JavaFx some Built-in Functions

For make stage Drag able

Make stage drag able means that when we hold the stage screen (during running program) and make it drag with mouse move in any direction .

----------------------------Write in controller section---------------------------

```
private double xOffset=0;

private double yOffset=0;

private TabPane anchorpane;

 private void makestageDragable(){

        anchorPane.setOnMousePressed((MouseEvent event) -> {

            xOffset=event.getSceneX();

            yOffset=event.getSceneY();

        });


        anchorPane.setOnMouseDragged((MouseEvent event) -> {

            GPA_CGPA.stage.setX(event.getScreenX()-xOffset);

            GPA_CGPA.stage.setY(event.getScreenY()-yOffset);

            GPA_CGPA.stage.setOpacity(0.8f);

        });
        anchorPane.setOnDragDone((DragEvent event) -> {
            GPA_CGPA.stage.setOpacity(0.95f);
        });
        anchorPane.setOnMouseReleased((MouseEvent event) -> {
            GPA_CGPA.stage.setOpacity(0.95f);
        });
    }
```

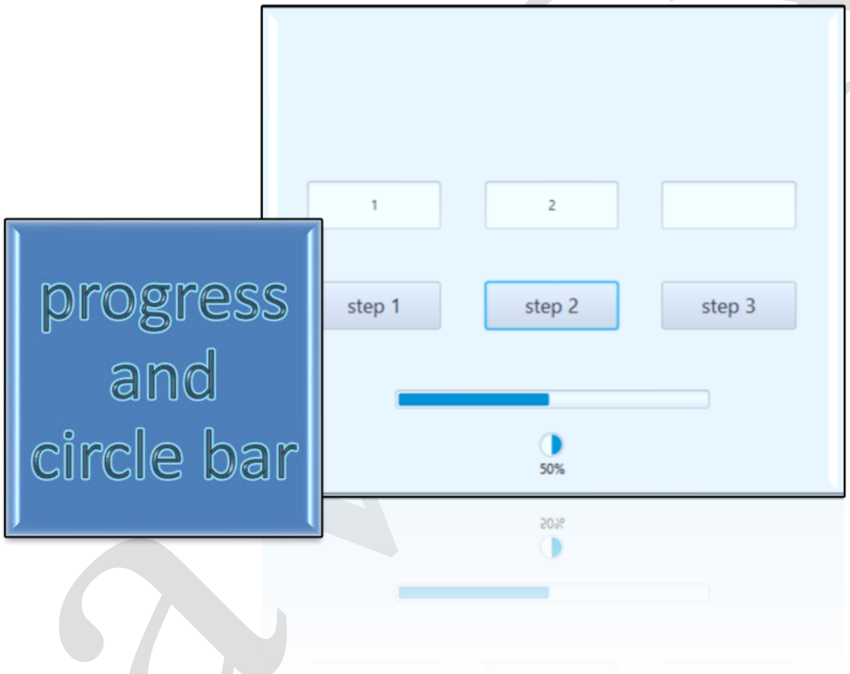
-------------------------Write in stage display section------------------------

```
public class GPA_CGPA extends Application {
            static Stage stage=null;

    @Override
    public void start(Stage stage) throws Exception {
        Parent root = FXMLLoader.load(getClass().getResource("FXMLDocument.fxml"));

        Scene scene = new Scene(root);
        try {

       GPA_CGPA.stage=stage;
      GPA_CGPA.stage.initStyle(StageStyle.UNDECORATED);
       GPA_CGPA.stage.setOpacity(0.95f);
        stage.setScene(scene);

        stage.show();

        } catch (Exception e) {

           System.out.println("Error: "+e);

        }
```

Basic use of progress bar

Usually progress bar used for show percentage of completion of any process as we talk about start of some websites they show this for few seconds as well as we see this in some quizzes to take and tasks,   challenges in many games , in storage space to show us % of our progress.

As shown in diagram.



In this diagram we press step 1 button then text field show 1

and when press step 2 button show 2 in text field …with thi-

-s process we also show that two progress bars as in long form

and in circular shape which is also progress with button pressed.

And the command here

----------------------------Write in controller section--------------------------

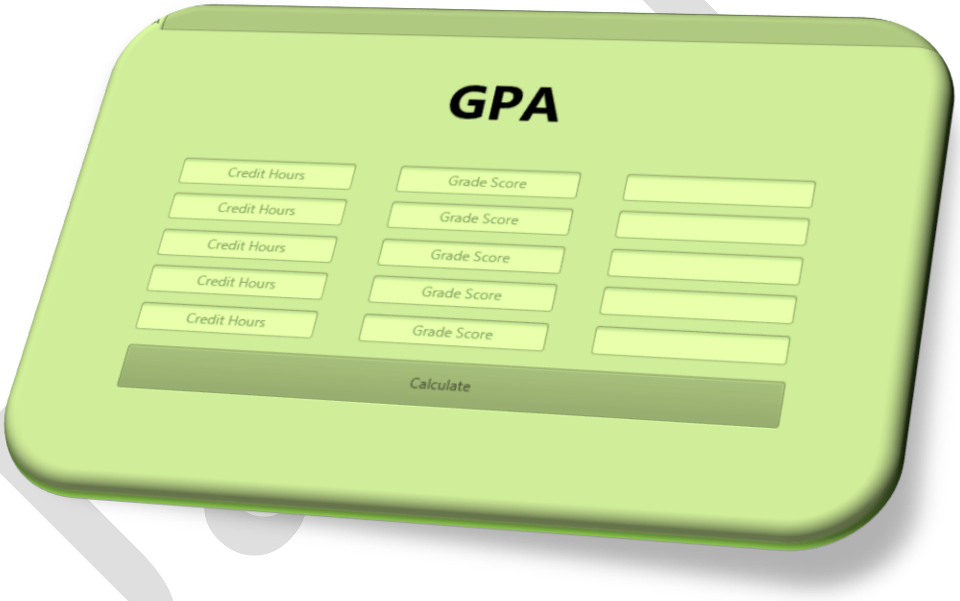
```
  @FXML
  private void fun_1(ActionEvent event) {
    text_1.setText("1");
    prograssBar.setProgress(0.3);                    //  this is for progress bar
    prograssCircle.setProgress(0.3);            // this is for circular  as shown in diagram

  }

  @FXML
  private void fun_2(ActionEvent event) {
    text_11.setText("2");
    prograssBar.setProgress(0.5);                    //  this is for progress bar
    prograssCircle.setProgress(0.5);                 // this is for circular  as shown in diagram
  }

  @FXML
  private void fun_3(ActionEvent event) {
    text_111.setText("3");
    prograssBar.setProgress(1);                          //  this is for progress bar
    prograssCircle.setProgress(1);                     // this is for circular  as shown in diagram
  }
```

```
}
```

Simple GPA Calculator

In this project we will see that calculation of GPA it's a simple but understandable program. Let's see what you understand☺.

As shown in diagram

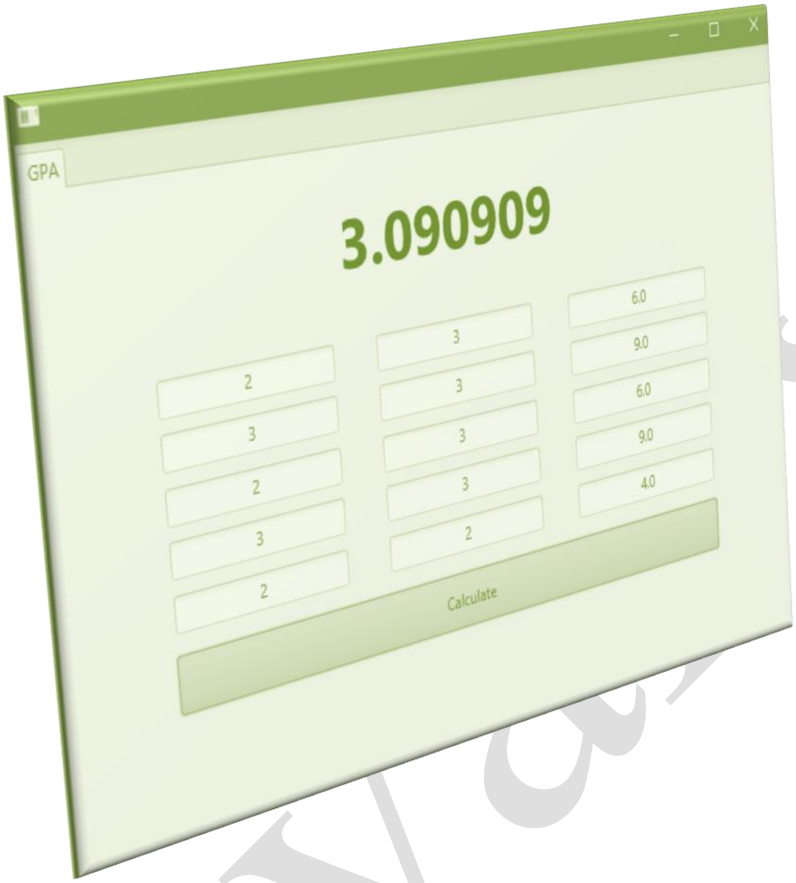


As shown in diagram first column is for credit

Hours and second column is for Credit Score

You also show a button name calculate here it function is to calculation of GPA. Show at the top of board in text field.

As shown in diagram ☺



3.090909

2	3	6.0
3	3	9.0
2	3	6.0
3	3	9.0
2	2	4.0

In this diagram we able to see that the result

Of GPA calculate shows at the top in text field ☺

Let the function begin☺.

