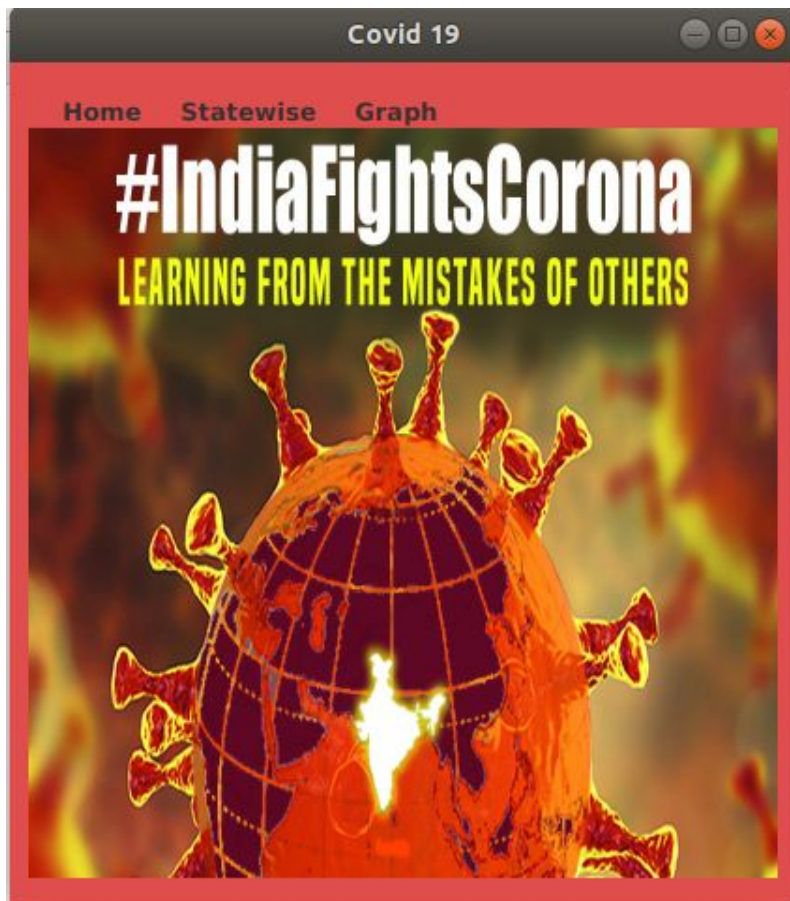


# Digital Assignment 3

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17BEC1028

## Covid 19 tracker App

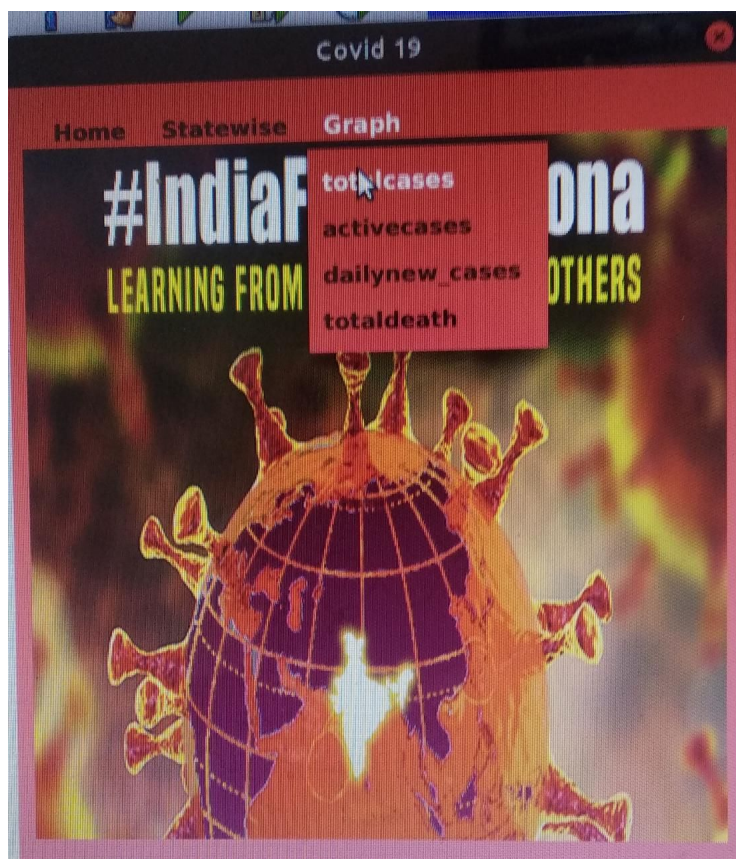
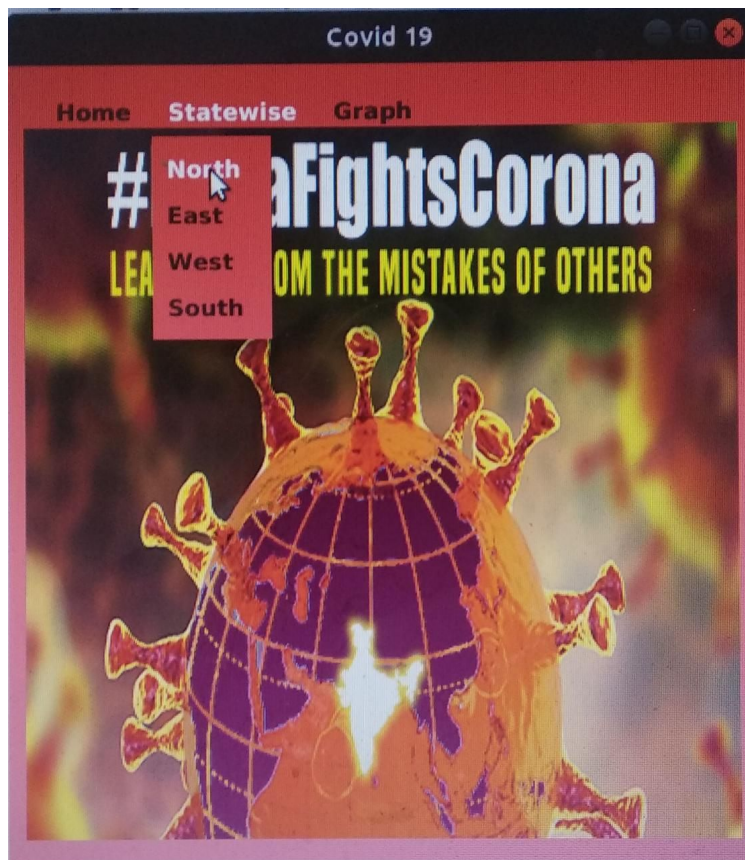
Home Page



Menu Bar has 3 Menus

- 1) Home: to navigate to Home page
- 2) Statewise: To know statewise data
  - a) North
  - b) West
  - c) East
  - d) South
- 3) Graph: To get graphical details
  - a) Total Cases vs Day
  - b) Active Cases vs Day
  - c) Daily New Cases vs Day
  - d) Total Deaths vs Day

Menu Bar



North States: On Clicking North Menu



On Clicking on different States you will get details:



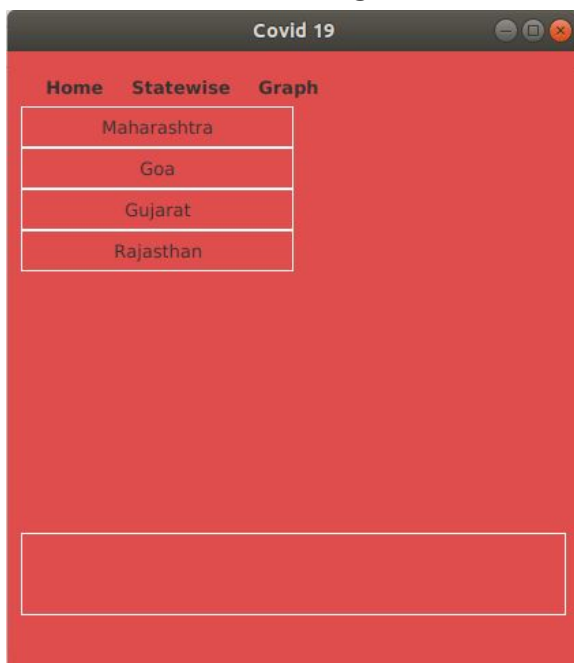
## East States: On Clicking East Menu



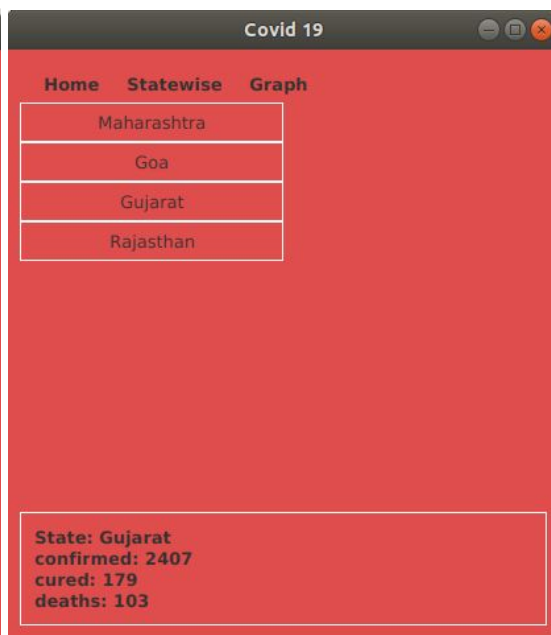
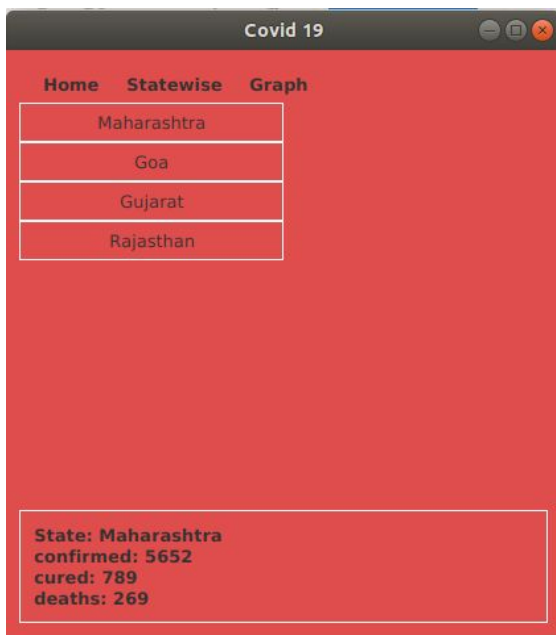
On Clicking on different States you will get details:



West States: On Clicking West Menu

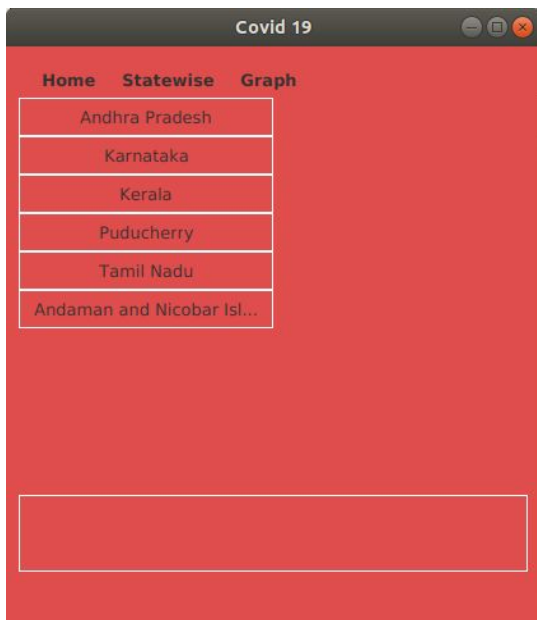


On Clicking on different States you will get details:

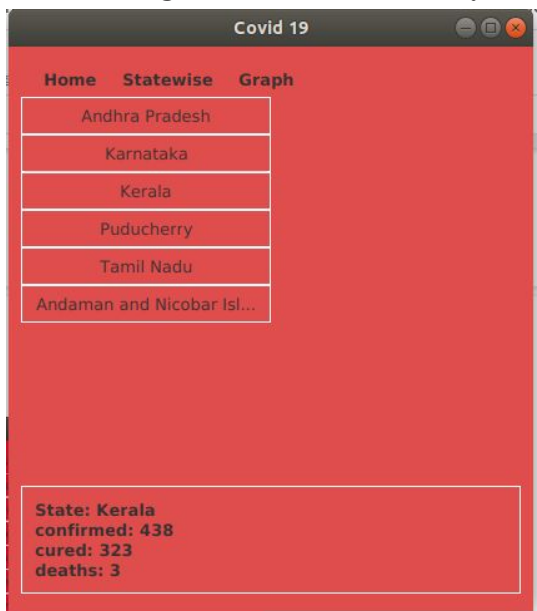




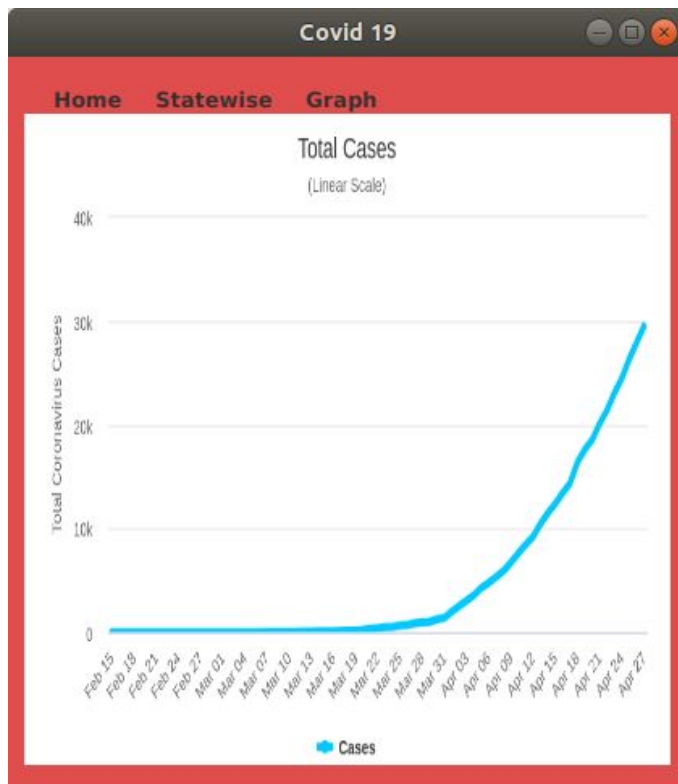
## South States: On Clicking South Menu

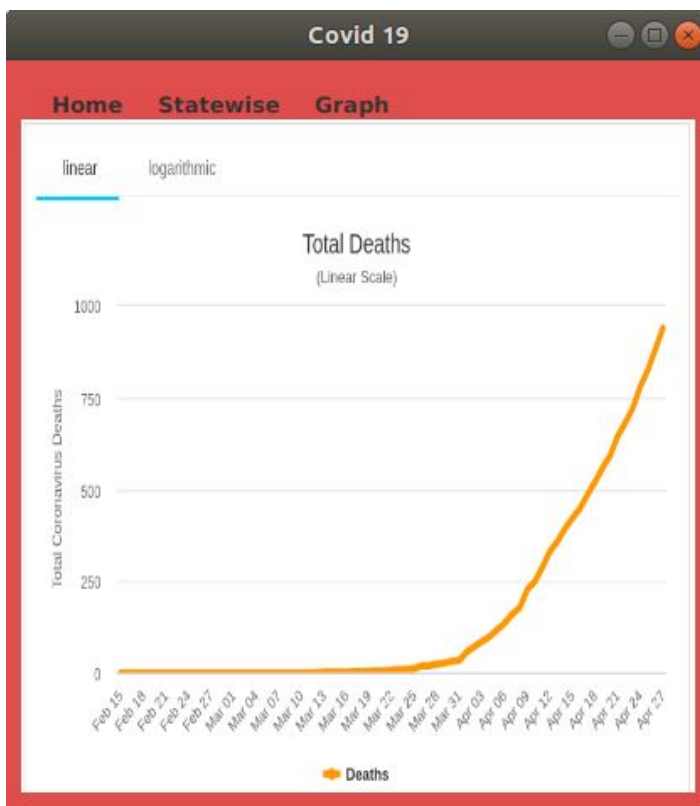
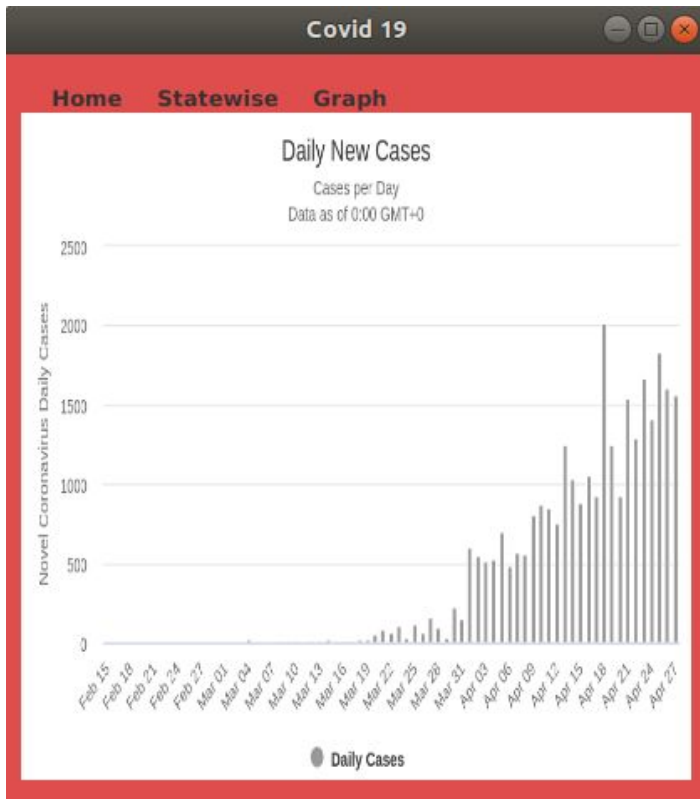


