phase :

- User have to entry every record manually.
- The category divided may be blunder or messy.
- Person who is handling system must have some technical knowledge.

In Update of Category phase :

- As soon as user enter the category, user have to update the category in the Main Window by just clicking on the REFRESH button present in the Main Window.
- User have to press the REFRESH button each time.
- Person who is handing the application must have knowledge of entering the data according to Textfield present.

CHAPTER II

ARCHITECTURE DESIGN FOR PROPOSED SYSTEM

We have developed the required system that works without internet. To use this system we need a database, a desktop, app and the user.

System Design

Systems design is the process of defining the architecture, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development.

Database Schema :-



Figure 1 : Database Schema

There are two tables in our application database which are category and spendings. In above diagram the tables covers all the variables defined in the table for the database.

Data Dictionary

A data dictionary also known as metadata repository is a centralized repository of information about data such as meaning, relationship to other data, origin, usage and format.

S.N	Entity	Attribute	Data type	Constraints
1	spendings	eid	INT	Primary
		category	VARCHAR(50)	
		sdate	DATE	
		amount	INT	
2	categoryinfo	category	VARCHAR(50)	PRIMARY

Table 1: Data Dictionary

UML class diagram Class :-

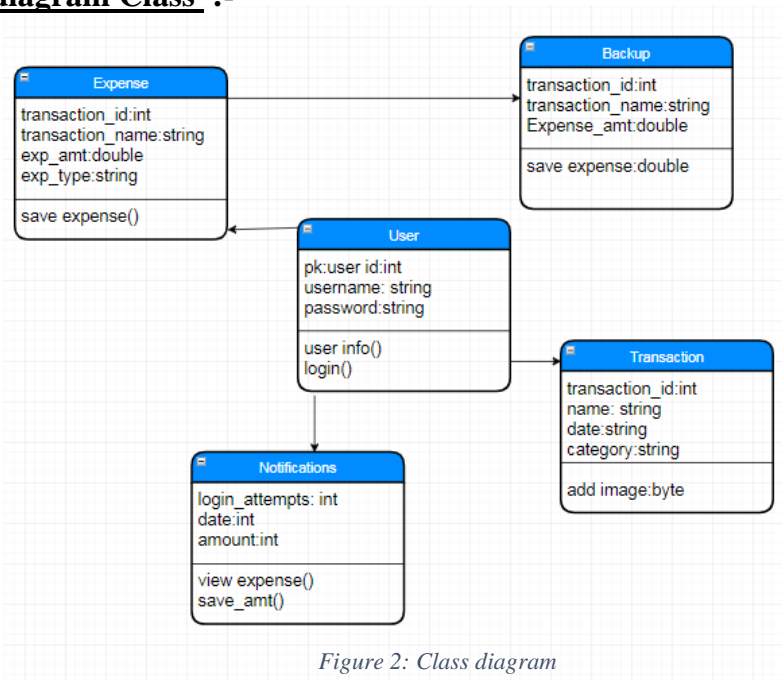


Figure 2: Class diagram

Savings Tracker application have five entities: Savings, user, backup, notification, transaction, which have their own data members and methods. Above diagram shows the flow of the functionality from entity to entity. Also, types of data members and methods of respective entity are mentioned above.

