

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Programme** | **:** | **B,Tech(CSE)** | **Semester** | **:** | **Winter 2020-21** |
| **Course** | **:** | **Java Programming** | **Code** | **:** | **CSE1007** |
| **Faculty** | **:** | **Rajarajeshwari S** | **Slot** | **:** | **A1** |
| **Name** | **:** | **Prakriti Sharma** | **Reg. No.** | **:** | **19BCE1655** |

**DA3**

**Link to the video:**

<https://drive.google.com/file/d/1qQWM7PeXfxFCisT--Zvz30GgF0xFVvEo/view?usp=sharing>

**Link to the zip file:**

<https://drive.google.com/file/d/131EW58noVWO1vU-VOAg_sHPuJVh1tV3c/view?usp=sharing>

**THE DOCUMENT HAS :**

**1.ANSWER TO THE DOCUMENT**

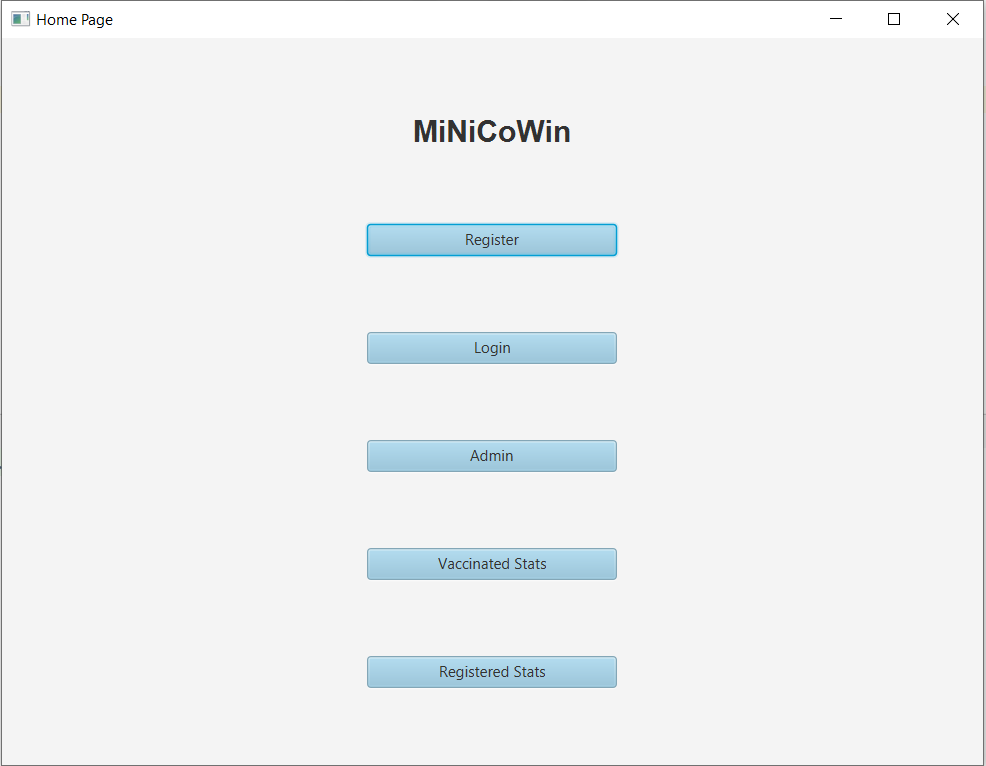
**2.SCREENSHOT OF OUTPUT.**

**3.PASTED CODE.**

**Link to the zip file :**

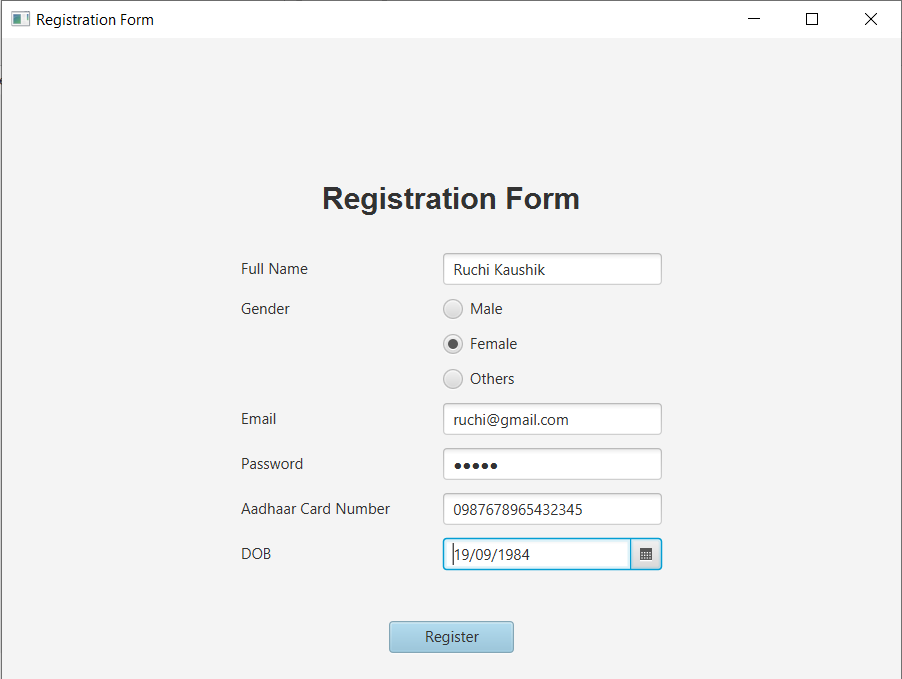
**1.ANSWER TO THE CLASS DEFINITION PART.**

Create a java application for the registration of covid vaccination with the necessary details. (refer coWin website). Make it simple as much as possible

