

Project Name: ATM Interface.

Dr/ Omnia El Barbary.

By/ Ahmed Khaled Ahmed Ibrahim.

```
package javafxapplication4;

import java.io.InputStream;

import java.io.FileInputStream;

import javafx.application.Application;

import javafx.scene.Group;

import javafx.scene.Scene;

import javafx.scene.text.Text;

import javafx.scene.text.Font;

import javafx.scene.text.FontWeight;

import javafx.scene.text.FontPosture;

import javafx.scene.control.Button;

import javafx.scene.control.PasswordField;

import javafx.scene.control.Label;

import javafx.scene.control.TextField;

import javafx.scene.control.RadioButton;

import javafx.scene.control.ToggleGroup;

import javafx.scene.paint.Color;

import javafx.event.EventHandler;

import javafx.event.ActionEvent;

import javafx.scene.image.Image;

import javafx.scene.image.ImageView;

import javafx.stage.Stage;

public class JavaFXApplication4 extends Application {
```

```

int balance = 50000;

int minAmount = 50;

int maxAmount = 5000;;

Scene scn1, scn2, scn3, scn4, scn5, scn6, scn7;

Stage primaryStage, NewWindow1, NewWindow2, NewWindow3, NewWindow4, NewWindow5,
NewWindow6, NewWindow7;

@Override

public void start(Stage primaryStage) throws Exception {

    primaryStage.setTitle(" My ATM ! ");           //put the title to Stage.

    // setting for Text

    Text tx1 = new Text();

    tx1.setText(" Welcome Dear Client ... ");

    tx1.setX(360);

    tx1.setY(100);

    tx1.setFont(Font.font("Forte", FontWeight.BOLD.BLACK,FontPosture.ITALIC, 25)); // string family
for font, font weight, Font Posture, font size

    tx1.setFill(Color.BLACK);

    // setting for label 1

    Label l1 = new Label();

    l1.setText(" User Number : ");

    l1.setLayoutX(180);

    l1.setLayoutY(270);

    l1.setStyle("-fx-background-color: #555553;");

    l1.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR, 35));

```

```

//setting for text field 1 just for integer number

TextField NumberField = new TextField() {

@Override public void replaceText(int start, int end, String text) {

    if (text.matches("[0-9]*"))

    {

        super.replaceText(start, end, text);

    }

}

@Override public void replaceSelection(String text) {

    if (text.matches("[0-9]*"))

    {

        super.replaceSelection(text);

        Group NumberField = new Group();

        primaryStage.setScene(new Scene(NumberField));

    }

}

};

NumberField.setLayoutX(440);

NumberField.setLayoutY(266);

NumberField.setPromptText(" Enter Your User Number ");

NumberField.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

NumberField.setOnKeyTyped(event ->{

int maxch = 4;

if(NumberField.getText().length() > maxch) event.consume();

});

```

```

//setting for label 2

Label l2 = new Label();

l2.setText(" Password :");

l2.setLayoutX(187);

l2.setLayoutY(380);

l2.setStyle("-fx-background-color: #555553;");

l2.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR, 35));

// setting for PassWor field just for integer number and not shown it

PasswordField NumberField2 = new PasswordField() {

    @Override public void replaceText(int start, int end, String text) {

        if (text.matches("[0-9]*"))

        {

            super.replaceText(start, end, text);

        }

    }

    @Override public void replaceSelection(String text) {

        if (text.matches("[0-9]*")) {

            super.replaceSelection(text);

            Group NumberField = new Group();

            primaryStage.setScene(new Scene(NumberField));

        }

    }

};

NumberField2.setLayoutX(440);

NumberField2.setLayoutY(376);

```

```

NumberField2.setPromptText(" Enter Your PassWord ");

NumberField2.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

NumberField2.setOnKeyTyped(event ->{

int maxch = 4;

if(NumberField2.getText().length() > maxch) event.consume();

});

Button bt11 = new Button();

bt11.setText(" Exit ");

bt11.setLayoutX(540);

bt11.setLayoutY(610);

bt11.setStyle("-fx-background-color: #ff3300;");

bt11.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR, 30));

bt11.setOnAction(new EventHandler<ActionEvent>() {

    @Override

    public void handle(ActionEvent e)

    {

        primaryStage.close();

    }

});

// setting for Button 1

Button bt1 = new Button();

bt1.setText(" Login ");

bt1.setLayoutX(340);

bt1.setLayoutY(610);

bt1.setStyle("-fx-background-color: #ff3300;");