On Clicking on different States you will get details:



Graphs which we will get on click on different menus.







## Code:

```
package hellofx;

import javafx.application.Application;

import java.io.FileInputStream;
import java.io.FileNotFoundException;
import javafx.application.*;
import javafx.scene.*;
import javafx.stage.*;
import javafx.scene.layout.*;
import javafx.scene.control.*;
import javafx.event.*;
import javafx.geometry.*;
import javafx.scene.image.Image;
import javafx.scene.image.ImageView;
import javafx.scene.input.*;
import java.sql.*;

public class covid19data extends Application
{
    static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
    static final String DB_URL = "jdbc:mysql://localhost/chk";

    // Database credentials
    static final String USER = "haider";
    static final String PASS = "Haider@786";

    static Connection conn = null;
    static Statement stmt = null;

    String state="";
    int confirmed;
    int cured;
    int deaths;
    Label response,response1,response2,response3,response4;
    Scene scene,scene1,scene2,scene3,scene4,scenei1,scenei2,scenei3,scenei4;
    Stage myStage;
    public void start(Stage stage) throws FileNotFoundException
    {
```

```
////////////////////////////////////  
////////////////////////////////////
```

```
    myStage =stage;  
    myStage.setTitle("Covid 19");
```

```
////////////////////////////////////  
////////////////////////////////////
```

```
    // --- All GridPanes ----  
    GridPane gp = giveroot();  
    scene = new Scene(gp); // Creating a scene object
```

```
    GridPane gp1 = giveroot();  
    scene1 = new Scene(gp1); // Creating a scene object
```

```
    GridPane gp2 = giveroot();  
    scene2 = new Scene(gp2); // Creating a scene object
```

```
    GridPane gp3 = giveroot();  
    scene3 = new Scene(gp3); // Creating a scene object
```

```
    GridPane gp4 = giveroot();  
    scene4 = new Scene(gp4); // Creating a scene object
```

```
    GridPane gpi1 = giveroot();  
    scenei1 = new Scene(gpi1); // Creating a scene object
```

```
    GridPane gpi2 = giveroot();  
    scenei2 = new Scene(gpi2); // Creating a scene object
```

```
    GridPane gpi3 = giveroot();  
    scenei3 = new Scene(gpi3); // Creating a scene object
```

```
    GridPane gpi4 = giveroot();  
    scenei4 = new Scene(gpi4); // Creating a scene object
```

```
//      gp1.setGridLinesVisible(true);
```

```
////////////////////////////////////  
////////////////////////////////////
```

```

MenuBar mb = createmb();
MenuBar mb1 = createmb();
MenuBar mb2 = createmb();
MenuBar mb3 = createmb();
MenuBar mb4 = createmb();
MenuBar mb5 = createmb();
MenuBar mb6 = createmb();
MenuBar mb7 = createmb();
MenuBar mb8 = createmb();

////////////////////////////////////
response = createlabel(""); // Create a label that will report the selection.
response1 = createlabel(""); // Create a label that will report the selection.
response2 = createlabel(""); // Create a label that will report the
selection.
    response3 = createlabel(""); // Create a label that will report the
selection.
    response4 = createlabel(""); // Create a label that will report the
selection.

////////////////////////////////////
////////////////////////////////////

// North States
Button btn1 = createbutton("Jammu and Kashmir",stmt,conn);
Button btn2 = createbutton("Himachal Pradesh",stmt,conn);
Button btn3 = createbutton("Haryana",stmt,conn);
Button btn4 = createbutton("Chandigarh",stmt,conn);
Button btn5 = createbutton("Delhi",stmt,conn);
Button btn6 = createbutton("Uttarakhand",stmt,conn);
Button btn7 = createbutton("Uttar Pradesh",stmt,conn);
Button btn8 = createbutton("Punjab",stmt,conn);
Button btn9 = createbutton("Madhya Pradesh",stmt,conn);
Button btn10 = createbutton("Ladakh",stmt,conn);

//west
Button btn11 = createbutton("Maharashtra",stmt,conn);
Button btn12 = createbutton("Goa",stmt,conn);
Button btn13 = createbutton("Gujarat",stmt,conn);
Button btn14 = createbutton("Rajasthan",stmt,conn);

//east