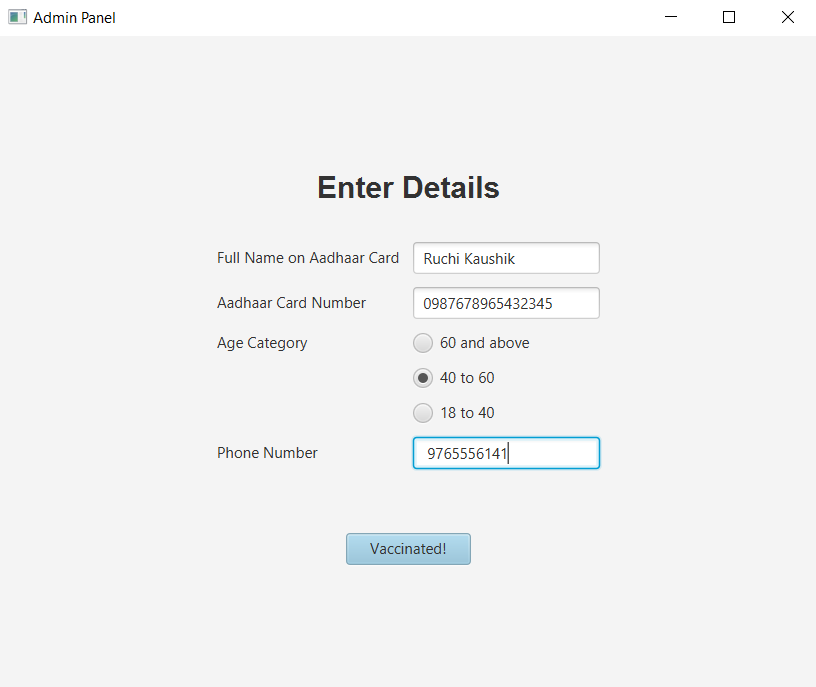


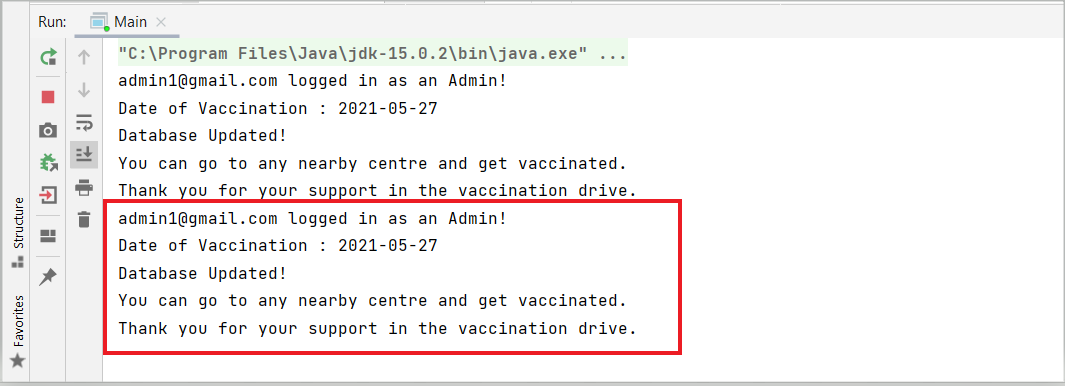
Perform the procedure like

* Registration

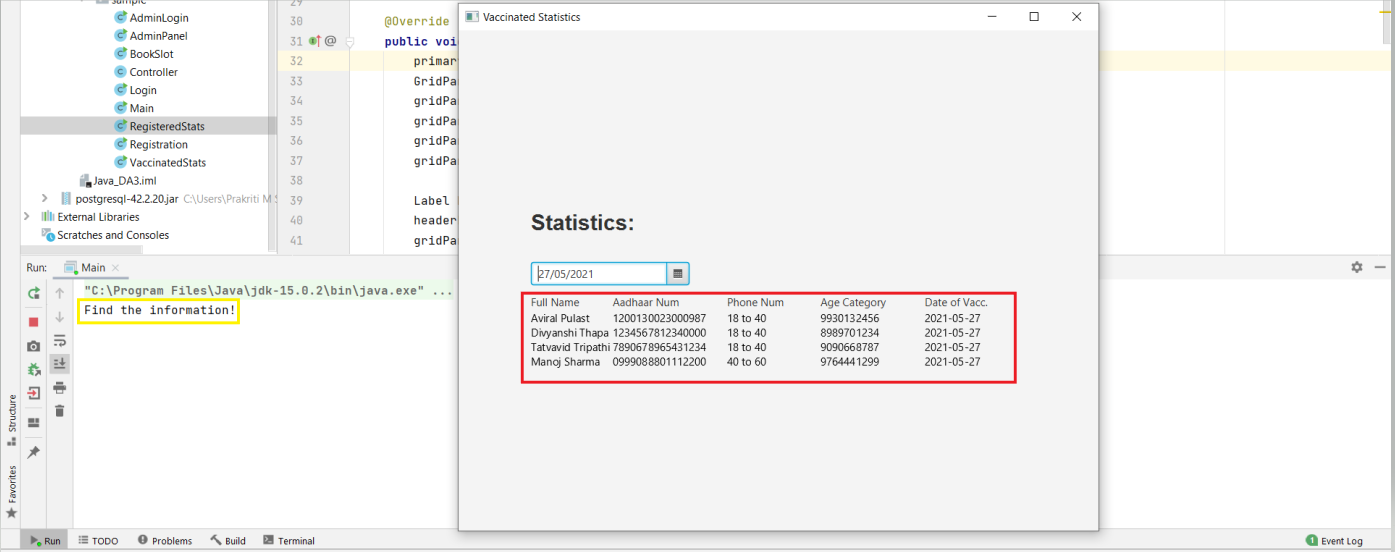