----------------------------Write in controller section--------------------------

```
private void f_function(ActionEvent event) {

        float gpa,h1,h2,h3,h4,h5,g1,g2,g3,g4,c1,c2,c3,c4,c5,sum,sum1,g5;


        h1=Float.valueOf(ch1.getText());

        h2=Float.valueOf(ch2.getText());

        h3=Float.valueOf(ch3.getText());
```

```
 h4=Float.valueOf(ch4.getText());
 h5=Float.valueOf(ch5.getText());
g1=Float.valueOf(gs1.getText());
 g2=Float.valueOf(gs2.getText());
  g3=Float.valueOf(gs3.getText());
   g4=Float.valueOf(gs4.getText());
    g5=Float.valueOf(gs5.getText());
    c1=h1*g1;
    c2=h2*g2;
    c3=h3*g3;
    c4=h4*g4;
    c5=h5*g5;
    f1.setText(String.valueOf(c1));
    f2.setText(String.valueOf(c2));
    f3.setText(String.valueOf(c3));
    f4.setText(String.valueOf(c4));
    f5.setText(String.valueOf(c5));
    sum=h1+h3+h3+h4+h5;
    sum1=c1+c2+c3+c4+c5;
    gpa=sum1/sum;
    gp.setText(String.valueOf(gpa));
```

```
}


@FXML

private void f_fun(ActionEvent event) {

}

void Cal(){

    float a1,a2,a3,a4,a5,cgpa,divid,c_s;

    a1=Float.parseFloat(s1.getText());

    a2=Float.valueOf(s2.getText());

    a3=Float.valueOf(s1.getText());

    a1=Float.valueOf(s1.getText());

    a1=Float.valueOf(s1.getText());

    a1=Float.valueOf(s1.getText());


}


   }
```

Simple determinant of equation☺

In this section we examine the determinant of linear equation, we just the require values a, b and c.

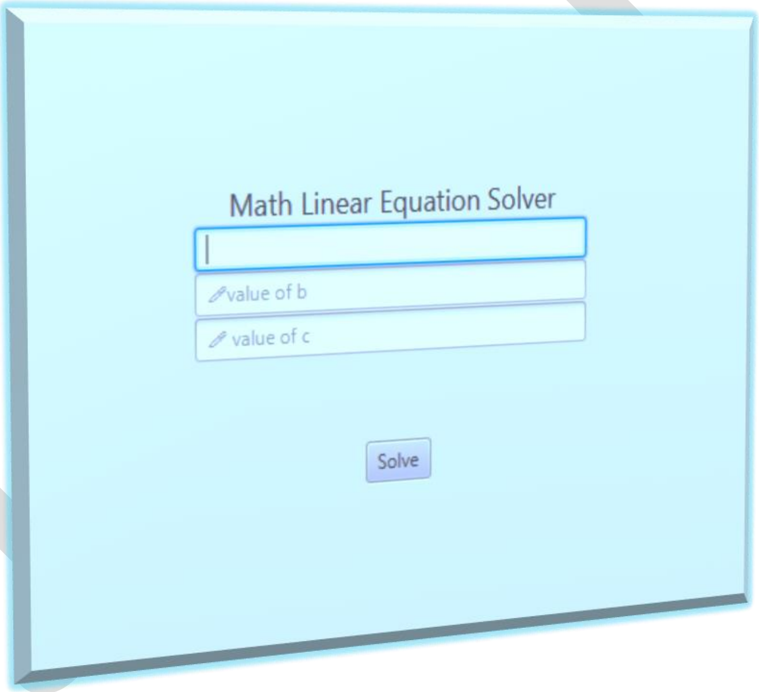
Formulas are following:-

Equation = (c1-c2)/c3;

Determinant = c2 * c2 - 4 * c1 * c3;

We are going to this formula implement in our java program

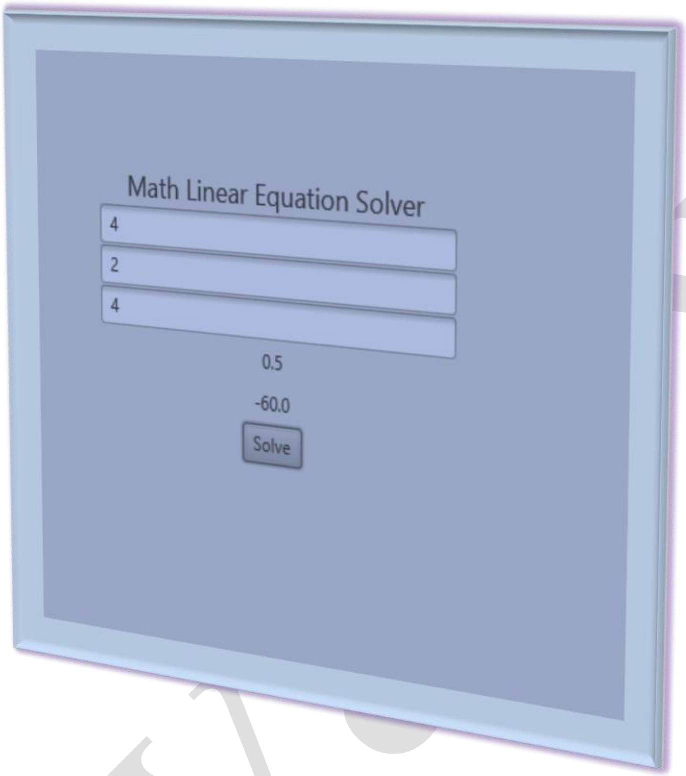
As shown in diagram ☺



In this diagram we see the out-put in GUI

When we enter the values then

As shown in diagram



Math Linear Equation Solver

4

2

4

0.5

-60.0

In this you see that the solution of equation

☺

And code of this project here

---------------------------Write in controller section-------------------------

```
private void f_solve(ActionEvent event) {

        double c1,c2,c3;

        double root1, root2;
```

```
c1=Double.parseDouble(text_a.getText());

c2=Double.parseDouble(text_b.getText());

c3=Double.parseDouble(text_c.getText());


double equation = (c1-c2)/c3;

        double determinant= c2 * c2 - 4 * c1 * c3;


// condition for real and different roots

if(determinant > 0) {

    root1 = (-c1 + Math.sqrt(determinant)) / (2 * c1);

    root2 = (-c2 - Math.sqrt(determinant)) / (2 * c1);

    System.out.format("root1 = %.2f and root2 = %.2f", root1 , root2);

}

// Condition for real and equal roots

else if(determinant == 0) {

    root1 = root2 = -c2 / (2 * c1);

    System.out.format("root1 = root2 = %.2f;", root1);

}

// If roots are not real

else {

    double realPart = -c2/ (2 *c1);

    double imaginaryPart = Math.sqrt(-determinant) / (2 * c1);

    System.out.format("root1 = %.2f+%.2fi and root2 = %.2f-%.2fi", realPart, imaginaryPart, realPart, imaginaryPart);
```

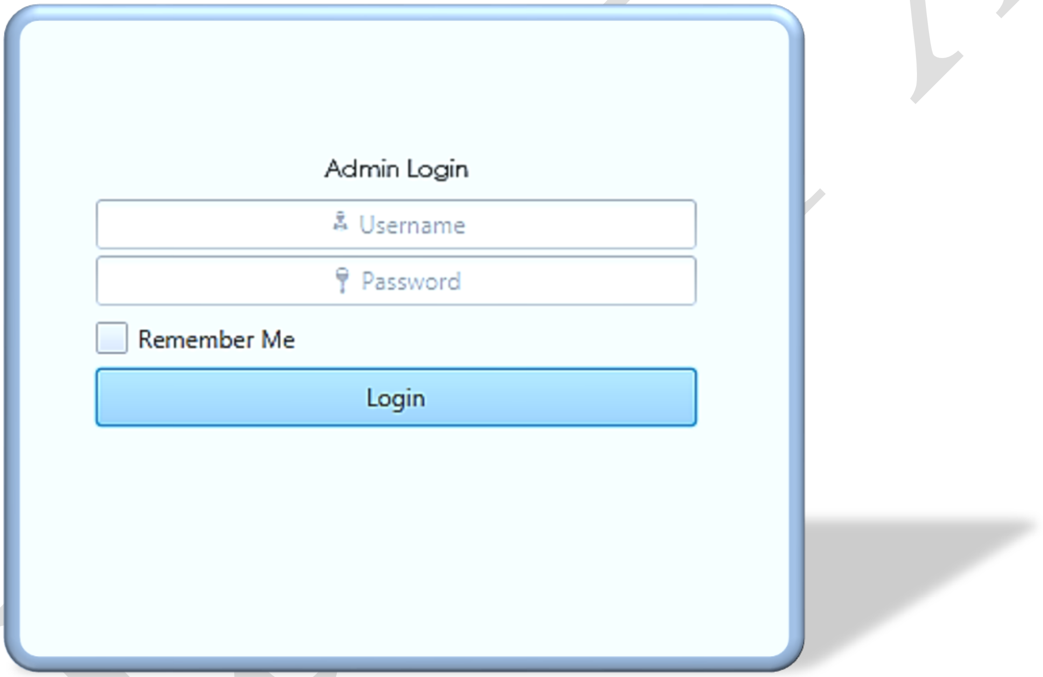
```
        answer.setText(String.valueOf(determinant));

        answer1.setText(String.valueOf(equation));


    // TODO code application logic here

  }

  }}
```

Admin Log in

This is simple program that show you the admin name and password ,and create a file which stores admin information.