```

```

Button btn15 = createbutton("West Bengal",stmt,conn);
Button btn16 = createbutton("Bihar",stmt,conn);
Button btn17 = createbutton("Jharkhand",stmt,conn);
Button btn18 = createbutton("Odisha",stmt,conn);
Button btn19 = createbutton("Arunachal Pradesh",stmt,conn);
Button btn20 = createbutton("Assam",stmt,conn);
Button btn21 = createbutton("Chhattisgarh",stmt,conn);
Button btn22 = createbutton("Manipur",stmt,conn);
Button btn23 = createbutton("Meghalaya",stmt,conn);
Button btn24 = createbutton("Mizoram",stmt,conn);
Button btn25 = createbutton("Tripura",stmt,conn);

```

```
//south
```

```

Button btn26 = createbutton("Andhra Pradesh",stmt,conn);
Button btn27 = createbutton("Karnataka",stmt,conn);
Button btn28 = createbutton("Kerala",stmt,conn);
Button btn29 = createbutton("Puducherry",stmt,conn);
Button btn30 = createbutton("Tamil Nadu",stmt,conn);
Button btn31 = createbutton("Telengana",stmt,conn);
Button btn32 = createbutton("Andaman and Nicobar Islands",stmt,conn);

```

```

////////////////////////////////////
////////////////////////////////////

```

```

Image homei = new Image(new
FileInputStream("/home/najaf/NetBeansProjects/HelloFX/src/hellofx/pic/co
vid19.jpg"));

```

```

    ImageView homeiv = new ImageView(homei);
    homeiv.setFitHeight(400);
    homeiv.setFitWidth(400);

```

```
//--//
```

```

Image graph1i = new Image(new
FileInputStream("/home/najaf/NetBeansProjects/HelloFX/src/hellofx/pic/to
tal_cases.png"));

```

```

    ImageView graph1iv = new ImageView(graph1i);
    graph1iv.setFitHeight(400);
    graph1iv.setFitWidth(400);