```

```
bt1.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR, 30));

// setting for new window 1

bt1.setOnAction(new EventHandler<ActionEvent>() {

    @Override

    public void handle(ActionEvent e) {

        Button bt69 = new Button();

        bt69.setText(" Close ");

        bt69.setLayoutX(30);

        bt69.setLayoutY(430);

        bt69.setStyle("-fx-background-color: #566666;");

        bt69.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR,
20));

        bt69.setOnAction(new EventHandler<ActionEvent>() {

            @Override

            public void handle(ActionEvent e)

            {

                NewWindow2.close();

                primaryStage.setScene(scen1);

            }

        });

        // seting for button 3

        Button bt3 = new Button();

        bt3.setText("  Deposit Balance  ");

        bt3.setLayoutX(40);

        bt3.setLayoutY(130);

        bt3.setStyle("-fx-background-color: #009dff;");
```

```

30));

    bt3.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR,

// setting for new window 2

bt3.setOnAction(new EventHandler<ActionEvent>() {

    @Override

    public void handle(ActionEvent e) {

        Text tx1 = new Text ();

        tx1.setText(" Welcome Dear Client ... ");

        tx1.setX(120);

        tx1.setY(80);

        tx1.setFont(Font.font("Forte", FontWeight.BOLD.BLACK,FontPosture.ITALIC, 25)); //
string family for font, font weight, Font Posture, font size

        tx1.setFill(Color.BLACK);

        Label l5 = new Label();

        l5.setText(" Enter The Amount : ");

        l5.setLayoutX(35);

        l5.setLayoutY(203);

        l5.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR,

18));

// setting for text field 2

Group TextField = new Group();

TextField NumberField = new TextField() {

    @Override public void replaceText(int start, int end, String text) {

        if (text.matches("[0-9]*"))

        {

            super.replaceText(start, end, text);

        }

```



```

    }

    @Override public void replaceSelection(String text) {

        if (text.matches("[0-9]*"))

        {

            super.replaceSelection(text);

            Group NumberField = new Group();

            primaryStage.setScene(new Scene(NumberField));

        }

    }

};

    NumberField.setLayoutX(210);

    NumberField.setLayoutY(200);

    NumberField.setPromptText(" Enter Your Amount ");

    NumberField.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 18));

    NumberField.setOnKeyTyped(event ->{

        int maxch = 3;

        if(NumberField.getText().length() > maxch) event.consume();

    });

// setting for button 6

Button bt6 = new Button();

bt6.setText(" Ok ");

bt6.setLayoutX(230);

bt6.setLayoutY(310);

bt6.setStyle("-fx-background-color: #ff3300;");

```

```
20));
```

```
bt6.setOnAction(new EventHandler<ActionEvent>() {  
    @Override  
    public void handle(ActionEvent e)  
    {  
        if(Integer.parseInt(NumberField.getText()) > maxAmount )  
        {  
            System.out.println(" > Sorry Wrong Value, It Must Be Less Than 5000 ");  
        }  
        else  
        {  
            balance += Integer.parseInt(NumberField.getText());  
            System.out.println( " > Your balance now is : " + balance);  
            NewWindow4.close();  
        }  
    }  
});  
  
Group root2 = new Group();  
root2.getChildren().add(l5);  
root2.getChildren().add(NumberField);  
root2.getChildren().add(bt6);  
root2.getChildren().add(tx1);  
  
scn6 = new Scene(root2, 500, 400);  
scn6.setFill(Color.GREEN);
```

```

        NewWindow4 = new Stage();

        NewWindow4.setTitle(" Deposit Balance ");

        NewWindow4.setScene(scen6);

        NewWindow4.show();

    }

});

    Text tx1 = new Text ();

    tx1.setText(" Welcome Dear Client ... ");

    tx1.setX(240);

    tx1.setY(70);

    tx1.setFont(Font.font("Forte", FontWeight.BOLD.BLACK,FontPosture.ITALIC, 25)); // string
family for font, font weight, Font Posture, font size

    tx1.setFill(Color.BLACK);

                                // setting for button 4

    Button bt4 = new Button();

    bt4.setText(" Withdraw Balance ");

    bt4.setLayoutX(400);

    bt4.setLayoutY(130);

    bt4.setStyle("-fx-background-color: #009dff;");

    bt4.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 30));

    // setting for new window 4

    bt4.setOnAction(new EventHandler<ActionEvent>() {

        @Override

        public void handle(ActionEvent e) {

            Text tx1 = new Text ();