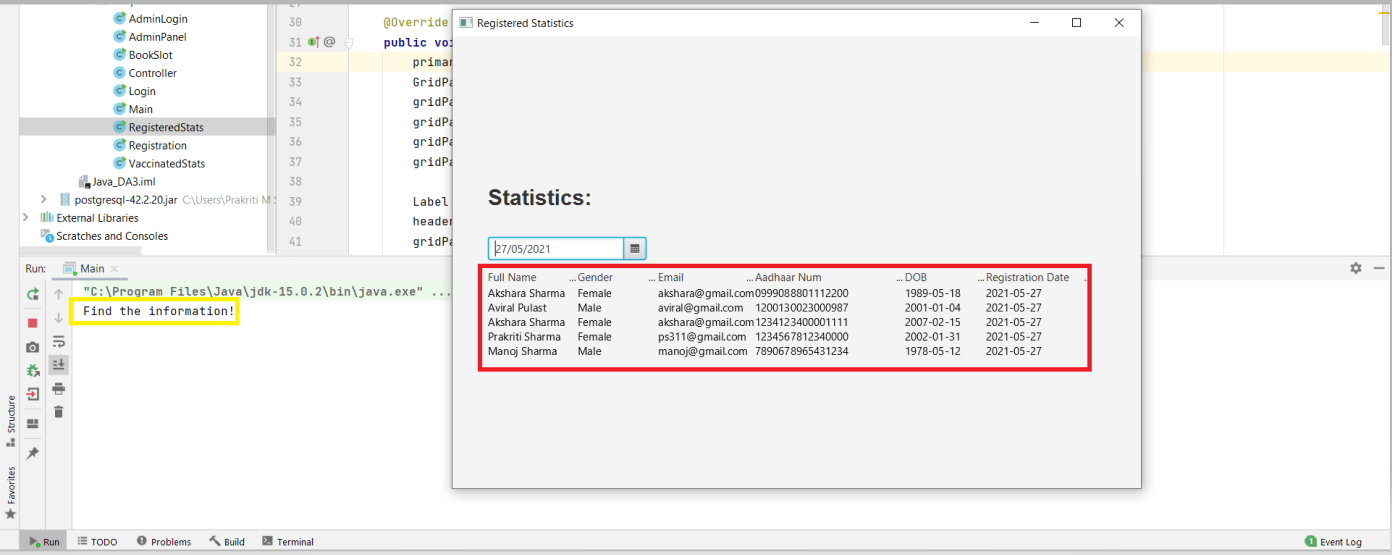
* Update the customer details after vaccination





* Daily report about the registered people and vaccinated people.