```

```
//--//
```

```
Image graph2i = new Image(new  
FileInputStream("/home/najaf/NetBeansProjects/HelloFX/src/hellofx/pic/ac  
tive_cases.png"));  
ImageView graph2iv = new ImageView(graph2i);  
graph2iv.setFitHeight(400);  
graph2iv.setFitWidth(400);
```

```
//--//
```

```
Image graph3i = new Image(new  
FileInputStream("/home/najaf/NetBeansProjects/HelloFX/src/hellofx/pic/da  
ily_new_cases.png"));  
ImageView graph3iv = new ImageView(graph3i);  
graph3iv.setFitHeight(400);  
graph3iv.setFitWidth(400);
```

```
//--//
```

```
Image graph4i = new Image(new  
FileInputStream("/home/najaf/NetBeansProjects/HelloFX/src/hellofx/pic/to  
tal_deaths.png"));  
ImageView graph4iv = new ImageView(graph4i);  
graph4iv.setFitHeight(400);  
graph4iv.setFitWidth(400);
```

```
//--//
```

```
////////////////////////////////////  
////////////////////////////////////
```

```
gp.add(mb,0,0,40,3);  
gp.add(homeiv, 0,5,40,35);
```

```
////////////////////////////////////  
////////////////////////////////////
```

```
//gp1  
gp1.add(mb1,0,0,40,3);
```

```
gp1.add(btn1,0,3,20,3);
gp1.add(btn2,0,6,20,3);
gp1.add(btn3,0,9,20,3);
gp1.add(btn4,0,12,20,3);
gp1.add(btn5,0,15,20,3);
gp1.add(btn6,0,18,20,3);
gp1.add(btn7,0,21,20,3);
gp1.add(btn8,0,24,20,3);
gp1.add(btn9,0,27,20,3);
gp1.add(btn10,0,30,20,3);
gp1.add(response1,0,34,40,7);
```

```
////////////////////////////////////
////////////////////////////////////
```

```
//gp2
```

```
gp2.add(mb2,0,0,40,3);
gp2.add(btn11,0,3,20,3);
gp2.add(btn12,0,6,20,3);
gp2.add(btn13,0,9,20,3);
gp2.add(btn14,0,12,20,3);
gp2.add(response2,0,34,40,7);
```

```
////////////////////////////////////
////////////////////////////////////
```

```
//gp3
```

```
gp3.add(mb3,0,0,40,3);
gp3.add(btn15,0,3,20,3);
gp3.add(btn16,0,6,20,3);
gp3.add(btn17,0,9,20,3);
gp3.add(btn18,0,12,20,3);
gp3.add(btn19,0,15,20,3);
gp3.add(btn20,0,18,20,3);
gp3.add(btn21,0,21,20,3);
gp3.add(btn22,0,24,20,3);
gp3.add(btn23,0,27,20,3);
gp3.add(btn24,0,30,20,3);
gp3.add(btn25,0,30,20,3);
gp3.add(response3,0,34,40,7);
```

```
////////////////////////////////////
////////////////////////////////////
```

```
//gp4
```



```
gp4.add(mb4,0,0,40,3);
gp4.add(btn26,0,3,20,3);
gp4.add(btn27,0,6,20,3);
gp4.add(btn28,0,9,20,3);
gp4.add(btn29,0,12,20,3);
gp4.add(btn30,0,15,20,3);
gp4.add(btn31,0,18,20,3);
gp4.add(btn32,0,18,20,3);
gp4.add(response4,0,34,40,7);
```

```
////////////////////////////////////
////////////////////////////////////
```

```
gpi1.add(mb5,0,0,40,3);
gpi1.add(graph1iv, 0,5,40,35);
```

```
////////////////////////////////////
//////////
```

```
gpi2.add(mb6,0,0,40,3);
gpi2.add(graph2iv, 0,5,40,35);
```

```
////////////////////////////////////
//////////
```

```
gpi3.add(mb7,0,0,40,3);
gpi3.add(graph3iv, 0,5,40,35);
```

```
////////////////////////////////////
//////////
```

```
gpi4.add(mb8,0,0,40,3);
gpi4.add(graph4iv, 0,5,40,35);
```

```
////////////////////////////////////
//////////
```

```
scene.getStylesheets().add("style2.css");
scene1.getStylesheets().add("style2.css");
scene2.getStylesheets().add("style2.css");
scene3.getStylesheets().add("style2.css");
scene4.getStylesheets().add("style2.css");
scenei1.getStylesheets().add("style2.css");
scenei2.getStylesheets().add("style2.css");
scenei3.getStylesheets().add("style2.css");
scenei4.getStylesheets().add("style2.css");
```

```

        myStage.setScene(scene); // Adding scene to the stage
        myStage.show();
    }
    public GridPane giveroot()
    {
        GridPane rootNode = new GridPane(); //Creating a Grid Pane
        rootNode.setMinSize(400, 450); //Setting size for the pane // col,row
        rootNode.setPadding(new Insets(10, 10, 10, 10)); //Setting the padding

        int numRows = 40;
        int numColumns = 40;
        for (int row = 0 ; row < numRows ; row++ )
        {
            RowConstraints rc = new RowConstraints(10);
            rc.setFillHeight(true);
            rc.setVgrow(Priority.ALWAYS);
            rootNode.getRowConstraints().add(rc);
        }

        for (int col = 0 ; col < numColumns; col++ )
        {
            ColumnConstraints cc = new ColumnConstraints(10);
            cc.setFillWidth(true);
            cc.setHgrow(Priority.ALWAYS);
            rootNode.getColumnConstraints().add(cc);
        }
        return rootNode;
    }
    public Label createlabel(String text)
    {
        Label l = new Label(text);
        l.setMaxSize(Double.MAX_VALUE, Double.MAX_VALUE);
        return l;
    }
    public Button createbutton(String text,Statement stmt,Connection conn)
    {
        Button btn = new Button(text);
        btn.setMaxSize(Double.MAX_VALUE, Double.MAX_VALUE);
        btn.setOnAction((e) -> {
            state = btn.getText();
            chk();
        });
    }