```

```

        tx1.setText(" Welcome Dear Client ... ");

        tx1.setX(120);

        tx1.setY(100);

        tx1.setFont(Font.font("Forte", FontWeight.BOLD.BLACK,FontPosture.ITALIC, 25));
// string family for font, font weight, Font Posture, font size

        tx1.setFill(Color.BLACK);

        Label l5 = new Label();

        l5.setText(" Enter The Amount : ");

        l5.setLayoutX(35);

        l5.setLayoutY(203);

        l5.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 18));

// setting for text field 2

Group TextField = new Group();

TextField NumberField = new TextField() {

@Override public void replaceText(int start, int end, String text) {

    if (text.matches("[0-9]*"))

    {

        super.replaceText(start, end, text);

    }

}

@Override public void replaceSelection(String text) {

    if (text.matches("[0-9]*"))

    {

        super.replaceSelection(text);

        Group NumberField = new Group();

```

```

        primaryStage.setScene(new Scene(NumberField));
    }
}
};

NumberField.setLayoutX(210);

NumberField.setLayoutY(200);

NumberField.setPromptText(" Enter Your Amount ");

NumberField.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 18));

NumberField.setOnKeyTyped(event ->{

    int maxch = 3;

    if(NumberField.getText().length() > maxch) event.consume();

});

// setting for button 6

Button bt7 = new Button();

bt7.setText(" Ok ");

bt7.setLayoutX(230);

bt7.setLayoutY(310);

bt7.setStyle("-fx-background-color: #ff3300;");

bt7.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR,
20));

bt7.setOnAction(new EventHandler<ActionEvent>() {

    @Override

    public void handle(ActionEvent e)

    {

        if(Integer.parseInt(NumberField.getText()) < minAmount )

```

```

        {
            System.out.println(" > Sorry Wrong Value, It Must Be More Than 50 ");
        }
        else if (Integer.parseInt(NumberField.getText()) > maxAmount)
        {
            System.out.println(" > Soorry Wrong Value, It Must Be Less Than 5000 ");
        }
        else
        {
            balance -= Integer.parseInt(NumberField.getText());
            System.out.println(" > Your balance now is : " + balance);
            NewWindow1.close();
        }
    }
});

```

```

Group root3 = new Group();
root3.getChildren().add(l5);
root3.getChildren().add(NumberField);
root3.getChildren().add(bt7);
root3.getChildren().add(tx1);
scn5 = new Scene(root3, 500, 400);
scn5.setFill(Color.GREEN);
NewWindow1 = new Stage();
NewWindow1.setTitle(" Withdraw Balance ");
NewWindow1.setScene(scn5);

```

```

NewWindow1.show();

}

});

Button bt45 = new Button();

bt45.setText(" Change Language ");

bt45.setLayoutX(400);

bt45.setLayoutY(250);

bt45.setStyle("-fx-background-color: #009dff;");

bt45.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR,
30));

bt45.setOnAction(new EventHandler<ActionEvent>() {

    @Override

    public void handle(ActionEvent e)

    {

        Text tx1 = new Text ();

        tx1.setText(" Welcome Dear Client ... ");

        tx1.setX(120);

        tx1.setY(80);

        tx1.setFont(Font.font("Forte", FontWeight.BOLD.BLACK,FontPosture.ITALIC, 25)); //
string family for font, font weight, Font Posture, font size

        tx1.setFill(Color.BLACK);

        RadioButton rb1 = new RadioButton();

        rb1.setText(" English ");

        rb1.setLayoutX(100);

        rb1.setLayoutY(150);

        rb1.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 22));