Sequence diagram :-

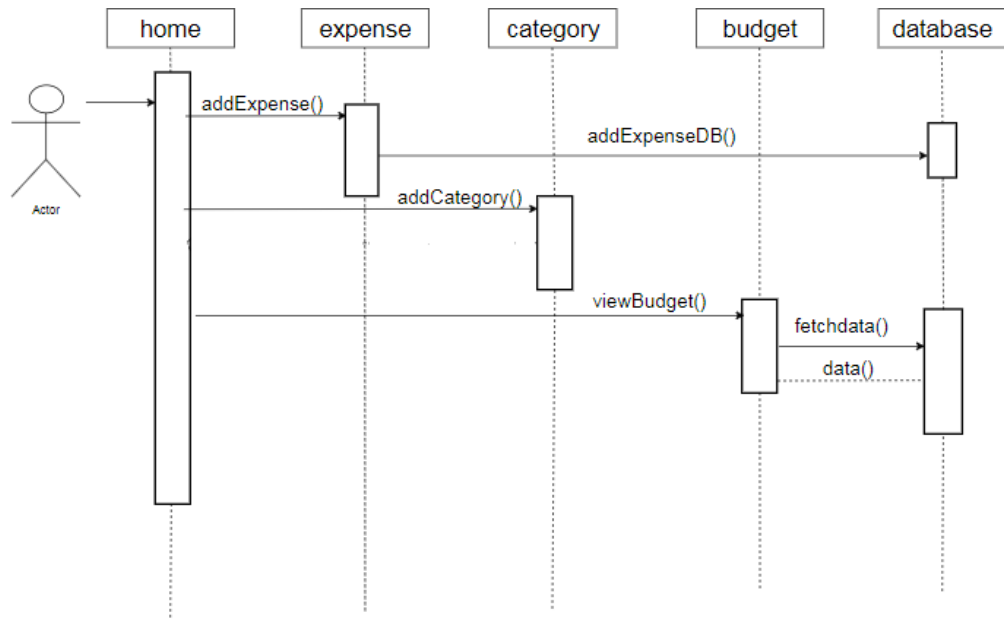


Figure 3 : Sequence Diagram

Activity Diagram :-

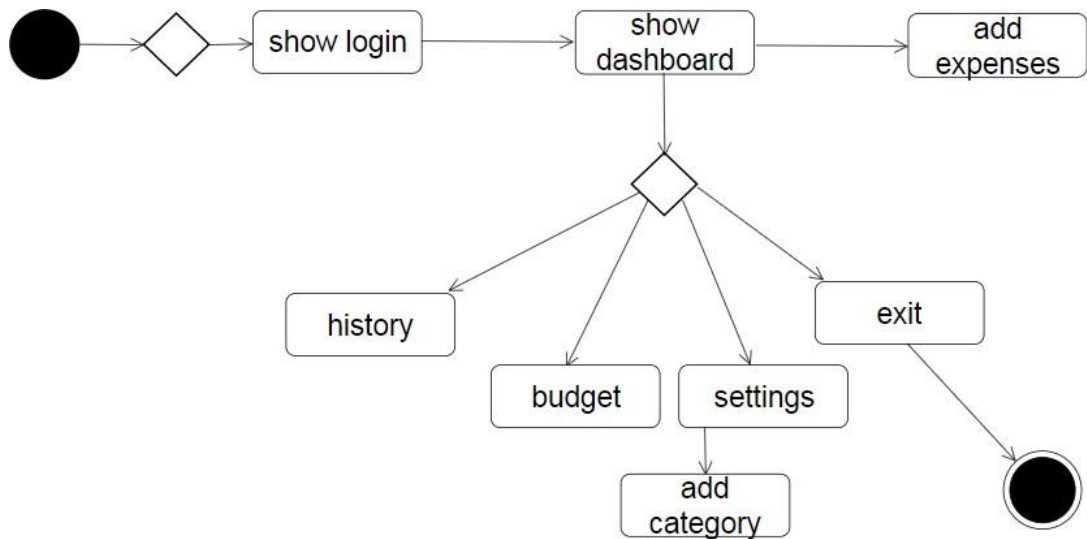


Figure 9: Activity Diagram

Input Output Diagram :-

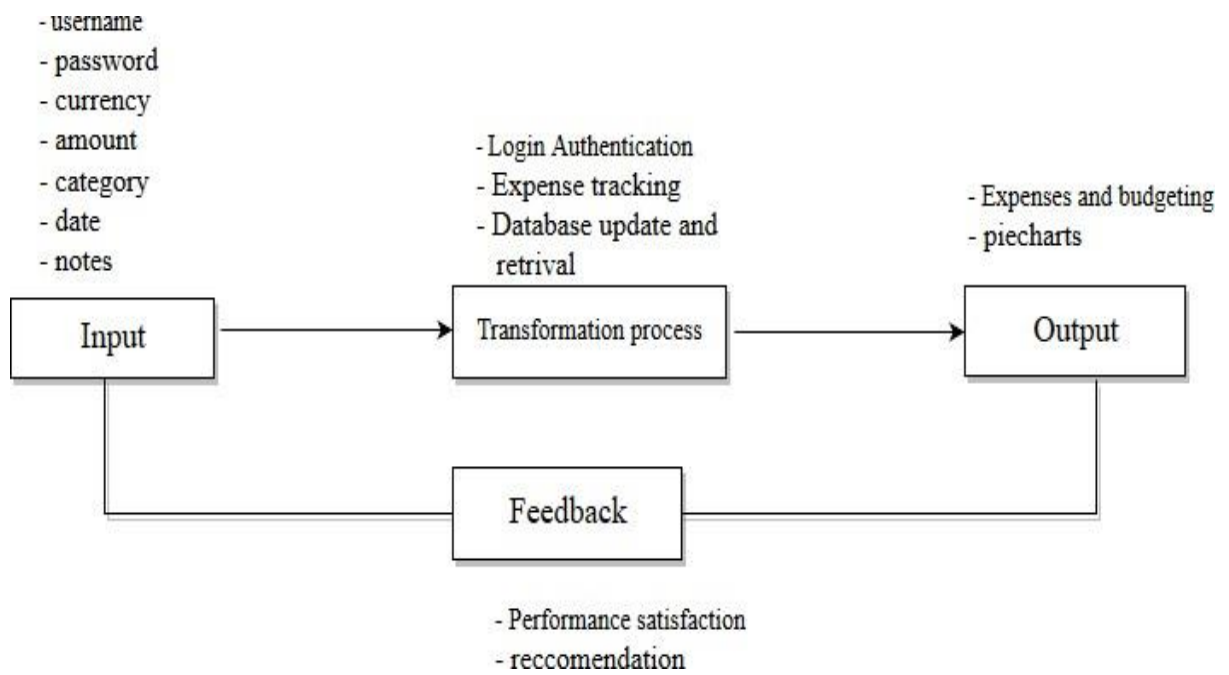


Figure 3 :- Input output diagram

CHAPTER III

IMPLEMENTATION AND DESCRIPTION OF PROJECT MODULES

Implementation Overview

Process Model Used :-

The waterfall model is a sequential approach, where each fundamental activity of a process represented as a separate phase, arranged in linear order. In the waterfall model, you must plan and schedule all of the activities before starting working on them (plan- driven process).

Waterfall model is used for the project because all the requirements are clear as this project is not dealing with the clients and hence beforehand planning can be made about how to carry out each phase of development.

Module Description

A modularization consists of well-defined manageable units with well-defined interfaces among the units.

Desirable property of modular system include

- a) Each module is a well-defined sub-system.
- b) Single, well – defined purpose of each module.
- c) Modules can be separately compiled and stored in a library.
- d) Modules can use another module.
- e) Modules should be easier to use than to build.

- f) Modules should be simpler from outside then from inside.

The project can be decomposed in following modules:

- a) **Welcome module:** This module is a starting page of this application.
- b) **Main window module:** This module is responsible for input the data and store in the database.
- c) **Add amount:** This module is responsible to enable the user to add amount in the database.
- d) **Delete Savings:** This module is responsible for deleting the previous 20 days Savings.
- e) **View Savings:** This module is responsible for viewing all the Savings in detail added to the log by the user earlier.
- f) **Add Module:** This module is responsible for editing the pre-defined category.
- g) **Categories module:** This module is responsible for various options. In this app users have options of selecting various basic Savings categories according to their choice.
- h) **Search module:** This module is responsible for adding notes and dates to the expenditure of user.

Report Organization :-

Chapter IV:

This chapter covers all the programs/codes of all the pages and displaying all the pages.

Chapter V:

This chapter describes or explains about the progress plan of this project.

Chapter VI:

Conclusion and future scope of the application are explained as well as references.

