**package** vans;

**import** javafx.collections.\*;

**import** javafx.application.Application;

**import** javafx.collections.FXCollections;

**import** javafx.collections.ObservableList;

**import** javafx.geometry.Insets;

**import** javafx.geometry.Pos;

**import** javafx.scene.Scene;

**import** javafx.scene.control.Button;

**import** javafx.scene.control.ChoiceBox;

**import** javafx.scene.control.DatePicker;

**import** javafx.scene.control.Label;

**import** javafx.scene.control.Menu;

**import** javafx.scene.control.MenuBar;

**import** javafx.scene.control.MenuItem;

**import** javafx.scene.control.RadioButton;

**import** javafx.scene.layout.GridPane;

**import** javafx.scene.layout.VBox;

**import** javafx.scene.text.Text;

**import** javafx.scene.control.TextField;

**import** javafx.scene.control.ToggleGroup;

**import** javafx.scene.control.ToggleButton;

**import** javafx.stage.Stage;

**import** javafx.event.ActionEvent;

**import** javafx.event.EventHandler;

**import** javafx.scene.input.MouseEvent;

**public** **class** jk **extends** Application

{

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

{

*launch*(args);

}

@Override

**public** **void** start(Stage primaryStage) **throws** Exception

{

VBox root=**new** VBox(5);

root.setPadding(**new** Insets(5));

MenuBar menubar=**new** MenuBar();

Menu menu=**new** Menu("Help");

MenuItem m1 = **new** MenuItem("Get Loan/Contact Us");

MenuItem m2 = **new** MenuItem("About Us");

menubar.getMenus().addAll(menu);

menu.getItems().add(m1);

menu.getItems().add(m2);

Label label2 = **new** Label("");

EventHandler<ActionEvent> event1 = **new** EventHandler<ActionEvent>()

{

**public** **void** handle(ActionEvent e)

{

label2.setText("For a loan contact us on 9650335010 (Vanshika Singh)"

+ " or mail us on vanshikasingh2803@gmail.com");

}

};

m1.setOnAction(event1);

EventHandler<ActionEvent> event2 = **new** EventHandler<ActionEvent>()

{

**public** **void** handle(ActionEvent e)

{

label2.setText("This is an application created by Vanshika Singh for Checking personal loan eligibility and calculating EMI");

}

};

m2.setOnAction(event2);

Text name=**new** Text("Name");

TextField name\_text = **new** TextField();

//DatePicker for entering date of birth

Text dob=**new** Text("Date of Birth");

DatePicker dob\_text= **new** DatePicker();

//Radio Button for selecting gender

Text gender= **new** Text("Gender");

ToggleGroup group\_Gender= **new** ToggleGroup();

RadioButton male= **new** RadioButton("Male");

male.setToggleGroup(group\_Gender);

RadioButton female = **new** RadioButton("Female");

female.setToggleGroup(group\_Gender);

RadioButton others = **new** RadioButton("Others");

others.setToggleGroup(group\_Gender);

//Toggle Button

Text citizen = **new** Text("Are you a citizen of India?");

ToggleButton citizen\_toggle = **new** ToggleButton();

ToggleButton yes = **new** ToggleButton("Yes");

ToggleButton no = **new** ToggleButton("No");

ToggleGroup citizenin = **new** ToggleGroup();

yes.setToggleGroup(citizenin);

no.setToggleGroup(citizenin);

//Monthly Income

Text mi=**new** Text("Monthly Income");

TextField mi\_text= **new** TextField();

//Work Experience

Text we=**new** Text("Work Experience");

TextField we\_text = **new** TextField();

Text type = **new** Text("Type of Employment");

ChoiceBox type\_drop = **new** ChoiceBox();

type\_drop.getItems().addAll("Service", "Business Owner", "Self-Employed", "Retired");

Text la=**new** Text("Loan Amount");

TextField la\_text = **new** TextField();

// Interest per month

Text interest=**new** Text("Interest per month");

TextField interest\_text = **new** TextField();

Text time=**new** Text("Total Number of Months");

TextField time\_text = **new** TextField();