Firstly I show you the output diagram.

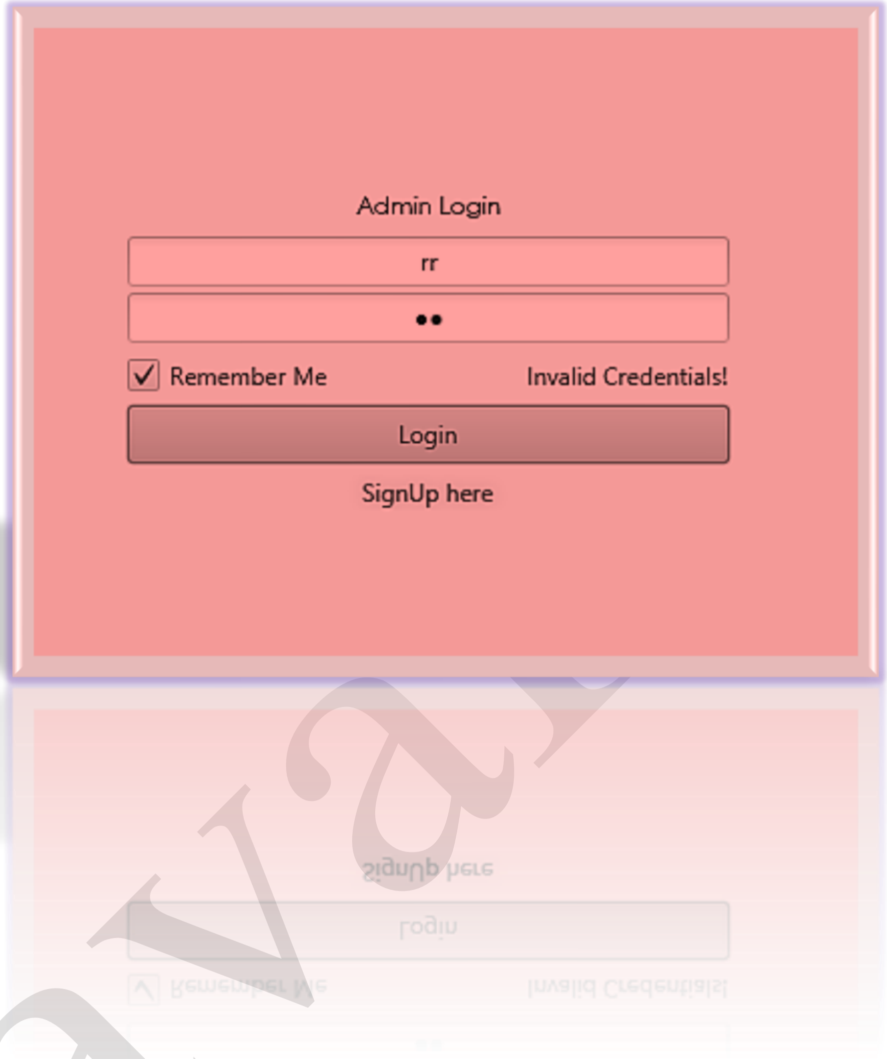
As shown in diagram☺



In diagram show you the two text fields, one check

Box which actually help us to save data enter by

User and a button



Admin Login

rr

••

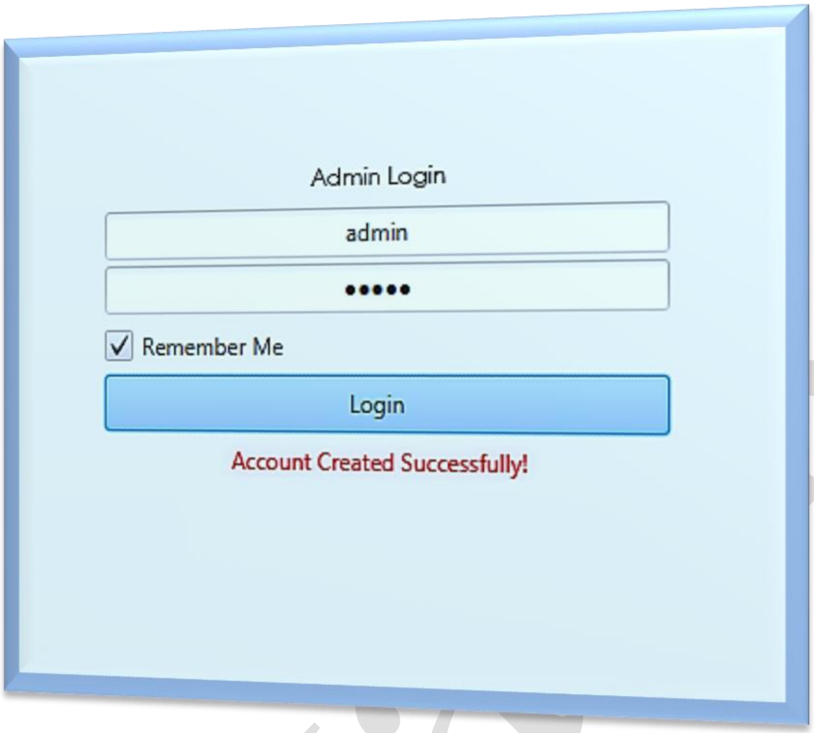
☑ Remember Me

Invalid Credentials!

In this diagram user couldn’t fulfill the condition of

Of program , screen show him invalid credentials

But in this :



Admin Login

admin

•••••

☑ Remember Me

Account Created Successfully!

In this ACCOUNT is Successfully! Show☺

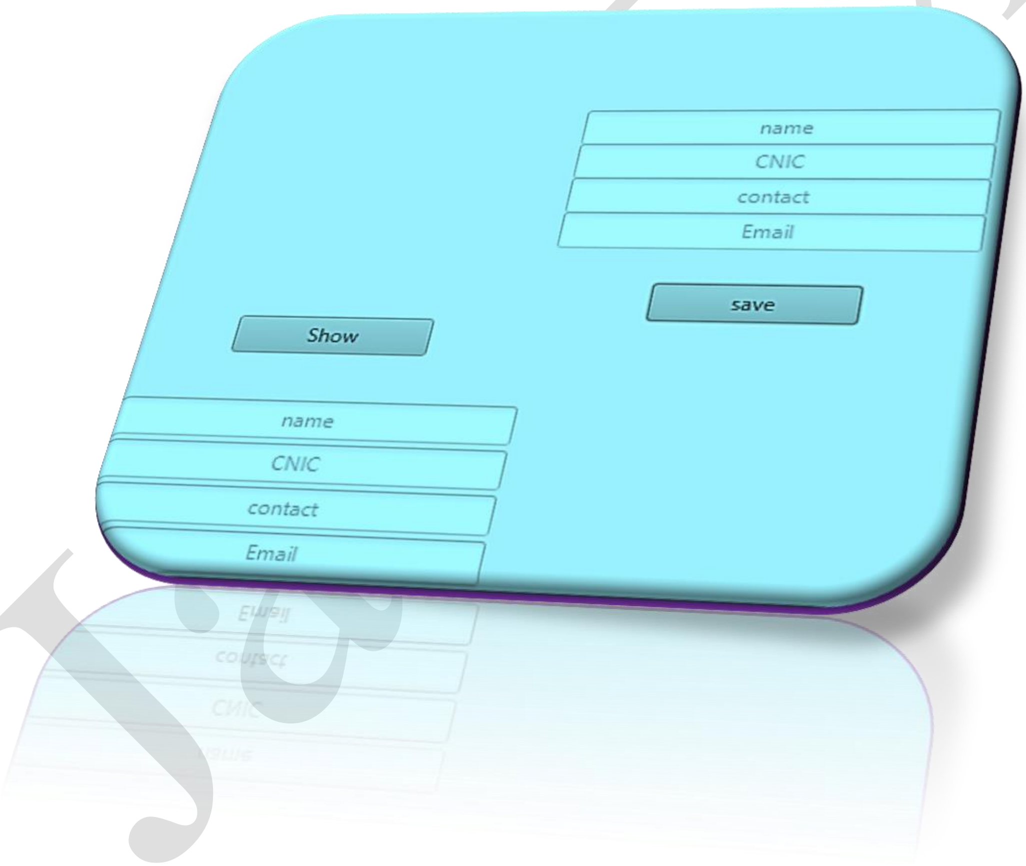
----------------------------Write in controller section--------------------------

```
private void function_LoginButton(ActionEvent event) {
    txt_signUp.setText("");
    if (txt_username.getText().equals("admin") && txt_password.getText().equals("admin")) {
      txt_failSignIn.setText("");
      if (rememberMe.isSelected()) {
        CreatingIniFile();
      }
      txt_signUp.setText("Account Created Successfully!");
    } else {
        txt_failSignIn.setText("Invalid Credentials!");
        txt_signUp.setText("SignUp here");
    }
}

@FXML
private void function_signUp(MouseEvent event) {
}

public void CreatingIniFile() {
    try {
        File file = new File("./Encrypted.ini");
        if (!file.exists()) {
            file.createNewFile();
        }

        Wini wini = new Wini(new File("./Encrypted.ini"));
        wini.put("Users", "Username", txt_username.getText());

        wini.put("Passwords", "Password", txt_password.getText());
        wini.store();
    } catch (IOException e) {
            txt_signUp.setText(e.toString());
        }
    }
}
```

Entered data show at a time

In which we need some text fields two buttons one for save one for show at a time on running screen ☺.