CHAPTER IV

CODE & OUTPUT(IMPLEMENTATION)

For database connection :-

```
package DatabaseConnection;
import java.sql.*;
import javax.swing.JOptionPane;
public class DatabaseConnection {
    public static Connection conn;
    public static Statement st;
    static{
        try{

conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/Savingsdb"+"?useSSL=
false","root","hrg00000@");
        st=conn.createStatement();
        }catch(Exception ex){
            JOptionPane.showMessageDialog(null,ex);
        }
    }
}
```

All frames used in this project :-

1.For category window :-

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package Gui;
import java.sql.*;
```



```

import javax.swing.JOptionPane;
import static DatabaseConnection.DatabaseConnection.*;
/**
 *
 * @author ASHISH
 */
public class Category extends javax.swing.JFrame {

    /**
     * Creates new form Category
     */
    public Category() {
        initComponents();
        clearEntries();
        getEntries();
    }
    private void clearEntries()
    {
        t1.setText("");
    }
    private void getEntries()
    {
        try
        {
            javax.swing.table.DefaultTableModel
dtm=(javax.swing.table.DefaultTableModel)table1.getModel();
            int rc=dtm.getRowCount();
            while(rc--!=0)
            {
                dtm.removeRow(rc);
            }
            ResultSet rs=st.executeQuery("select * from categoryinfo");
            int sno=0;
            while(rs.next())
            {
                String cate=rs.getString("category");

```

```

        //Object o[]={ ++sno,category };
        //dtm.addRow(o);
        java.util.Vector row=new java.util.Vector();
        row.add(++sno);
        row.add(cate);
        dtm.addRow(row);
    }
} catch(Exception ex)
{
    JOptionPane.showMessageDialog(null,ex);
}
}
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jScrollPane1 = new javax.swing.JScrollPane();
    table1 = new javax.swing.JTable();
    jPanel1 = new javax.swing.JPanel();
    jPanel2 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jButton2 = new javax.swing.JButton();
    t1 = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    jButton3 = new javax.swing.JButton();

    setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);
    setTitle("Category");
    setResizable(false);

```

```

table1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "S.No", "Category"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
table1.getTableHeader().setReorderingAllowed(false);
jScrollPane1.setViewportView(table1);

jPanel1.setBackground(new java.awt.Color(102, 102, 102));

jPanel2.setBackground(new java.awt.Color(204, 204, 204));

jLabel2.setBackground(new java.awt.Color(255, 255, 255));
jLabel2.setFont(new java.awt.Font("Pristina", 1, 36)); // NOI18N
jLabel2.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel2.setText("Add New Category");

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel2Layout.createSequentialGroup()
        .addGap(65, 65, 65)

```

```

        .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 262,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(147, 147, 147)
        .addComponent(jLabel1)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAI
LING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(29, 29, 29)
            .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanel2Layout.createSequentialGroup()
                .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE,
64, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(0, 0, Short.MAX_VALUE)))
            .addContainerGap())
    );

jLabel4.setFont(new java.awt.Font("Segoe UI Semibold", 0, 18)); // NOI18N
jLabel4.setForeground(new java.awt.Color(255, 255, 255));
jLabel4.setText("Category :");

jButton2.setBackground(new java.awt.Color(51, 255, 0));
jButton2.setFont(new java.awt.Font("Tw Cen MT Condensed", 1, 18)); // NOI18N
jButton2.setText("ADD");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
}

```



```

);
jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 67,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(0, 0, Short.MAX_VALUE)
        .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE,
36, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(t1)
        .addComponent(jButton2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGap(29, 29, 29))
);

jButton3.setBackground(new java.awt.Color(255, 0, 0));
jButton3.setFont(new java.awt.Font("Tw Cen MT Condensed", 1, 18)); // NOI18N
jButton3.setText("REMOVE");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);

```

```

        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                    .addContainerGap()
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 510,
Short.MAX_VALUE)
                    .addContainerGap())
                .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 108,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(33, 33, 33))

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jPanel1, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addContainerGap(173, Short.MAX_VALUE)
                .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
182, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jButton3, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addGap(6, 6, 6))

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

```

```

        .addContainerGap(238, Short.MAX_VALUE)))
    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    try
    {
        String cate=t1.getText();
        if(!cate.equals(" "))
        {
            DatabaseConnection.DatabaseConnection.st.executeUpdate("insert into
categoryinfo values(""+cate+"");
            JOptionPane.showMessageDialog(null,"Category Added Succesfully!");
            getEntries();
            clearEntries();
        }
        else
        {
            JOptionPane.showMessageDialog(null,"Category is blank!");
        }
    }
    catch(SQLIntegrityConstraintViolationException ex)
    {
        JOptionPane.showMessageDialog(null,"Category Already Exist!");
    }
    catch(Exception ex)
    {
        JOptionPane.showMessageDialog(null, ex);
    }
}

private void t1ActionPerformed(java.awt.event.ActionEvent evt) {
    jButton2ActionPerformed(null);
}

```



```

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    int rindex=table1.getSelectedRow();
    if(rindex!=-1)
    {
        int answer=JOptionPane.showConfirmDialog(null,"Do you really want to
delete?","Deletion Confirmation!",JOptionPane.YES_NO_OPTION);
        if(answer==JOptionPane.YES_OPTION)
        {
            String cate=(String)table1.getValueAt(rindex,1);
            try{
                Connection
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/Savingsdb"+"?useSSL=
false","root","hrg00000@");
                Statement st=conn.createStatement();
                st.executeUpdate("delete from categoryinfo where category='"+cate+"'");
                JOptionPane.showMessageDialog(null,"Category Deleted Successfully!");
                getEntries();
            }catch(Exception ex)
            {
                JOptionPane.showMessageDialog(null,ex);
            }
        }
    }
    else
    {
        JOptionPane.showMessageDialog(null,"Please select any Category first!");
    }
}

```

```


// Variables declaration - do not modify
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;

```