```

```

        RadioButton rb2 = new RadioButton();

        rb2.setText(" French ");

        rb2.setLayoutX(100);

        rb2.setLayoutY(190);

        rb2.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 22));

        RadioButton rb3 = new RadioButton();

        rb3.setText(" Arabic ");

        rb3.setLayoutX(100);

        rb3.setLayoutY(230);

        rb3.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 22));

        Button bt98 = new Button();

        bt98.setText(" Ok ");

        bt98.setLayoutX(220);

        bt98.setLayoutY(300);

        bt98.setStyle("-fx-background-color: #566666;");

        bt98.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

        bt98.setOnAction(new EventHandler <ActionEvent>() {

            @Override

            public void handle(ActionEvent e)

            {

                //set the language when i choose and close the window

                NewWindow7.close();

            }

```



```
    });

    // to choose one option
    ToggleGroup tg = new ToggleGroup();

    rb1.setToggleGroup(tg);

    rb2.setToggleGroup(tg);

    rb3.setToggleGroup(tg);

    Group root8 = new Group();

    root8.getChildren().add(rb1);

    root8.getChildren().add(rb2);

    root8.getChildren().add(tx1);

    root8.getChildren().add(rb3);

    root8.getChildren().add(bt98);

    scn7 = new Scene(root8, 500, 400);

    scn7.setFill(Color.GREEN);

    NewWindow7 = new Stage();

    NewWindow7.setTitle(" Change Language ");

    NewWindow7.setScene(scn7);

    NewWindow7.show();
}

});

    // setting for button 5

    Button bt5 = new Button();

    bt5.setText(" Check My Balance ");

    bt5.setLayoutX(40);

    bt5.setLayoutY(250);
```

```

        bt5.setStyle("-fx-background-color: #009dff;");

        bt5.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR,
30));

        bt5.setOnAction(new EventHandler<ActionEvent>() {

            @Override

            public void handle(ActionEvent e)

            {

                Text tx1 = new Text ();

                tx1.setText(" Welcome Dear Client ... ");

                tx1.setX(120);

                tx1.setY(70);

                tx1.setFont(Font.font("Forte", FontWeight.BOLD.BLACK,FontPosture.ITALIC, 25)); //
string family for font, font weight, Font Posture, font size

                tx1.setFill(Color.BLACK);

                Label l6 = new Label();

                l6.setText(" User Number : ");

                l6.setLayoutX(60);

                l6.setLayoutY(120);

                l6.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

                // to print User Number in new window 3

                Text tx99 = new Text (NumberField.getText());

                tx99.setX(230);

                tx99.setY(145);

                tx99.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.ITALIC, 25)); // string family for font, font weight, Font Posture,
font size

```

```

tx99.setFill(Color.BLACK);

Label l8 = new Label();

l8.setText(" Last Check : ");

l8.setLayoutX(70);

l8.setLayoutY(160);

l8.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

Label l9 = new Label();

l9.setText(" My Balance : " + balance);

l9.setLayoutX(65);

l9.setLayoutY(200);

l9.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

Button bt99 = new Button();

bt99.setText(" Close ");

bt99.setLayoutX(20);

bt99.setLayoutY(430);

bt99.setStyle("-fx-background-color: #566666;");

bt99.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

bt99.setOnAction(new EventHandler <ActionEvent>() {

    @Override

    public void handle(ActionEvent e)

    {

        NewWindow5.close();

    }

});

```

```
Group root6 = new Group();
root6.getChildren().add(tx1);
root6.getChildren().add(l6);
root6.getChildren().add(l8);
root6.getChildren().add(l9);
root6.getChildren().add(tx99);
root6.getChildren().add(bt99);
scn3 = new Scene(root6, 500, 500);
scn3.setFill(Color.GREEN);
NewWindow5 = new Stage();
NewWindow5.setTitle(" Check My Balance ");
NewWindow5.setScene(scn3);
NewWindow5.show();
}
});

Group root4 = new Group();
root4.getChildren().add(bt3);
root4.getChildren().add(bt4);
root4.getChildren().add(bt45);
root4.getChildren().add(bt5);
root4.getChildren().add(tx1);
root4.getChildren().add(bt69);
scn2 = new Scene(root4, 750, 500);
scn2.setFill(Color.GREEN);
NewWindow2 = new Stage();
```

```

        NewWindow2.setTitle(" Login ");

        NewWindow2.setScene(scen2);

        primaryStage.setScene(scen2);

    }

});

// setting for Button 2

Button bt2 = new Button();

bt2.setText(" Help ");

bt2.setLayoutX(30);

bt2.setLayoutY(730);

bt2.setStyle("-fx-background-color: #566666;");

bt2.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

// setting for new window 3

bt2.setOnAction(new EventHandler<ActionEvent>() {

    @Override

    public void handle(ActionEvent e)

    {

        Text tx1 = new Text ();

        tx1.setText(" Welcome Dear Client ... ");

        tx1.setX(280);

        tx1.setY(80);

        tx1.setFont(Font.font("Forte", FontWeight.BOLD.BLACK,FontPosture.ITALIC, 25)); //
string family for font, font weight, Font Posture, font size

        tx1.setFill(Color.BLACK);

        Text tx5 = new Text();

        tx5.setText( " Dear Clint, Welcome To Your  ATM Service .... \n" + "\n" +