As shown in diagram



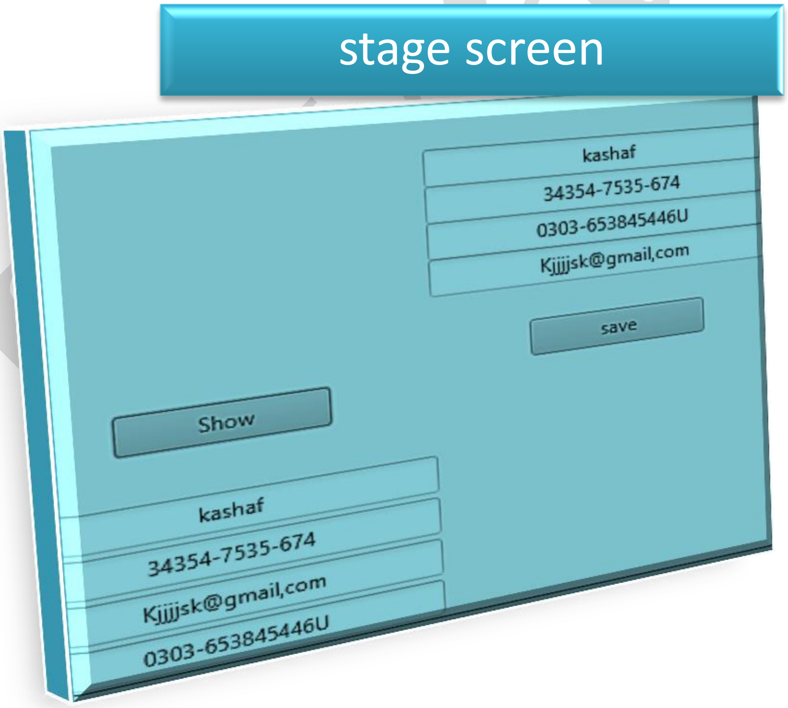
This is show you the GUI of the diagram☺

-----------------------Write in controller section--------------------

```
private void f_botton(ActionEvent event) {
        CreatingIniFile();
    }

    public void CreatingIniFile() {

        try {
            File file = new File("./info.ini");
            if (!file.exists()) {
                file.createNewFile();
            }
            Wini wini = new Wini(new File("./info.ini"));
            wini.put("Databases", "name", t_name.getText());
            wini.put("Databases", "contact", t_con.getText());
            wini.put("Databases", "email", t_email.getText());
            wini.put("Databases", "CNIC-NO", t_CNIC.getText());
            wini.store();

        } catch (IOException e) {
            text_1.setText(e.getMessage());
        }
```

```
}


public void readinifile() {
    try {
        File file = new File("./info.ini");
        if (file.exists()) {
            Wini wini = new Wini(new File("./info.ini"));
            String name = wini.get("Databases", "name");
            String non = wini.get("Databases", "contact");
            String mail = wini.get("Databases", "email");
            String idn = wini.get("Databases", "CNIC-NO");


            t_name1.setText(name);
            t_CNIC1.setText(idn);
            t_con1.setText(mail);
            t_email1.setText(non);
            wini.store();


        }


    } catch (IOException e) {


    }
    }


    @FXML
    private void f_Showbotton(ActionEvent event) {
        readinifile();
    }


}
```

As shown in diagram☺



kashaf

34354-7535-674

0303-653845446U

Kjjjsk@gmail,com

kashaf

34354-7535-674

Kjjjsk@gmail,com

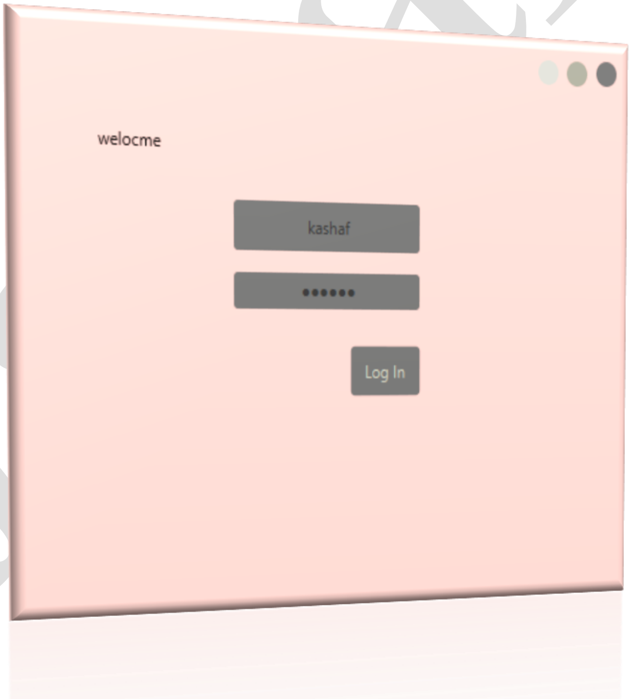
0303-653845446U

Login form with beautiful color combination

Again this is an interesting form. It’s simple to understand ☺

In this project we will enter user name and password is same as name after that press log in button if password and user name is same then text show you welcome else show you , you enter wrong entities .

As shown in diagram



welocme

kashaf

••••••

In this diagram we see that in right upper corner three button placed ……the right first one id for

exit screen, middle one for maximize, last one

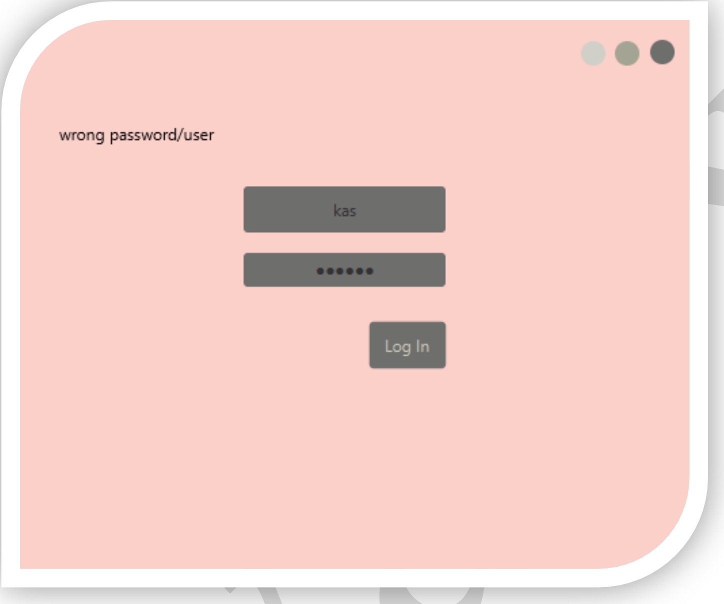
for minimize the stage screen.

---------------------------Write in controller section--------------------------

```
 @Override
  public void initialize(URL url, ResourceBundle rb) {
      makestageDragable();
      // TODO
  }
  private void makestageDragable(){
      pane.setOnMousePressed((event) -> {
          xOffset=event.getSceneX();
          yOffset=event.getSceneY();
      });
      pane.setOnMouseDragged((event) -> {
          COLOR_LOGIN_PG.stage.setX(event.getScreenX()-xOffset);
          COLOR_LOGIN_PG.stage.setY(event.getScreenY()-yOffset);
          COLOR_LOGIN_PG.stage.setOpacity(0.8f);
      });
      pane.setOnDragDone((event) -> {
           COLOR_LOGIN_PG.stage.setOpacity(1.0f);
      });
```

```
          pane.setOnMouseReleased((event) -> {
            COLOR_LOGIN_PG.stage.setOpacity(1.0f);
        });
    }
    @FXML
    private void f_exit(MouseEvent event) {
        System.exit(0);
    }

    @FXML
    private void f_max(MouseEvent event) {

        COLOR_LOGIN_PG.stage.setResizable(true);

    }

    @FXML
    private void f_mini(MouseEvent event) {
        COLOR_LOGIN_PG.stage.setIconified(true);
    }
public   String nam,pas;
    @FXML
    private void f_login(ActionEvent event) {
        nam=t_user.getText();

        pas=passwordi.getText();

       //massage.setText("welocm");

       //massage2.setText("wrong password/user");


        if(t_user.getText().equals(passwordi.getText()) )

        {


                 massage.setText("welocme");

    }

        else

        {

           massage.setText("wrong password/user");

        }



}}
```

As shown in diagram



wrong password/user

kas

••••••

In this diagram we see that the name of

user is not equal to the password…so ac-

-cording to our condition of algorithm it is wrong entity.