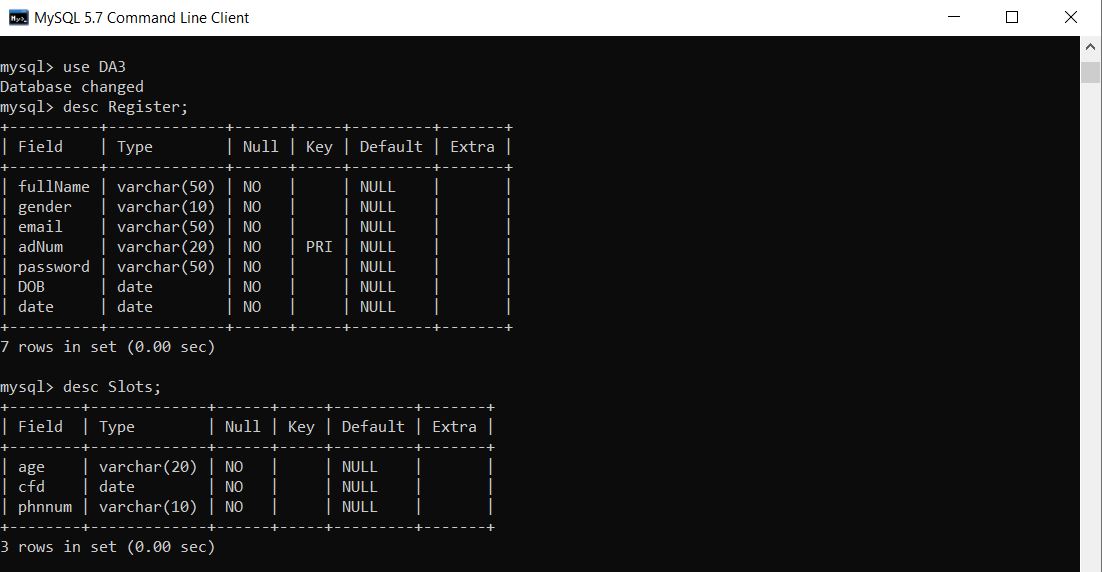


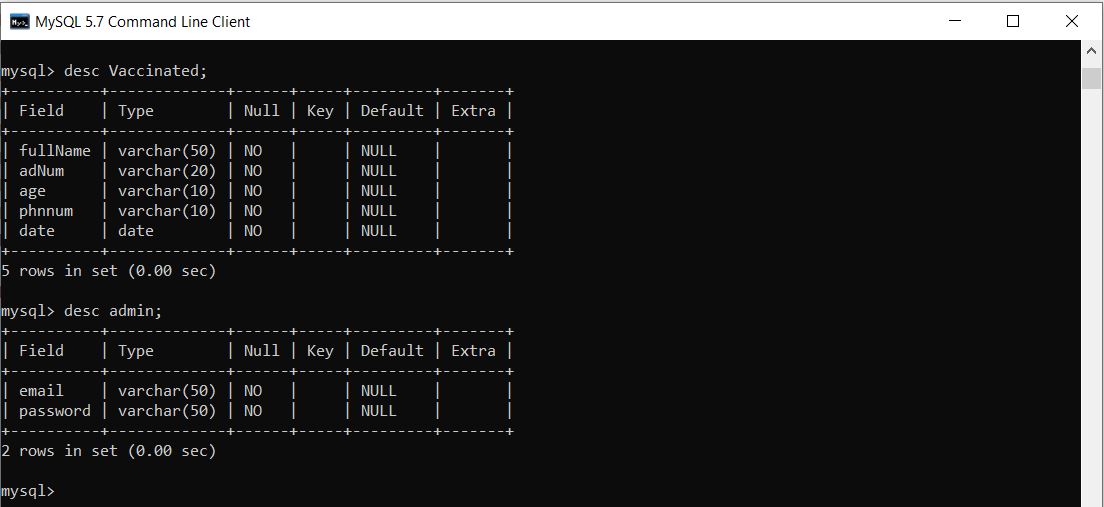
Use appropriate concepts to perform the