```

```

        "To Help You With Anything You Want, Read These Rules Carefully\n" + "\n" +
        "First: You Must Have A Bank Account, Either Here Or Any Other Bank In Order\n
" + "\n" +

        "To Be Able To Do Operations In This Account\n" + "\n" +

        "Second: Try To Choose The Process Carefully So As Not\n" + "\n" +

        "To Lose Your Bank Balance ..... ");

tx5.setLayoutX(10);

tx5.setLayoutY(130);

tx5.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 22)); // string family for font, font weight, Font
Posture, font size

tx5.setFill(Color.BLACK);

Button bt8 = new Button();

bt8.setText(" Close ");

bt8.setLayoutX(500);

bt8.setLayoutY(410);

bt8.setStyle("-fx-background-color: #566666;");

bt8.setFont(Font.font("Times New Roman",
FontWeight.BOLD.BLACK,FontPosture.REGULAR, 25));

bt8.setOnAction(new EventHandler <ActionEvent>() {

    @Override

    public void handle(ActionEvent e)

    {

        NewWindow3.close();

        primaryStage.setScene(scen1);

    }

});

```

```
Group root3 = new Group();

Scene scn4 = new Scene(root3, 810, 500);

scn4.setFill(Color.GREEN);

root3.getChildren().add(tx1);

root3.getChildren().add(tx5);

root3.getChildren().add(bt8);

NewWindow3 = new Stage();

NewWindow3.setTitle(" Help ");

NewWindow3.setScene(sc4);

primaryStage.setScene(sc4);

}

});
```

//RadioButton 1, it is not important but it will use to take tax from the clint

```
RadioButton rb1 = new RadioButton();

rb1.setText(" I Am A Clint In This Bank. ");

rb1.setLayoutX(300);

rb1.setLayoutY(470);

rb1.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR, 22));
```

//RadioButton 2

```
RadioButton rb2 = new RadioButton();

rb2.setText(" I Am Not. ");

rb2.setLayoutX(300);

rb2.setLayoutY(520);

rb2.setFont(Font.font("Times New Roman", FontWeight.BOLD.BLACK,FontPosture.REGULAR, 22));
```

// to choose one option

```

ToggleGroup tg = new ToggleGroup();

rb1.setToggleGroup(tg);

rb2.setToggleGroup(tg);

// for image at primaryStage

/*

    Image img2 = new Image ("https://image.app.goo.gl/DS6f4kJmHhRULi9E8"); // code for image
but online

*/

InputStream strm = new FileInputStream("D:\\image pro\\images.jpeg");

Image img1 = new Image(strm);

ImageView imgv = new ImageView();

imgv.setImage(img1);

imgv.setLayoutX(805);

imgv.setLayoutY(590);

imgv.setFitWidth(180);

imgv.setPreserveRatio(true);

Group root1 = new Group();

root1.getChildren().add(tx1);

root1.getChildren().add(bt1);

root1.getChildren().add(bt11);

root1.getChildren().add(bt2);

root1.getChildren().add(NumberField);

root1.getChildren().add(NumberField2);

root1.getChildren().add(l1);

root1.getChildren().add(rb1);