Button btn= **new** Button("Check Eligibility");

Button btn2=**new** Button("EMI Calculator");

Button btn1= **new** Button("Reset");

Label label = **new** Label("");

Label label1=**new** Label("");

GridPane gridPane = **new** GridPane();

gridPane.setMinSize(500, 500);

gridPane.setPadding(**new** Insets(10, 10, 10, 10));

gridPane.setVgap(5);

gridPane.setHgap(5);

//gridPane.setAlignment(Pos.CENTER);

gridPane.add(name, 0, 0);

gridPane.add(name\_text, 1, 0);

gridPane.add(dob, 0, 1);

gridPane.add(dob\_text, 1, 1);

gridPane.add(gender, 0, 2);

gridPane.add(male, 1, 2);

gridPane.add(female, 2, 2);

gridPane.add(others,3,2);

gridPane.add(citizen, 0, 3);

gridPane.add(yes, 1, 3);

gridPane.add(no, 2, 3);

gridPane.add(type, 0, 4);

gridPane.add(type\_drop, 1, 4);

gridPane.add(mi, 0, 5);

gridPane.add(mi\_text, 1, 5);

gridPane.add(we, 0, 6);

gridPane.add(we\_text, 1, 6);

gridPane.add(la, 0, 8);

gridPane.add(la\_text, 1, 8);

gridPane.add(interest, 0, 9);

gridPane.add(interest\_text, 1, 9);

gridPane.add(time, 0, 10);

gridPane.add(time\_text, 1, 10);

gridPane.add(btn, 0, 11);

gridPane.add(btn2, 1, 11);

gridPane.add(btn1, 2, 11);

gridPane.add(label, 0, 13);

gridPane.add(label1, 0, 14);

gridPane.add(label2, 0, 15);

EventHandler<MouseEvent> handler=**new** EventHandler<MouseEvent>()

{

@Override

**public** **void** handle(MouseEvent event) {

**if**(event.getSource()==btn)

{

**boolean** a=no.isSelected();

**double** income=Double.*parseDouble*(mi\_text.getText());

**int** exp=Integer.*parseInt*(we\_text.getText());

**if**(a || income<25000 || exp<3)

{

label.setText("Not eligible for a Personal Loan.");

}

**else**

{

label.setText("Eligible for Personal Loan.");

}

}

**if**(event.getSource()==btn2)

{

**boolean** a=no.isSelected();

**double** income=Double.*parseDouble*(mi\_text.getText());

**double** exp=Double.*parseDouble*(we\_text.getText());

**if**(a || income<25000 || exp<3)

{

label.setText("Not eligible for a Personal Loan.");

}

**else**

{

label.setText("Eligible for Personal Loan and Monthly EMI is:");

**int** loan=Integer.*valueOf*(la\_text.getText());

**int** rate=Integer.*valueOf*(interest\_text.getText());

**int** time=Integer.*valueOf*(time\_text.getText());

//emi calculation formula=EMI = P × r × (1 + r)n/((1 + r)n - 1) where P= Loan amount, r= interest rate, n=tenure in number of months.

**int** p=loan\*rate/100\*(1+rate/100)\*time/((1+rate/100)\*(time-1));

label1.setText(Integer.*toString*(p));

}

}

**if**(event.getSource()==btn1)

{

label.setText("");

label2.setText("");

label1.setText("");

name\_text.clear();

mi\_text.clear();

interest\_text.clear();

time\_text.clear();

we\_text.clear();

la\_text.clear();

dob\_text.getEditor().clear();

male.setSelected(**false**);

female.setSelected(**false**);

others.setSelected(**false**);

yes.setSelected(**false**);

no.setSelected(**false**);

}

}

};

btn.setOnMouseClicked(handler);

btn2.setOnMouseClicked(handler);

btn1.setOnMouseClicked(handler);

root.getChildren().addAll(menubar,gridPane);

Scene scene = **new** Scene(root);

primaryStage.setTitle("Personal Loan Eligibility and EMI Calculator");

primaryStage.setScene(scene);

primaryStage.show();

}

}