```

```

        response.setText("State: "+state+"\n"+"confirmed:
"+confirmed+"\n"+"cured: "+cured+"\n"+"deaths: "+deaths+"\n");
        response1.setText("State: "+state+"\n"+"confirmed:
"+confirmed+"\n"+"cured: "+cured+"\n"+"deaths: "+deaths+"\n");
        response2.setText("State: "+state+"\n"+"confirmed:
"+confirmed+"\n"+"cured: "+cured+"\n"+"deaths: "+deaths+"\n");
        response3.setText("State: "+state+"\n"+"confirmed:
"+confirmed+"\n"+"cured: "+cured+"\n"+"deaths: "+deaths+"\n");
        response4.setText("State: "+state+"\n"+"confirmed:
"+confirmed+"\n"+"cured: "+cured+"\n"+"deaths: "+deaths+"\n");
    }
    );
    return btn;
}
public MenuBar createmb()
{
    MenuBar mb = new MenuBar(); // Create the menu bar.

    Menu home = new Menu("_Home");
    MenuItem home_page = new MenuItem("Home");
    home.getItems().add(home_page);
    mb.getMenus().add(home);

    Menu state = new Menu("_Statewise");

    MenuItem north = new MenuItem("North");
    MenuItem east = new MenuItem("East");
    MenuItem west = new MenuItem("West");
    MenuItem south = new MenuItem("South");
    state.getItems().addAll(north, east, west, south);

    // ,new SeparatorMenuItem()
    mb.getMenus().add(state);

    Menu graph = new Menu("_Graph");

    MenuItem total_cases = new MenuItem("total_cases");
    MenuItem active_cases = new MenuItem("active_cases");
    MenuItem daily_new_cases = new MenuItem("daily_new_cases");
    MenuItem total_death = new MenuItem("total_death");

    graph.getItems().addAll(total_cases,active_cases,daily_new_cases,total_death);

```

```
mb.getMenus().add(graph);
```

```
////////////////////////////////////  
////////////////////////////////////
```

```
        EventHandler<ActionEvent> MEHandler = new  
        EventHandler<ActionEvent>()  
        {  
            public void handle(ActionEvent ae)  
            {  
                String name =  
                ((MenuItem)ae.getTarget()).getText();  
                //  
                if(name=="")  
                if(name=="Home")  
                    myStage.setScene(scene);  
                if(name=="North")  
                    myStage.setScene(scene1);  
                if(name=="West")  
                    myStage.setScene(scene2);  
                if(name=="East")  
                    myStage.setScene(scene3);  
                if(name=="South")  
                    myStage.setScene(scene4);  
                if(name=="total_cases")  
                    myStage.setScene(scenei1);  
                if(name=="active_cases")  
                    myStage.setScene(scenei2);  
                if(name=="daily_new_cases")  
                    myStage.setScene(scenei3);  
                if(name=="total_death")  
                    myStage.setScene(scenei4);  
            }  
        };  
        // Set action event handlers for the menu items.  
        home_page.setOnAction(MEHandler);  
        north.setOnAction(MEHandler);  
        east.setOnAction(MEHandler);  
        west.setOnAction(MEHandler);  
        south.setOnAction(MEHandler);  
        total_cases.setOnAction(MEHandler);  
        active_cases.setOnAction(MEHandler);
```

```

        daily_new_cases.setOnAction(MEHandler);
        total_death.setOnAction(MEHandler);
        return mb;
    }
    public void chk()
    {
        try
        {
            Class.forName("com.mysql.cj.jdbc.Driver");
            conn = DriverManager.getConnection(DB_URL, USER, PASS);
            stmt = conn.createStatement();
            String sql = "SELECT * from covid where state='"+state+"'";
            int flag=0;
            ResultSet rs = stmt.executeQuery(sql);

            while(rs.next())
            {
                confirmed = rs.getInt("confirmed");
                cured = rs.getInt("cured");
                deaths = rs.getInt("deaths");
            }
            rs.close();
        }
        catch(SQLException se) { se.printStackTrace(); }
        catch(Exception e) { e.printStackTrace(); }
        finally
        {
            try
            {
                if(stmt!=null)
                    conn.close();
                if(conn!=null)
                    conn.close();
            }
            catch(SQLException se){ se.printStackTrace(); } // do nothing
        }
    }

    public static void main(String[] args)
    {
        launch(args);
    }

```

}

## Style sheet(CSS):

```
*  
{  
  -fx-background-color:rgb(223, 77, 77);  
}
```

Button

```
{  
  
-fx-border-color: white;  
-fx-border-width:1px;  
}
```

Label

```
{  
  -fx-border-color: white;  
  -fx-border-width:1px;  
  -fx-font-weight:bold;  
  -fx-text-align:center;  
  -fx-align-self: center;
```



```
-fx-padding:10px;  
}
```

**Result:**

Covid 19 tracker app was developed using javafx and it gives us data and graph related to Covid 19.