```



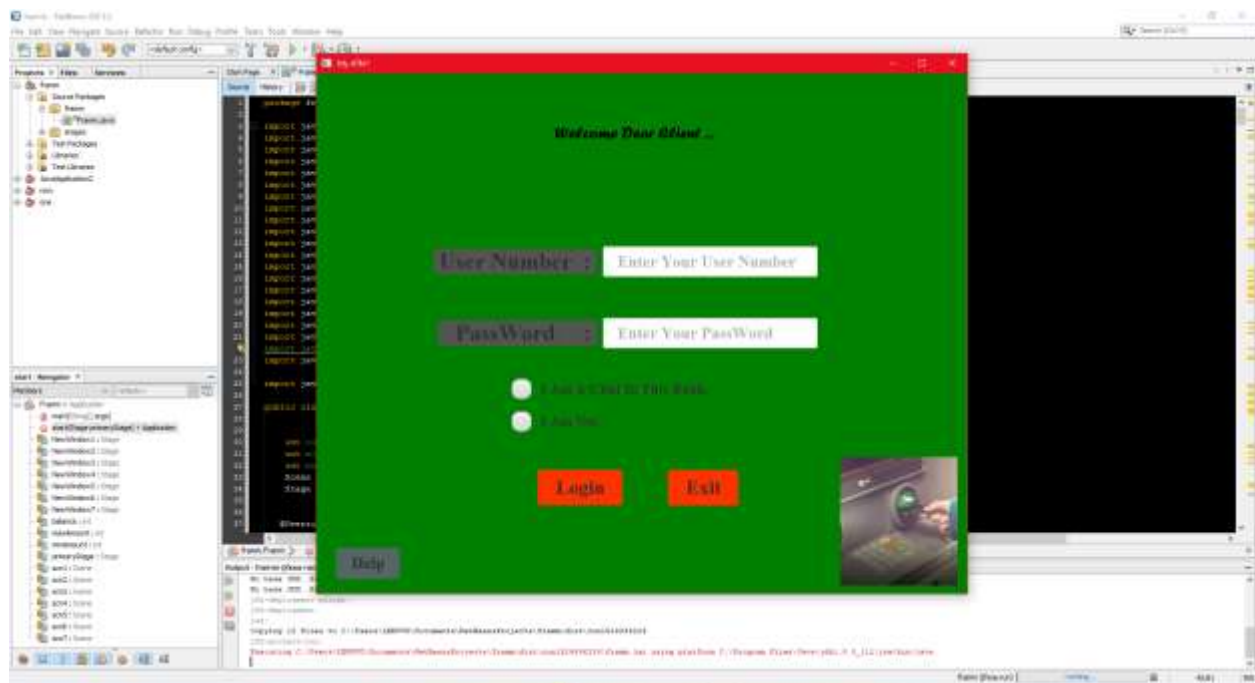
```
    root1.getChildren().add(rb2);  
    root1.getChildren().add(l2);  
    root1.getChildren().add(imgv);  
    scn1 = new Scene(root1, 1000, 800);  
    scn1.setFill(Color.GREEN);  
    primaryStage.setScene(scn1);  
    primaryStage.show();  
}  
public static void main(String args[]){  
    launch(args);  
}  
}
```

A Photo used in project.



When I Run ...

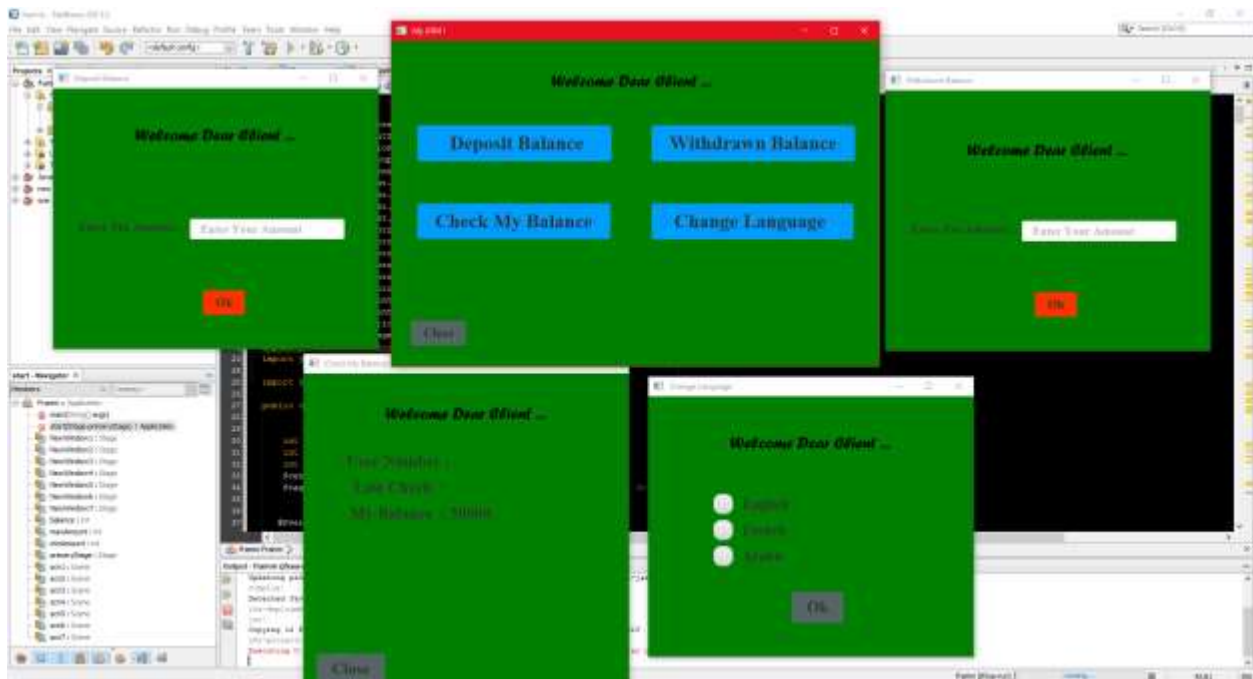
First Stage...