above process (JDBC, JAVA FX)

**2.SCREENSHOT OF OUTPUT.**

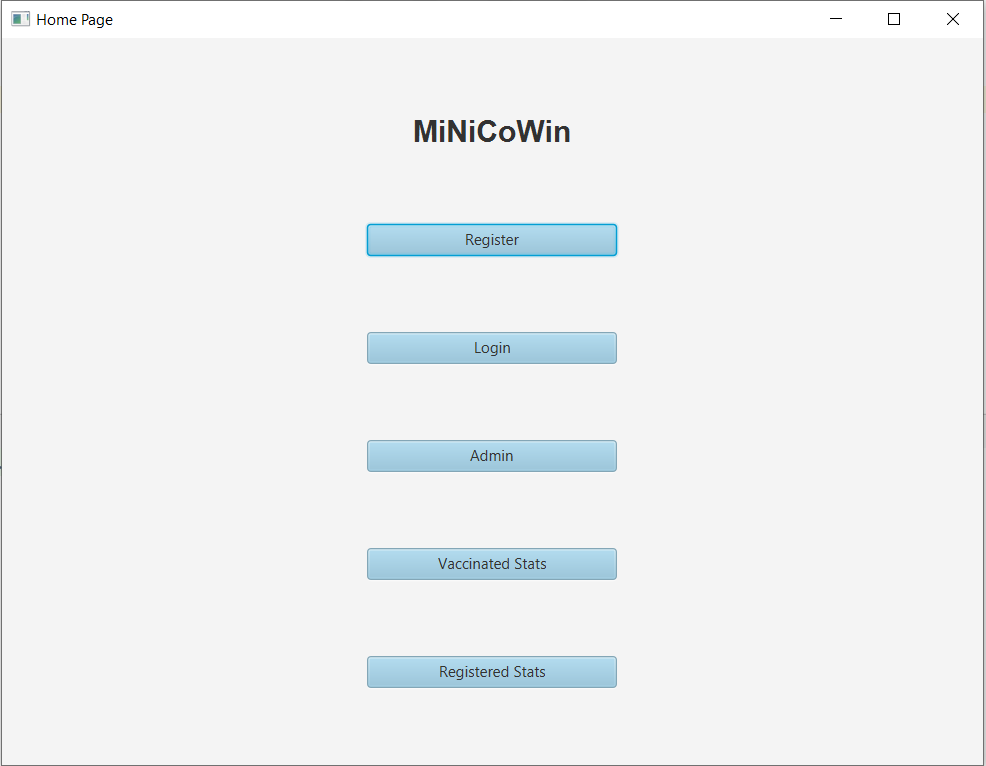
The DataBase Tables:



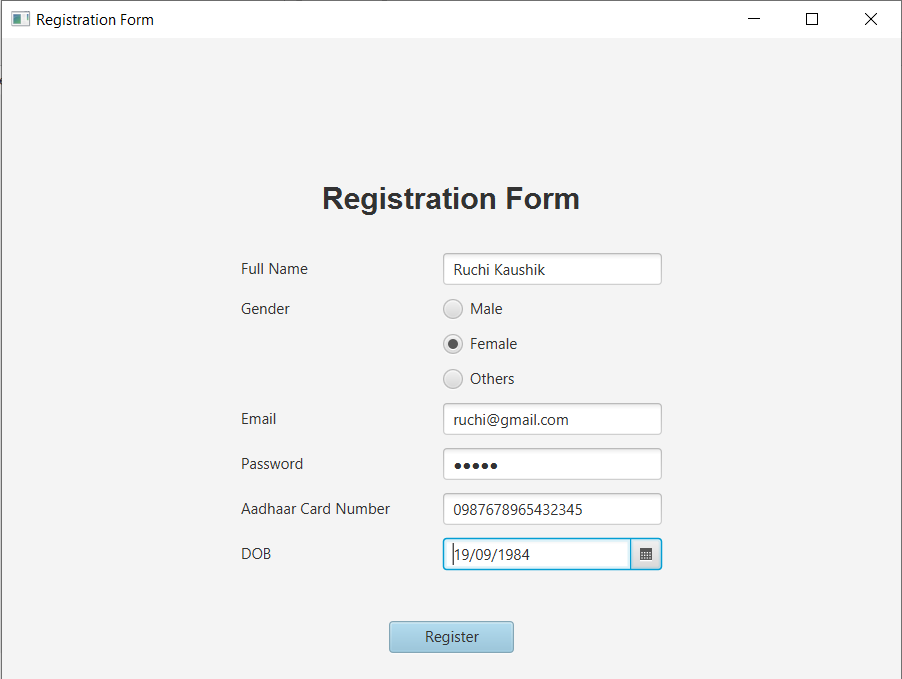




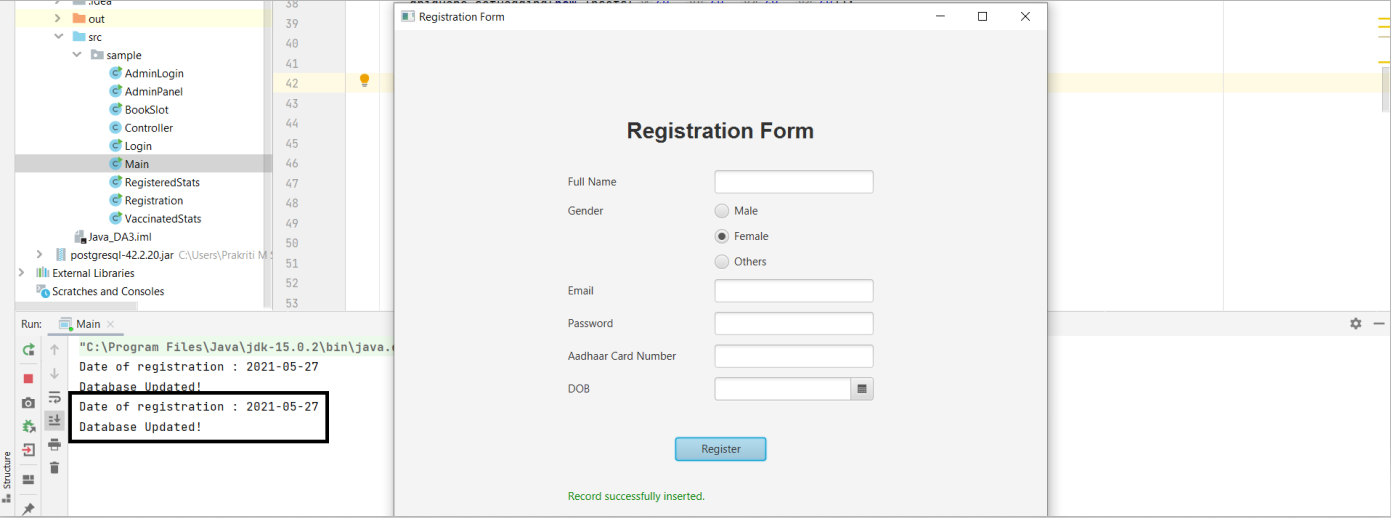
The HomePage:

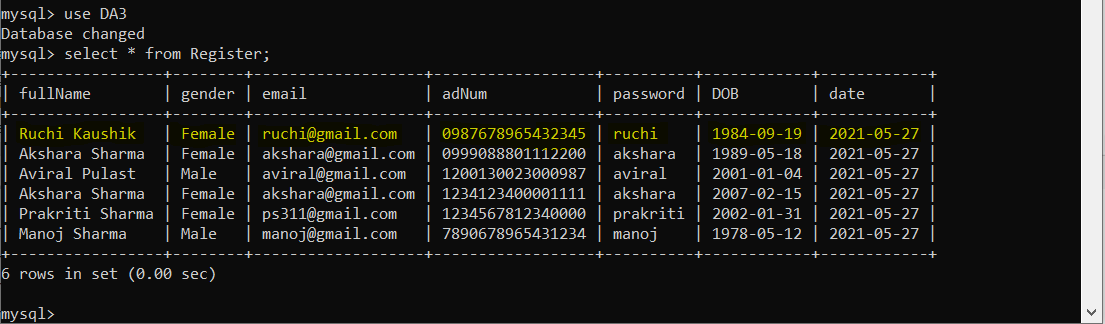