Stage section

-------------------------Write in stage display section-----------------------

```
public class COLOR_LOGIN_PG extends Application {


    static Stage stage=null;


    @Override
```

```
public void start(Stage stage) throws Exception {
    Parent root = FXMLLoader.load(getClass().getResource("FXMLDocument.fxml"));


    Scene scene = new Scene(root);
    stage.setResizable(false);
    COLOR_LOGIN_PG.stage=stage;
    stage.initStyle(StageStyle.TRANSPARENT);
    stage.setScene(scene);
   stage.show();


}
```

Registration, searching, read and write ini file

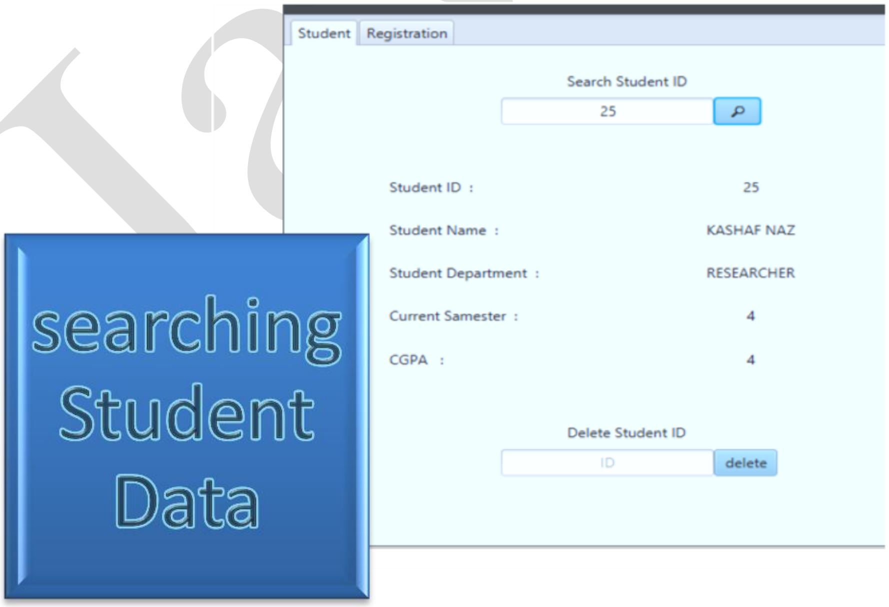
Student data

In this project we enter data about student and save it with button called register and search only required data in search section , enter ID of the student and again press search button.

Create Ini File

I create this in my system (Net beans) for searching student by his/her ID

As Shown in diagram



Search Student ID

25

Student ID : 25

Student Name : KASHAF NAZ

Student Department : RESEARCHER

Current Samester : 4

CGPA : 4

Delete Student ID

ID

In this section of picture we search student

With add their ID in id text field and press

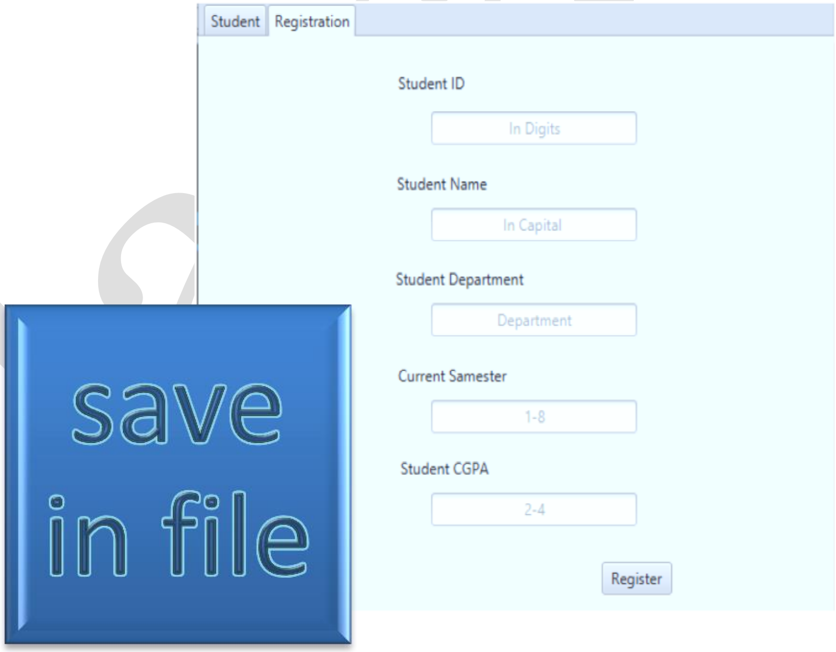
search button to show basic information about student.

Read Ini file

Read ini file means that we add some check points in program to show only required data which is save in file in back side of project program.

And here is also tab for registration you see in above pic which looks like as,

As shown in diagram



In this diagram we analyses that at upper left

corner two tabs ,one is for student registration and other one tab is for student section with their unique ID.

Code, function controller

---------------------------Write in controller section-------------------------

- ***public void CreatingIniFile()*** {

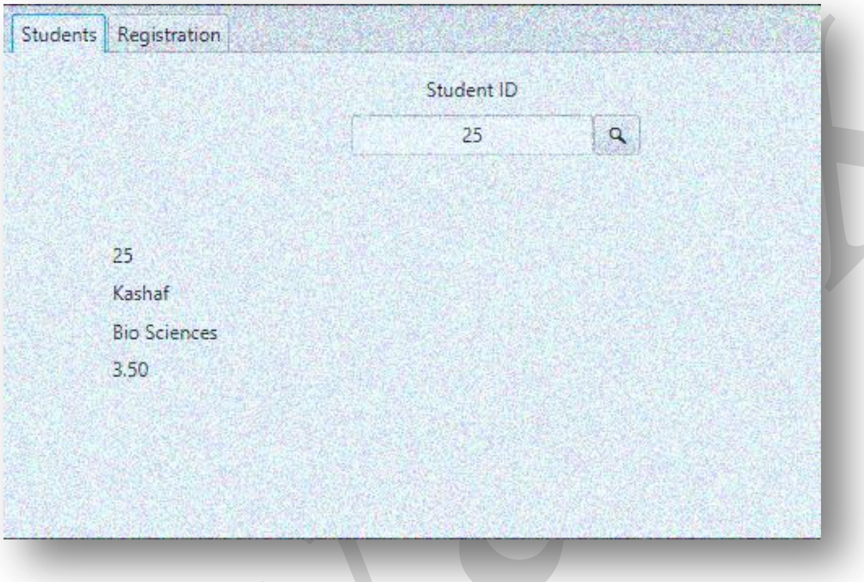
```
try {
    File file = new File("./data.ini");
    if (!file.exists()) {
        file.createNewFile();
    }
    Wini wini = new Wini(new File("./data.ini"));
    wini.put("Student ID: " + student_id.getText(), "ID", student_id.getText());
    wini.put("Student ID: " + student_id.getText(), "Name", student_name.getText());
    wini.put("Student ID: " + student_id.getText(), "Department", student_deparment.getText());
    wini.put("Student ID: " + student_id.getText(), "Samester", student_samester.getText());
    wini.put("Student ID: " + student_id.getText(), "CGPA", student_cgpa.getText());
    wini.store();

} catch (IOException e) {
}
}
```

- ***public void readinifile()*** {

```
try {
    String ID, NAME, DPT, CGPA, SAM;
    File file = new File("./data.ini");
    if (file.exists()) {
        Wini wini = new Wini(new File("./data.ini"));
        ID = wini.get("Student ID: " + search_id.getText(), "ID");
        NAME = wini.get("Student ID: " + search_id.getText(), "Name");
        DPT = wini.get("Student ID: " + search_id.getText(), "Department");
        SAM = wini.get("Student ID: " + search_id.getText(), "Samester");
        CGPA = wini.get("Student ID: " + search_id.getText(), "CGPA");
        id.setText(ID);
        name.setText(NAME);
        dept.setText(DPT);
        samester.setText(SAM);
        cgpa.setText(CGPA);
    }

} catch (IOException e) {


}}
```

One more example of create read & write file

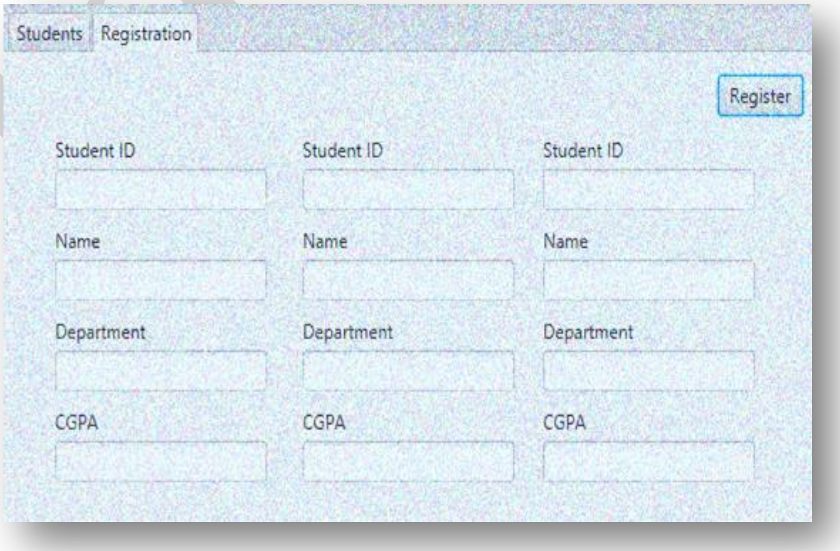
As shown in diagram



25

25
Kashaf
Bio Sciences
3.50

Student data: search by his/her UNIQUE ID



Code to create ini file readable and writeable

---------------------------Write in controller section-------------------------

- **public void CreatingIniFile()** {

```
try {
    File file = new File("./data.ini");
    if (!file.exists()) {
        file.createNewFile();
    }
    Wini wini = new Wini(new File("./data.ini"));
    wini.put("Student ID: " + id1.getText(), "ID", id1.getText());
    wini.put("Student ID: " + id1.getText(), "Name", name1.getText());
    wini.put("Student ID: " + id1.getText(), "Department", department1.getText());
    wini.put("Student ID: " + id1.getText(), "CGPA", cgpa1.getText());

    wini.put("Student ID: " + id2.getText(), "ID", id2.getText());
    wini.put("Student ID: " + id2.getText(), "Name", name2.getText());
    wini.put("Student ID: " + id2.getText(), "Department", department2.getText());
    wini.put("Student ID: " + id2.getText(), "CGPA", cgpa2.getText());

    wini.put("Student ID: " + id3.getText(), "ID", id3.getText());
```

```
        wini.put("Student ID: " + id3.getText(), "Name", name3.getText());
        wini.put("Student ID: " + id3.getText(), "Department", department3.getText());
        wini.put("Student ID: " + id3.getText(), "CGPA", cgpa3.getText());

        wini.store();

    } catch (IOException e) {
    }

}
```