```
private javax.swing.JLabel jLabel4;  
private javax.swing.JPanel jPanel1;  
private javax.swing.JPanel jPanel2;  
private javax.swing.JScrollPane jScrollPane1;  
private javax.swing.JTextField t1;  
private javax.swing.JTable table1;  
// End of variables declaration  
}
```

OUTPUT(SCREENSHOT) :-

Main



Add New Savings



Date : Amount : Category :

Last 20 Days Spendings :-

ID	Date	Category	Amount
----	------	----------	--------

Total Amount :- 0

SavingsTracker - Apache NetBeans IDE 12.6

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

<default config> 16567438.0MB

DatabaseConnection.java x Category.java x SavingTracker.java x Splash.java x ViewSaving.java x


Source Design History

Projects x Files


SavingsTracker

- Source Packages
 - DatabaseConnection
 - DatabaseConnection.java
- Gui
 - Category.java
 - SavingTracker.java
 - Splash.java
 - ViewSaving.java
- Gui.Icons
- Test Packages
- Libraries
- Test Libraries

Main



Add New Savings



Date : Amount : Category :

Last 20 Days Spendings :-

ID	Date	Category	Amount
----	------	----------	--------

Total Amount :- 0

2.For Splash Screen window :-

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package Gui;

/**
 *
 * @author ASHISH
 */
public class Splash extends javax.swing.JFrame {

    /**
     * Creates new form Splash
     */
    public Splash() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jButton1 = new javax.swing.JButton();
        jButton4 = new javax.swing.JButton();
        jButton5 = new javax.swing.JButton();
        jPanel2 = new javax.swing.JPanel();
        jLabel2 = new javax.swing.JLabel();
    }
}
```

```

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);
setTitle("Welcome to Savings Tracker");
setResizable(false);

jButton1.setBackground(new java.awt.Color(255, 0, 0));
jButton1.setFont(new java.awt.Font("Pristina", 0, 24)); // NOI18N
jButton1.setText("Next...");
jButton1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jButton1MouseClicked(evt);
    }
    public void mouseReleased(java.awt.event.MouseEvent evt) {
        jButton1MouseReleased(evt);
    }
});
jButton1.addComponentListener(new java.awt.event.ComponentAdapter() {
    public void componentHidden(java.awt.event.ComponentEvent evt) {
        jButton1ComponentHidden(evt);
    }
});
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jButton4.setBackground(new java.awt.Color(255, 204, 204));
jButton4.setFont(new java.awt.Font("Pristina", 0, 24)); // NOI18N
jButton4.setText("\A Tracker that manages your Savings (A Make in India
Initiative)");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

```

```

jButton5.setBackground(new java.awt.Color(255, 255, 255));
jButton5.setFont(new java.awt.Font("Pristina", 1, 36)); // NOI18N
jButton5.setText("\Welcome to Savings Tracker ");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});

jLabel2.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Gui/Icons/ayaneshu-bhardwaj-
OwOtokcHv90-unsplash.jpg"))); // NOI18N

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGap(0, 782, Short.MAX_VALUE)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING)
    .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 781,
Short.MAX_VALUE))
);
jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGap(0, 512, Short.MAX_VALUE)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEA
DING)
    .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 512,
Short.MAX_VALUE))
);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);

```

```

    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addGap(0, 0, Short.MAX_VALUE)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 94,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(32, 32, 32))
            .addGroup(layout.createSequentialGroup()
                .addGap(147, 147, 147)
                .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 482,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(153, Short.MAX_VALUE))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 660,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(0, 0, Short.MAX_VALUE)))
    );

    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(157, 157, 157)
                .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 92,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jButton4, javax.swing.GroupLayout.PREFERRED_SIZE, 53,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,

```

```

149, Short.MAX_VALUE)
        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 33,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(22, 22, 22))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    new SavingsTracker().setVisible(true);
}

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void jButton1MouseClicked(java.awt.event.MouseEvent evt) {

}

private void jButton1MouseReleased(java.awt.event.MouseEvent evt) {

}

private void jButton1ComponentHidden(java.awt.event.ComponentEvent evt) {
    // TODO add your handling code here:
}

```



```

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Splash.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Splash.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Splash.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

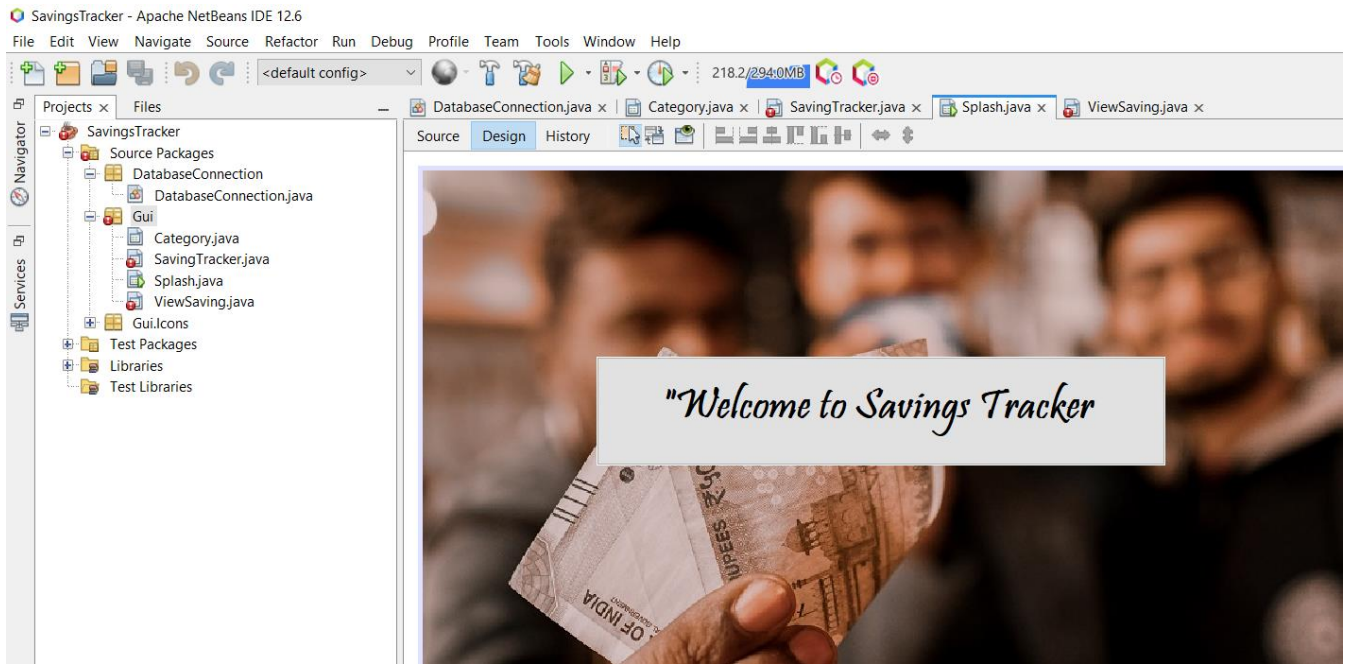
java.util.logging.Logger.getLogger(Splash.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
    //</editor-fold>