When I Press Login

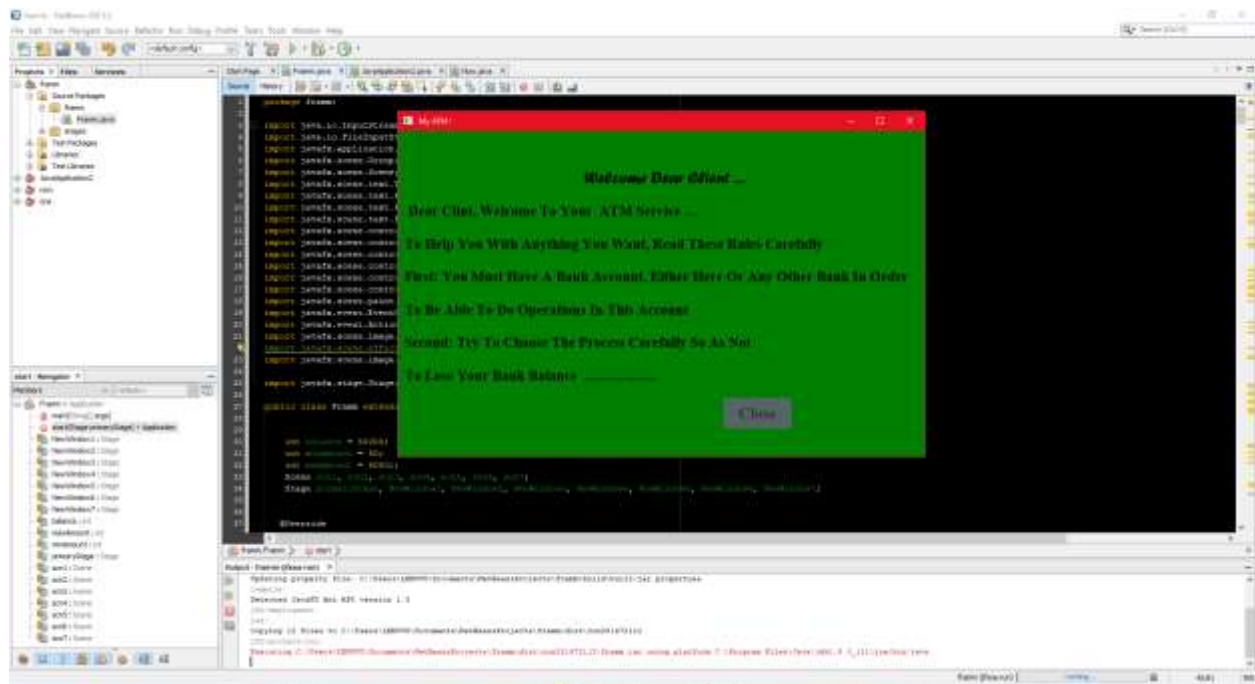
Second Scene From First and Opposite...

Second Stage and All Frames That Open From it...



When I Press Help...

From Scene to Scene ...



**Finally If I Enter User Number, It Will Shown But, Password No,
For More Safe.**