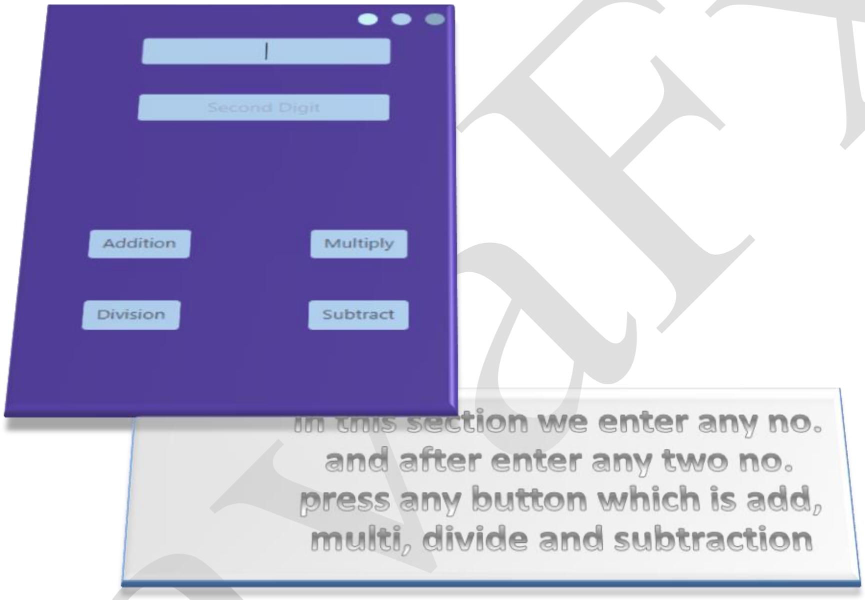
- **public void readinifile()** {

```
    try {
        String ID, NAME, DPT, CGPA;
        File file = new File("./data.ini");
        if (file.exists()) {
            Wini wini = new Wini(new File("./data.ini"));
            ID = wini.get("Student ID: "+search_ID.getText(), "ID");
            NAME = wini.get("Student ID: "+search_ID.getText(), "Name");
            DPT = wini.get("Student ID: "+search_ID.getText(), "Department");
            CGPA = wini.get("Student ID: "+search_ID.getText(), "CGPA");
            id.setText(ID);
            name.setText(NAME);
            department.setText(DPT);
            cgpa.setText(CGPA);
        }


    } catch (IOException e) {


    }
```

Calculator

Another program with GUI

As shown in diagram☺



In this section we enter any no. and after enter any two no. press any button which is add, multi, divide and subtraction

This is the interface of a simple arithmetic

Operators that are add. sub, divide and multi

---------------------------Write in controller section-------------------------

```
private void makestageDragable(){
    anchorPane.setOnMousePressed((event) -> {
        xOffset=event.getSceneX();
        yOffset=event.getSceneY();
    });
    anchorPane.setOnMouseDragged((event) -> {
      Project_cal.stage.setX(event.getScreenX()-xOffset);
      Project_cal.stage.setY(event.getScreenY()-yOffset);
      Project_cal.stage.setOpacity(0.8f);
    });
    anchorPane.setOnDragDone((event) -> {
        Project_cal.stage.setOpacity(1.0f);
    });
     anchorPane.setOnMouseReleased((event) -> {
        Project_cal.stage.setOpacity(1.0f);
    });


}



@Override
public void initialize(URL url, ResourceBundle rb) {
    // TODO
    makestageDragable();
}
```

```
  @FXML
 private void B_exit (MouseEvent event)
 {
    //System.exit(0);
    Project_cal.stage.close();

 }
 @FXML
 private void F_Add(ActionEvent event) {
    float first,second,sum;
    first=Float.parseFloat(First_Digit.getText());
     second=Float.parseFloat(Second_Digit.getText());
    sum=first+second;
     t_text.setText(String.valueOf(sum));

 }

 @FXML
 private void F_Multi(ActionEvent event) {



  float first,second,mul;
    first=Float.parseFloat(First_Digit.getText());
     second=Float.parseFloat(Second_Digit.getText());
```

```
        mul=first*second;
         t_text.setText(String.valueOf(mul));



    }



    @FXML
    private void F_Divide(ActionEvent event) {



float first,second,div;
        first=Float.parseFloat(First_Digit.getText());
         second=Float.parseFloat(Second_Digit.getText());
        div=first/second;
         t_text.setText(String.valueOf(div));

    }



    @FXML
    private void F_Subtract(ActionEvent event) {



float first,second,sub;
```

```
        first=Float.parseFloat(First_Digit.getText());

         second=Float.parseFloat(Second_Digit.getText());

        sub=first-second;

        t_text.setText(String.valueOf(sub));


    }


  @FXML

   private void M_exit(MouseEvent event) {

     Project_cal.stage.setIconified(true);


    }


   @FXML

   private void maximize(MouseEvent event) {

       Project_cal.stage.setFullScreen(true);


    }
```

In stage section of Net beans

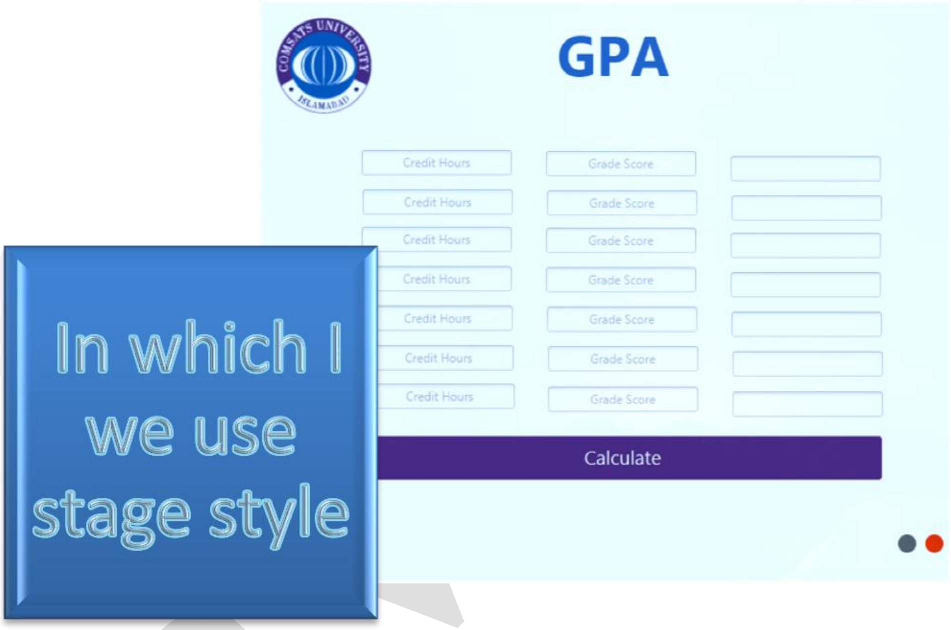
--------------------------Write in stage display section------------------------

```
public class Project_cal extends Application {
```

```
static Stage stage=null;

@Override

public void start(Stage stage) throws Exception {

   Parent root = FXMLLoader.load(getClass().getResource("FXMLDocument.fxml"));


    Scene scene = new Scene(root);

   stage.setResizable(false);

   Project_cal.stage=stage;

   stage.initStyle(StageStyle.TRANSPARENT);

   stage.setScene(scene);

   stage.show();

}

}
```

Here I have a small project named GPA calculator

Firstly I show you a diagram that makes you understand easily ☺



In this diagram we able to understood that red and grey circles is used for stage decoration.

Red for close stage and grey for minimize the program. And I also add a picture on the top which Is logo of a university. COMSATS

And three section created, one button for calculate

Let’s play with this project right now☺

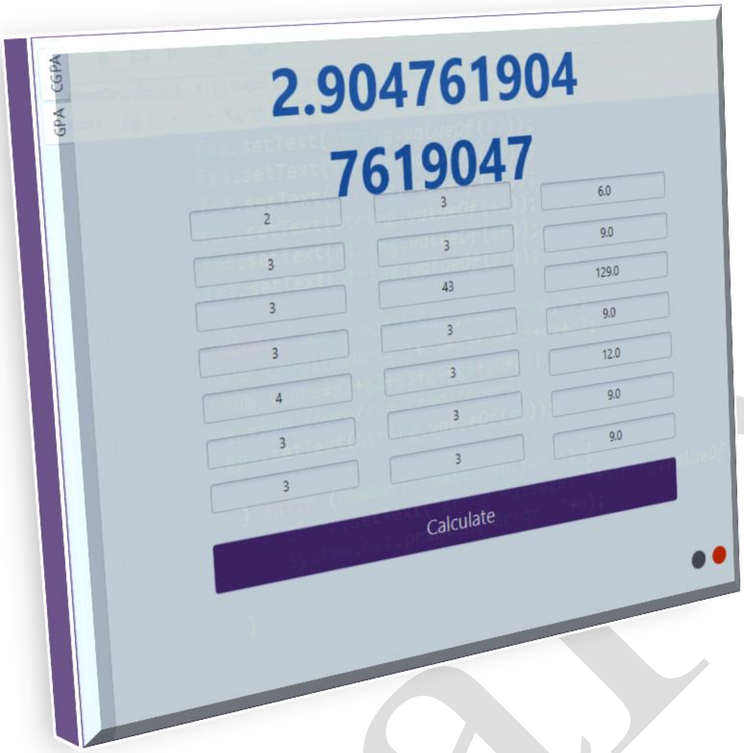
As we know that program write in controller section first and GUI in fxml file and stage in stage file section .