```

```
/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new Splash().setVisible(true);
    }
});
}

// Variables declaration - do not modify
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton4;
private javax.swing.JButton jButton5;
private javax.swing.JLabel jLabel2;
private javax.swing.JPanel jPanel2;
// End of variables declaration
}
```

OUTPUT(SCREENSHOT) :-



3.For Main Window :-

```
/*  
 * To change this license header, choose License Headers in Project Properties.  
 * To change this template file, choose Tools | Templates  
 * and open the template in the editor.  
*/
```

```
package Gui;
```

```
import javax.swing.JOptionPane;
```

```
import java.sql.*;
```

```
import static DatabaseConnection.DatabaseConnection.*;
```

```
import javax.swing.JFrame;
```

```
/**
```

```
 *
```

```
 * @author ASHISH
```

```
*/
```

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

```
    /**
```

```
     * Creates new form SavingsTracker
```

```
    */
```

```
    public SavingsTracker() {
```

```
        initComponents();
```

```
        displayCategory();
```

```
        getEntries();
```

```
        clearEntries();
```

```
        d.setSelectableDateRange(null,new java.util.Date());
```

```
        d.setDate(new java.util.Date());
```

```
        //this.setExtendedState(JFrame.MAXIMIZED_BOTH);
```

```
    }
```

```
    private void clearEntries()
```

```
    {
```

```
        a.setText("");
```

```
    }
```

```
    private void displayCategory()
```

```
    {
```

```

try
{
    combo1.removeAllItems();
    ResultSet rs=st.executeQuery("select * from categoryinfo");
    while(rs.next())
    {
        String cate=rs.getString("category");
        combo1.addItem(cate);
    }
}catch(Exception ex)
{
    JOptionPane.showMessageDialog(null,ex);
}
}
private void getEntries()
{
    try{
        javax.swing.table.DefaultTableModel
dtm=(javax.swing.table.DefaultTableModel)table2.getModel();
        int rc=dtm.getRowCount();
        while(rc--!=0)
        {
            dtm.removeRow(0);
        }
        java.time.LocalDate cd=java.time.LocalDate.now();
        java.time.LocalDate bd=cd.minusDays(20);
        ResultSet rs=st.executeQuery("select * from spendings where sdate<='"+cd+"' and
sdate>='"+bd+"' order by sdate asc");
        int total=0;
        while(rs.next())
        {
            int t=rs.getInt("amount");
            total+=t;
            java.util.Vector row=new java.util.Vector();
            row.add(rs.getInt("eid"));
            row.add(rs.getDate("sdate"));
            row.add(rs.getString("category"));

```

```

        row.add(t);
        dtm.addRow(row);
    }
    t1.setText(total+" ");
} catch(SQLException ex)
{
    JOptionPane.showMessageDialog(null,ex);
}
}
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jPanel2 = new javax.swing.JPanel();
    jMonthChooser1 = new com.toedter.calendar.JMonthChooser();
    jLabel8 = new javax.swing.JLabel();
    jMenu1 = new javax.swing.JMenu();
    jMenu2 = new javax.swing.JMenu();
    jPanel1 = new javax.swing.JPanel();
    jLabel2 = new javax.swing.JLabel();
    d = new com.toedter.calendar.JDateChooser();
    jLabel3 = new javax.swing.JLabel();
    a = new javax.swing.JTextField();
    jLabel4 = new javax.swing.JLabel();
    combo1 = new javax.swing.JComboBox<>();
    jPanel3 = new javax.swing.JPanel();
    jLabel5 = new javax.swing.JLabel();
    jLabel1 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();

```

```

jButton5 = new javax.swing.JButton();
jLabel6 = new javax.swing.JLabel();
jScrollPane1 = new javax.swing.JScrollPane();
table2 = new javax.swing.JTable();
jButton3 = new javax.swing.JButton();
jPanel4 = new javax.swing.JPanel();
jLabel7 = new javax.swing.JLabel();
t1 = new javax.swing.JLabel();
jMenuBar1 = new javax.swing.JMenuBar();
jMenu3 = new javax.swing.JMenu();
jMenuItem1 = new javax.swing.JMenuItem();
jMenuItem2 = new javax.swing.JMenuItem();
jSeparator2 = new javax.swing.JPopupMenu.Separator();
jMenuItem3 = new javax.swing.JMenuItem();
jSeparator1 = new javax.swing.JPopupMenu.Separator();
jMenu4 = new javax.swing.JMenu();
jMenuItem4 = new javax.swing.JMenuItem();

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGap(0, 100, Short.MAX_VALUE)
);
jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGap(0, 100, Short.MAX_VALUE)
);

jLabel8.setText("jLabel8");

jMenu1.setText("jMenu1");

jMenu2.setText("jMenu2");

```

```

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setTitle("Savings Tracker");
setResizable(false);

jPanel1.setBackground(new java.awt.Color(102, 102, 102));
jPanel1.setBorder(javax.swing.BorderFactory.createMatteBorder(1, 1, 1, 1, new
java.awt.Color(51, 51, 51)));

jLabel2.setFont(new java.awt.Font("Segoe UI Semibold", 0, 18)); // NOI18N
jLabel2.setForeground(new java.awt.Color(255, 255, 255));
jLabel2.setText("Date :");

jLabel3.setFont(new java.awt.Font("Segoe UI Semibold", 0, 18)); // NOI18N
jLabel3.setForeground(new java.awt.Color(255, 255, 255));
jLabel3.setText("Amount :");

a.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        actionPerformed(evt);
    }
});
a.addKeyListener(new java.awt.event.KeyAdapter() {
    public void keyTyped(java.awt.event.KeyEvent evt) {
        keyTyped(evt);
    }
});

jLabel4.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel4.setForeground(new java.awt.Color(255, 255, 255));
jLabel4.setText("Category :");

combo1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        combo1ActionPerformed(evt);
    }
});

```



```

jPanel3.setBackground(new java.awt.Color(255, 255, 255));

jPanel3.setBorder(javax.swing.BorderFactory.createBevelBorder(javax.swing.border.Bevel
Border.RAISED));

jLabel5.setBackground(new java.awt.Color(255, 255, 51));
jLabel5.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Gui/Icons/Spending.jpg"))); // NOI18N

jLabel1.setFont(new java.awt.Font("Pristina", 1, 36)); // NOI18N
jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel1.setText("Add New Savings");

jLabel9.setBackground(new java.awt.Color(255, 255, 51));
jLabel9.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Gui/Icons/Spending.jpg"))); // NOI18N

javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
jPanel3.setLayout(jPanel3Layout);
jPanel3Layout.setHorizontalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel3Layout.createSequentialGroup()
        .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 296,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 256,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jLabel9)
    );
jPanel3Layout.setVerticalGroup(

jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE)

```

```

        .addGroup(jPanel13Layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addContainerGap()
            .addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE, 0,
Short.MAX_VALUE)
        );

jButton1.setBackground(new java.awt.Color(255, 255, 102));
jButton1.setFont(new java.awt.Font("Times New Roman", 0, 18)); // NOI18N
jButton1.setText("Add New Category");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jButton2.setBackground(new java.awt.Color(51, 255, 0));
jButton2.setFont(new java.awt.Font("Tw Cen MT Condensed", 1, 18)); // NOI18N
jButton2.setText("ADD");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jButton5.setBackground(new java.awt.Color(255, 153, 51));
jButton5.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton5.setText("REFRESH");
jButton5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton5ActionPerformed(evt);
    }
});

```

```

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(14, 14, 14)
        .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 55,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(d, javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)
                    .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 92,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addComponent(a, javax.swing.GroupLayout.PREFERRED_SIZE, 121,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addGap(27, 27, 27)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 93,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton5, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
            .addComponent(jButton1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(combo1, 0, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
            .addGap(18, 18, 18)
            .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 99,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(26, Short.MAX_VALUE))
    )
);

```

```

        .addGroup(jPanel1Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addContainerGap())
    );
    JPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE,
            javax.swing.GroupLayout.DEFAULT_SIZE,
            javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(d, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
        javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE,
        27, javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE,
        27, javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(a, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
        javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(jLabel4,
        javax.swing.GroupLayout.PREFERRED_SIZE, 24,
        javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(combo1,
        javax.swing.GroupLayout.PREFERRED_SIZE, 27,
        javax.swing.GroupLayout.PREFERRED_SIZE)))

```

```

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
    .addComponent(jButton1, javax.swing.GroupLayout.DEFAULT_SIZE,
33, Short.MAX_VALUE)
    .addComponent(jButton5, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
    .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE, 39,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap(15, Short.MAX_VALUE))
);

jLabel6.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
jLabel6.setText("Last 20 Days Spendings :-");

table2.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {

    },
    new String [] {
        "ID", "Date", "Category", "Amount"
    }
) {
    boolean[] canEdit = new boolean [] {
        false, false, true, true
    };

    public boolean isCellEditable(int rowIndex, int columnIndex) {
        return canEdit [columnIndex];
    }
});
table2.getTableHeader().setReorderingAllowed(false);
jScrollPane1.setViewportViewView(table2);

jButton3.setBackground(new java.awt.Color(255, 51, 51));

```

```

jButton3.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jButton3.setText("REMOVE");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jPanel4.setBackground(new java.awt.Color(102, 102, 102));

jLabel7.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jLabel7.setForeground(new java.awt.Color(255, 255, 255));
jLabel7.setText("Total Amount :-");

t1.setBackground(new java.awt.Color(255, 255, 255));
t1.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
t1.setForeground(new java.awt.Color(51, 255, 51));
t1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
t1.setText("0");

javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
jPanel4.setLayout(jPanel4Layout);
jPanel4Layout.setHorizontalGroup(

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel4Layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 133,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(t1, javax.swing.GroupLayout.PREFERRED_SIZE, 200,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(63, 63, 63)
    );
jPanel4Layout.setVerticalGroup(

```

```

jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel4Layout.createSequentialGroup()
        .addContainerGap()

.addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
    .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE, 27,
Short.MAX_VALUE)
    .addComponent(t1))
    .addContainerGap()
);

jMenu3.setText("Main");
jMenu3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenu3ActionPerformed(evt);
    }
});

```

```

jMenuItem1.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEven
t.VK_C, java.awt.event.InputEvent.SHIFT_MASK));
    jMenuItem1.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Gui/Icons/Category -Icon.jpg"))); //
NOI18N
    jMenuItem1.setText("Add/View Category");
jMenuItem1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem1ActionPerformed(evt);
    }
});
jMenu3.add(jMenuItem1);

```

```

jMenuItem2.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEven
t.VK_A, java.awt.event.InputEvent.SHIFT_MASK));
    jMenuItem2.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Gui/Icons/ViewSpending.jpg"))); //
NOI18N

```

```

jMenuItem2.setText("View All Savings");
jMenuItem2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem2ActionPerformed(evt);
    }
});
jMenu3.add(jMenuItem2);
jMenu3.add(jSeparator2);

```

```

jMenuItem3.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_E, java.awt.event.InputEvent.CTRL_MASK));
jMenuItem3.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Gui/Icons/Exit-Icon.png"))); // NOI18N
jMenuItem3.setText("Exit");
jMenuItem3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem3ActionPerformed(evt);
    }
});
jMenu3.add(jMenuItem3);
jMenu3.add(jSeparator1);