In controller

---------------------------Write in controller section-------------------------

```
@Override
    public void initialize(URL url, ResourceBundle rb) {
         makestageDragable();
        // TODO
    }
    private void makestageDragable(){
        anchorPane.setOnMousePressed((event) -> {
            xOffset=event.getSceneX();
            yOffset=event.getSceneY();
        });

        anchorPane.setOnMouseDragged((event) -> {
            project_gpa_cgpa.stage.setX(event.getScreenX()-xOffset);
            project_gpa_cgpa.stage.setY(event.getScreenY()-yOffset);
            project_gpa_cgpa.stage.setOpacity(0.8f);
        });
        anchorPane.setOnDragDone((event) -> {
            project_gpa_cgpa.stage.setOpacity(0.95f);
        });
        anchorPane.setOnMouseReleased((MouseEvent event) -> {
            project_gpa_cgpa.stage.setOpacity(0.95f);
        });
    }

    @FXML
    private void f_cgpa(ActionEvent event) {

         try {
            double m1,m2,m3,m4,m5,m6,m7,m8;

        m1=Double.valueOf(sgs1.getText());
        m2=Double.valueOf(sgs2.getText());
        m3=Double.valueOf(sgs3.getText());
        m4=Double.valueOf(sgs4.getText());
        m5=Double.valueOf(sgs5.getText());
        m6=Double.valueOf(sgs6.getText());
        m7=Double.valueOf(sgs7.getText());
        m8=Double.valueOf(sgs8.getText());

           double sum_SamsesterScores,cgp_a;
        sum_SamsesterScores=m1+m2+m3+m4+m5+m6+m7+m8;
        cgp_a=(sum_SamsesterScores/8);
        cgpa.setText(String.valueOf(cgp_a));
        } catch (NumberFormatException e) {

            Error1.setText("Error Massage: "+String.valueOf(e));

        }
    }

    @FXML
    private void exit(MouseEvent event) {
        Project_gpa_cgpa.stage.close();
    }

    @FXML
    private void mini(MouseEvent event) {
        Project_gpa_cgpa.stage.setIconified(true);
    }

    @FXML
    private void f_gpa(ActionEvent event) {
         try {
        double c1,c2,c3,c4,c5,c6,c7;
        double g1,g2,g3,g4,g5,g6,g7;
        double a1,a2,a3,a4,a5,a6,a7;



        c1=Double.valueOf(ch1.getText());

        c2=Double.valueOf(ch2.getText());

        c3=Double.valueOf(ch3.getText());

        c4=Double.valueOf(ch4.getText());

        c5=Double.valueOf(ch5.getText());

        c6=Double.valueOf(ch6.getText());

        c7=Double.valueOf(ch7.getText());


        g1=Double.valueOf(gs1.getText());

        g2=Double.valueOf(gs2.getText());

        g3=Double.valueOf(gs3.getText());

        g4=Double.valueOf(gs4.getText());

        g5=Double.valueOf(gs5.getText());

        g6=Double.valueOf(gs6.getText());

        g7=Double.valueOf(gs7.getText());


        a1=c1*g1;

        a2=c2*g2;

        a3=c3*g3;

        a4=c4*g4;

        a5=c5*g5;
```

```
a6=c6*g6;

a7=c7*g7;


fs1.setText(String.valueOf(a1));

fs2.setText(String.valueOf(a2));

fs3.setText(String.valueOf(a3));

fs4.setText(String.valueOf(a4));

fs5.setText(String.valueOf(a5));

fs6.setText(String.valueOf(a6));

fs7.setText(String.valueOf(a7));


 double sum_credithours,sum_score,gp;

 sum_credithours=c1+c2+c3+c4+c5+c6+c7;

 sum_score=g1+g2+g3+g4+g5+g6+g7;

 gp=sum_score/sum_credithours;

 gpa.setText(String.valueOf(gp));


  } catch (NumberFormatException e) {

      Error.setText("Error Massage: "+String.valueOf(e));

      System.out.println("Error: "+e);

       }  }}
```



2.904761904
7619047

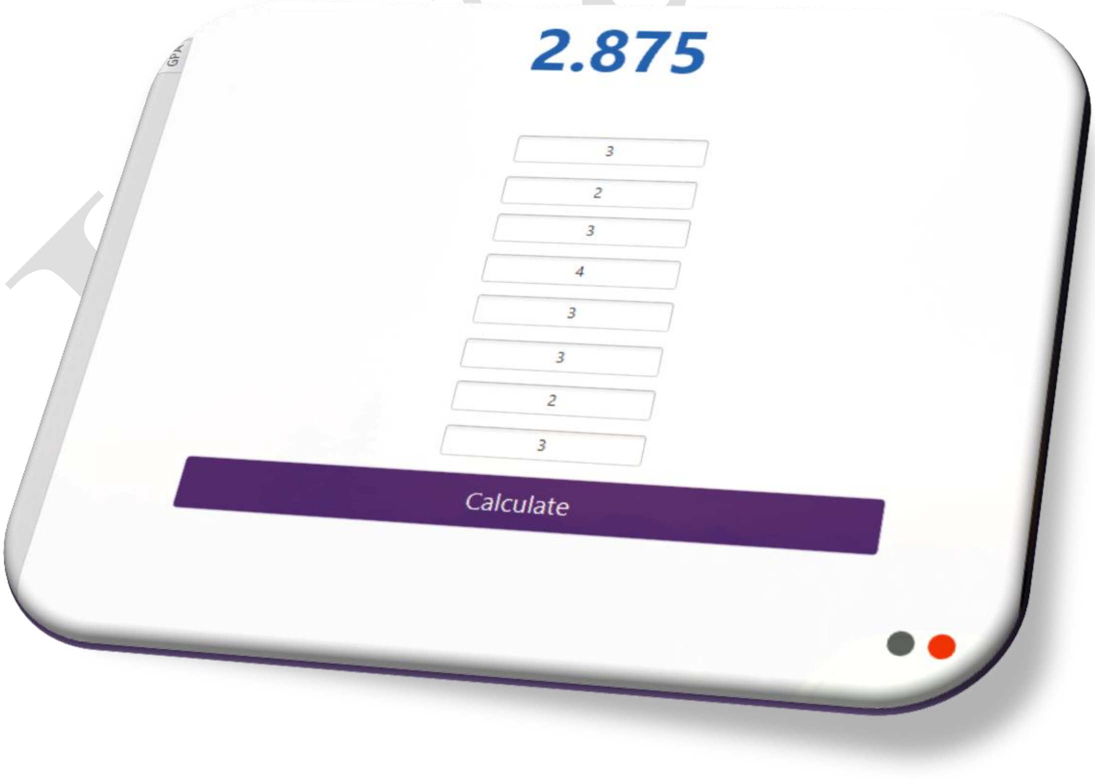
2	3	6.0
3	3	9.0
3	43	129.0
3	3	9.0
4	3	12.0
3	3	9.0
3	3	9.0

In decoration section

-------------------------Write in stage display section-----------------------

```
public class Project_gpa_cgpa extends Application {
    static Stage stage=null;


    @Override
    public void start(Stage stage) throws Exception {
```

```
    Parent root = FXMLLoader.load(getClass().getResource("FXMLDocument.fxml"));


    Scene scene = new Scene(root);


    Project_gpa_cgpa.stage=stage;
    Project_gpa_cgpa.stage.initStyle(StageStyle.UNDECORATED);
   Project_gpa_cgpa.stage.setOpacity(0.95f);


    stage.setScene(scene);
    stage.show();
}
```

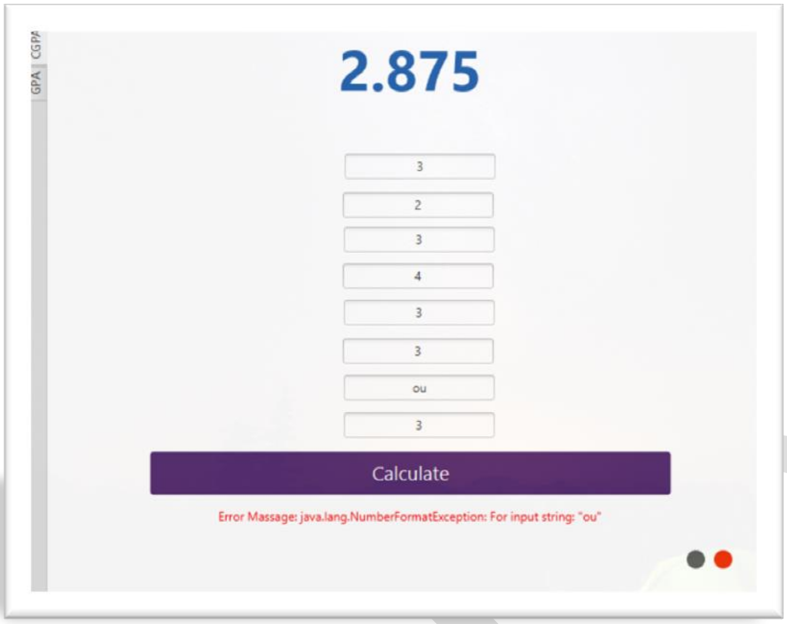


2.875

3
2
3
4
3
3
2
3

Extra stage file due to some exceptions

```
package project_gpa_cgpa;


/**
 *
 * @author Advisor
 */
public class stage {

    static void setOpacity(float f) {
        throw new UnsupportedOperationException("Not supported yet."); //To change body of generated methods, choose Tools | Templates.
    }

    static void setY(double d) {
        throw new UnsupportedOperationException("Not supported yet."); //To change body of generated methods, choose Tools | Templates.
    }

    static void setX(double d) {
        throw new UnsupportedOperationException("Not supported yet."); //To change body of generated methods, choose Tools | Templates.}}
```