```

```

jMenu4.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/Gui/Icons/More.jpg"))); // NOI18N
jMenu4.setText("About...");
jMenu4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenu4ActionPerformed(evt);
    }
});

```

```

jMenuItem4.setText("About App");
jMenuItem4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem4ActionPerformed(evt);
    }
}

```



```

});
jMenu4.add(jMenuItem4);

jMenu3.add(jMenu4);

jMenuBar1.add(jMenu3);

setJMenuBar(jMenuBar1);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel1, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE,
194, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE,
112, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap()
        );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addComponent(jScrollPane1)
            .addComponent(jPanel4, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE,
194, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE,
112, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap()
            );
});

```

```

        .addContainerGap()
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)
        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
181, javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(jPanel4, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold>

private void actionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    try
    {
        java.util.Date dt=d.getDate();
        String s1=a.getText();
        String s2=s1.trim();
        String c=(String)combo1.getSelectedItem();
    }
}

```

```

        if(dt!=null && !s2.equals(" ") && !c.equals(" "))
        {
            int amount=Integer.parseInt(s2);
            java.sql.Date date=new java.sql.Date(dt.getTime());
DatabaseConnection.DatabaseConnection.st.executeUpdate("insert into
spendings(category,sdate,amount) values ("'+c+'","'+date+'","'+amount+'");
            JOptionPane.showMessageDialog(null,"Savings Added Successfully!");
            getEntries();
            clearEntries();
        }
        else
        {
            JOptionPane.showMessageDialog(null,"Please fill all the details!");
        }
    }catch(Exception ex)
    {
        JOptionPane.showMessageDialog(null,ex);
    }
}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    int rindex=table2.getSelectedRow();
    if(rindex!=-1)
    {
        int answer=JOptionPane.showConfirmDialog(null,"Do you really want to
delete?","Deletion Confirmation!",JOptionPane.YES_NO_OPTION);
        if(answer==JOptionPane.YES_OPTION)
        {
            int id=(int)table2.getValueAt(rindex,0);
            try{
                Connection
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/Savingsdb"+"?useSSL=
false","root","hrg00000@");
                Statement st=conn.createStatement();
                st.executeUpdate("delete from spendings where eid="+id);
                JOptionPane.showMessageDialog(null,"Category Deleted Successfully!");
                getEntries();
            }
        }
    }
}

```

```

    }catch(Exception ex)
    {
        JOptionPane.showMessageDialog(null,ex);
    }
}
else
{
    JOptionPane.showMessageDialog(null,"Please select any Category first!");
}
}

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
    displayCategory();
}

private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {
    new Category().setVisible(true);
}

private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
    new ViewSavings().setVisible(true);
}

private void combo1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    new Category().setVisible(true);
}

private void aKeyTyped(java.awt.event.KeyEvent evt) {
    char ch=evt.getKeyChar();
    {
        if(!Character.isDigit(ch))

```

```

        {
            evt.consume();
        }
    }
}

private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {

}

private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {
    System.exit(0);
}

private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {

}

private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {
    JOptionPane.showMessageDialog(null,"Developed By ASHISH GUPTA, ANANT
PRAKASH SINGH & NAVNEET KUMAR(Student at Galgotias University)!");
}

/*public static void main(String args[]) {*/
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    /*try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());

```

```

        break;
    }
}
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(SavingsTracker.class.getName()).log(java.util.logging.
Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(SavingsTracker.class.getName()).log(java.util.logging.
Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(SavingsTracker.class.getName()).log(java.util.logging.
Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

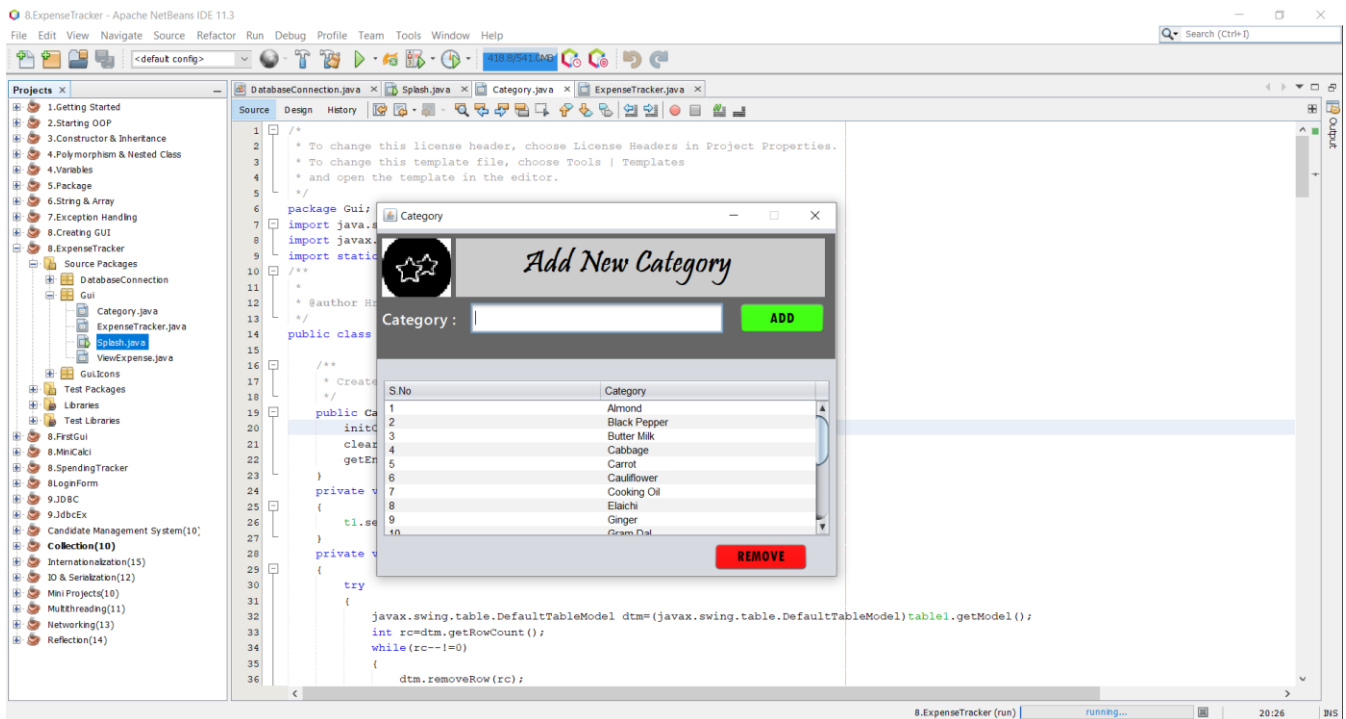
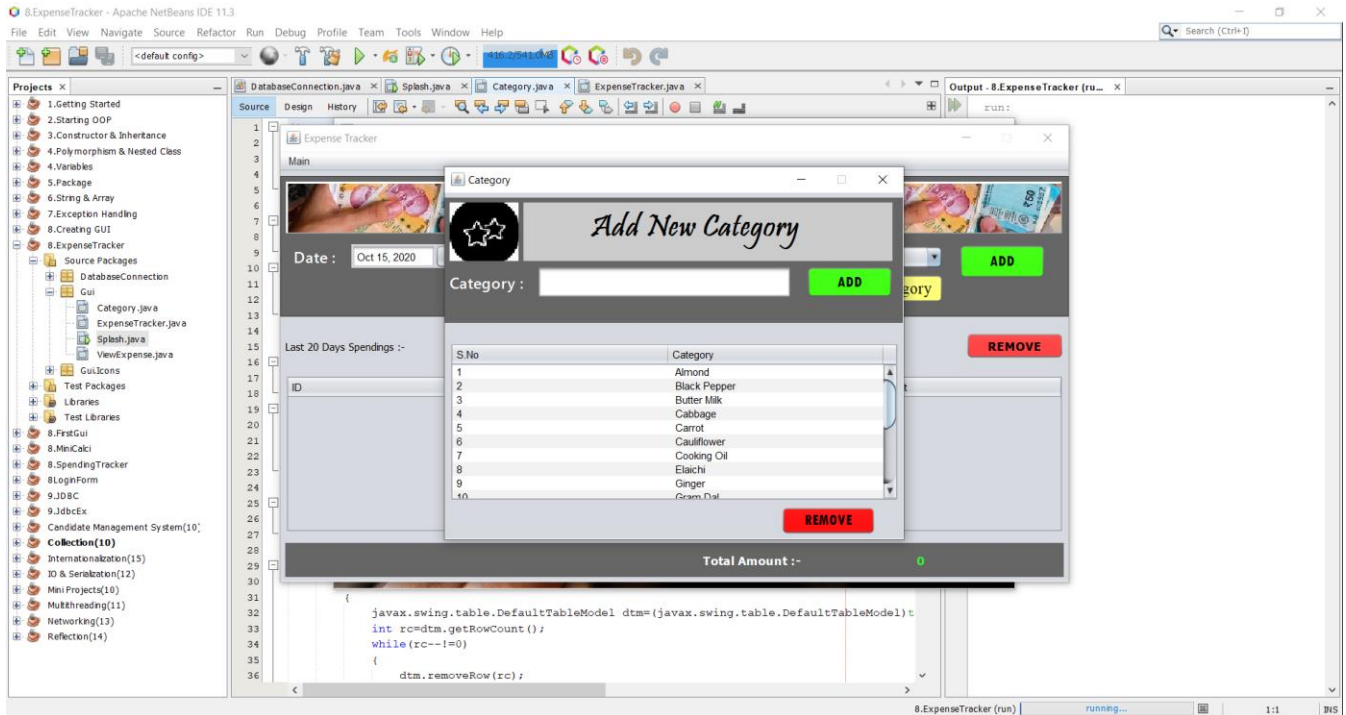
java.util.logging.Logger.getLogger(SavingsTracker.class.getName()).log(java.util.logging.
Level.SEVERE, null, ex);
    }*/
//</editor-fold>
/*
    /* Create and display the form */
    //java.awt.EventQueue.invokeLater(new Runnable() {
    // public void run() {
    //     new SavingsTracker().setVisible(true);
    // }
    // });
//}*/

// Variables declaration - do not modify
private javax.swing.JTextField a;
private javax.swing.JComboBox<String> combol;
private com.toedter.calendar.JDateChooser d;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;


```

```
private javax.swing.JButton jButton5;
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.JMenu jMenu1;
private javax.swing.JMenu jMenu2;
private javax.swing.JMenu jMenu3;
private javax.swing.JMenu jMenu4;
private javax.swing.JMenuBar jMenuBar1;
private javax.swing.JMenuItem jMenuItem1;
private javax.swing.JMenuItem jMenuItem2;
private javax.swing.JMenuItem jMenuItem3;
private javax.swing.JMenuItem jMenuItem4;
private com.toedter.calendar.JMonthChooser jMonthChooser1;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JPopupMenu.Separator jSeparator1;
private javax.swing.JPopupMenu.Separator jSeparator2;
private javax.swing.JLabel t1;
private javax.swing.JTable table2;
// End of variables declaration
}
```

OUTPUT(SCREENSHOT) :-



Category

 *Add New Category*

Category : **ADD**

S.No	Category
1	Almond
2	Black Pepper
3	Butter Milk
4	Cabbage
5	Carrot
6	Cauliflower
7	Cooking Oil
8	Elaichi
9	Ginger
10	Gram Dal

REMOVE

CHAPTER V

PROGRESS PLAN

Last phase:

- In the last phase, we are making one last frame i.e., ViewSavings frame.
- In this frame, the user can see the Savings according to category wise as well as date wise.
- Conclusion and references.

REFERENCES

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2. www.softwaretestinghelp.com (2021). NetBeans [online] Available at: <https://www.softwaretestinghelp.com/software-development-tools/> [Accessed 14 October 2021].