2.875

3

2

3

4

3

3

ou

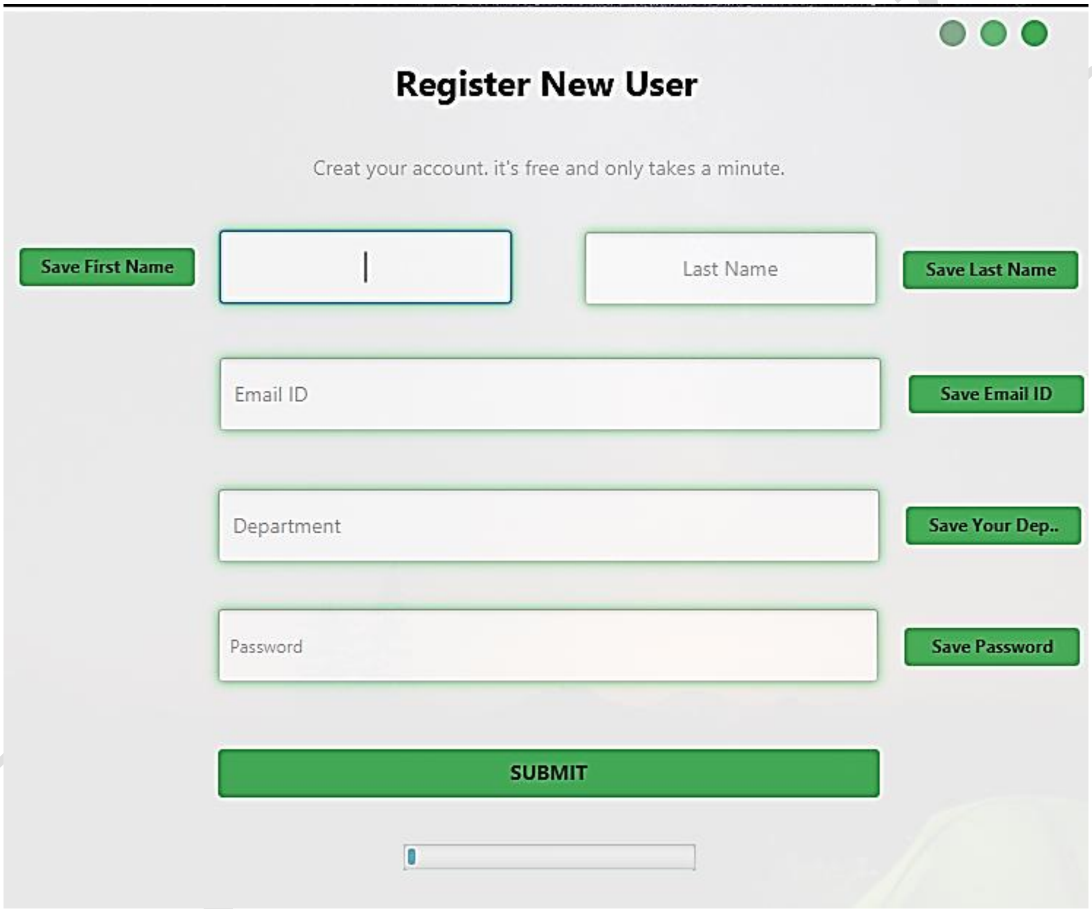
3

Error Massage: java.lang.NumberFormatException: For input string: "ou"

Registration form

In this program we see the proper GUI and color alignment with apply stage drag able and decoration bar style.

As shown in diagram



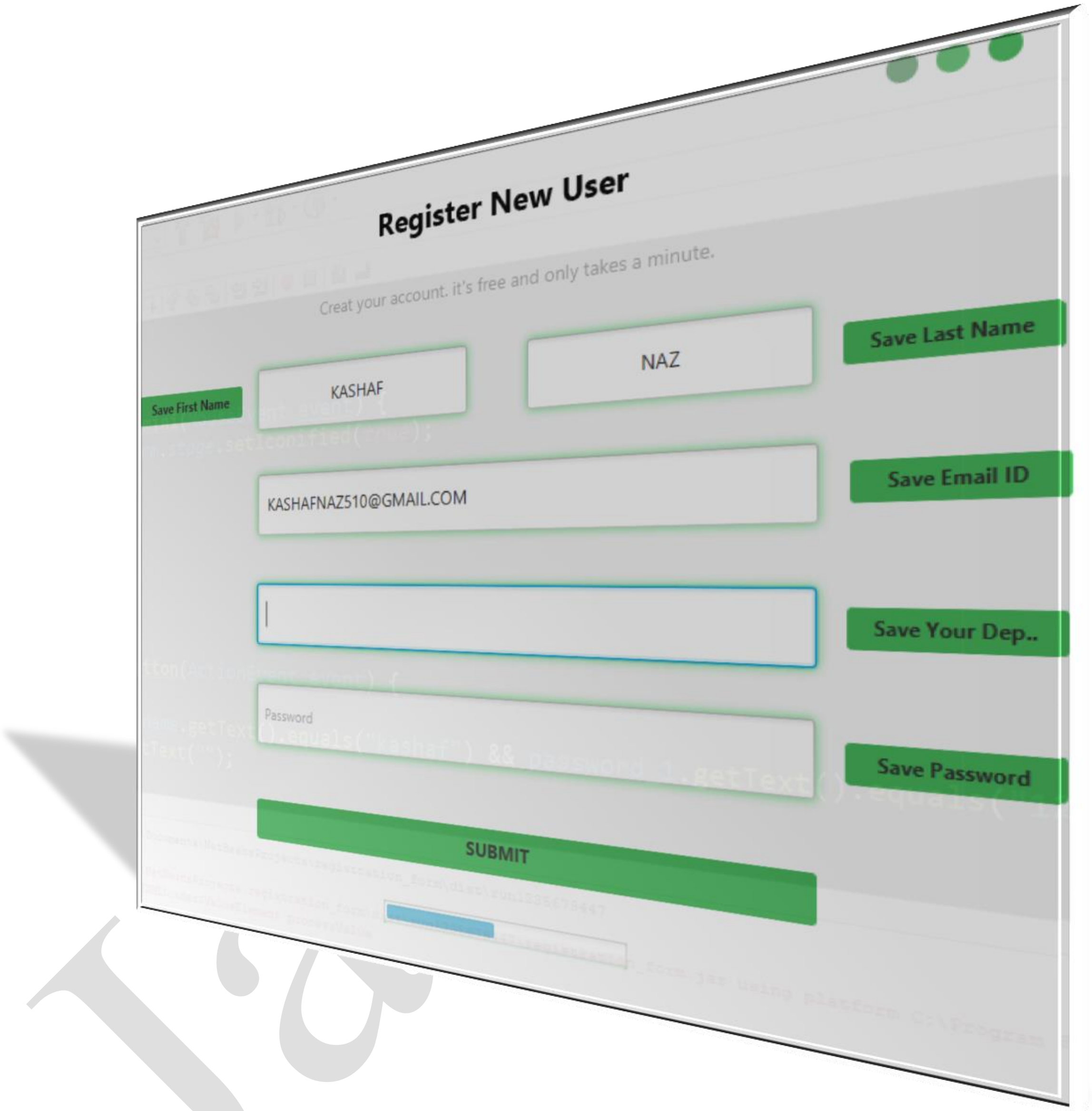
Register New User

Creat your account. it's free and only takes a minute.

In this function we follow two principles one progress bar

Other is submit button for save information

After enter the data in above diagram looks like



Register New User

Creat your account. it's free and only takes a minute.

KASHAF

NAZ

KASHAFNAZ510@GMAIL.COM

Password

JavaFx Built-in functions

- ✓ **Undecorated Stage**

```
stage.initStyle(StageStyle.UNDECORATED);
```

- ✓ **Window Title**

```
stage.setTitle("Window Title");
```

- ✓ **Always on Top Property**

```
stage.alwaysOnTopProperty();
```

- ✓ **Stage Minimize**

```
((Stage)((Button)event.getSource()).getScene().getWindow()).setIconified(true);
```

- ✓ **Stage Exit**

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

- ✓ **App Icon**

```
Image icon= new Image(getClass().getResourceAsStream("/filePath"));
stage.getIcons().add(icon);
```

- ✓ **New Window**

```
AnchorPane pane = FXMLLoader.load(getClass().getResource("name2.fxml"));
rootPane.getChildren().setAll(pane);
```

- ✓ **Progress bar(linear and circular)**

```
 prograssBar.setProgress(1);
 prograssCircle.setProgress(1);
```