The Registration Page:

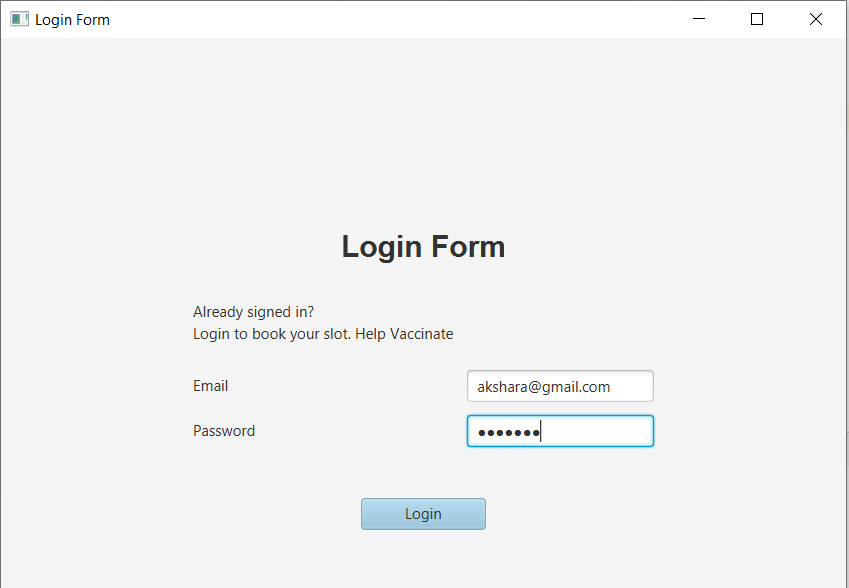


Data Insertion in Registration Page:

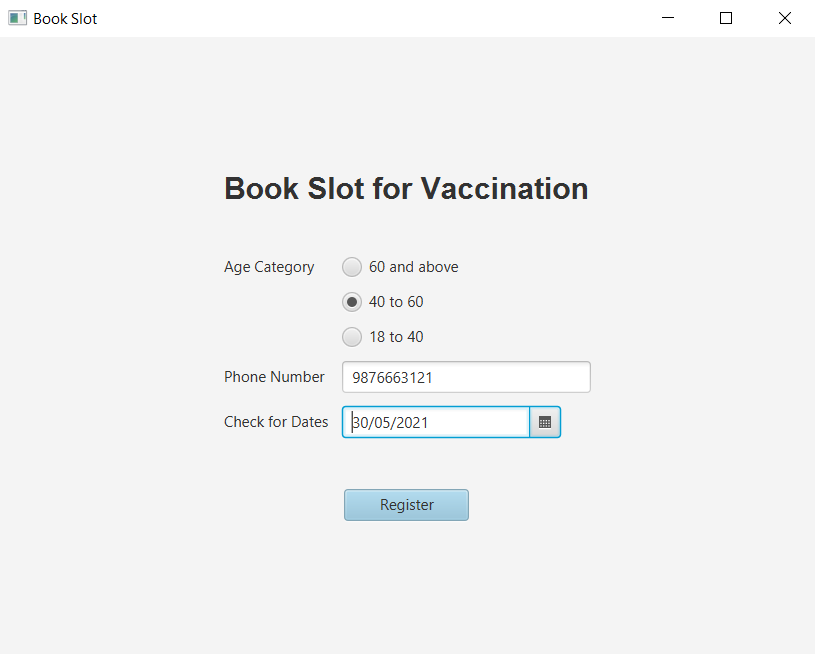




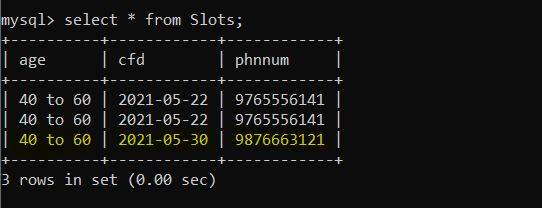
Login Page:



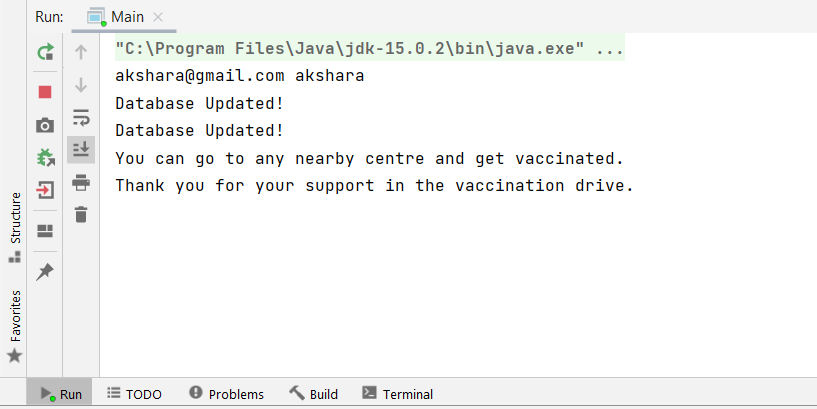
BookSlot Page:



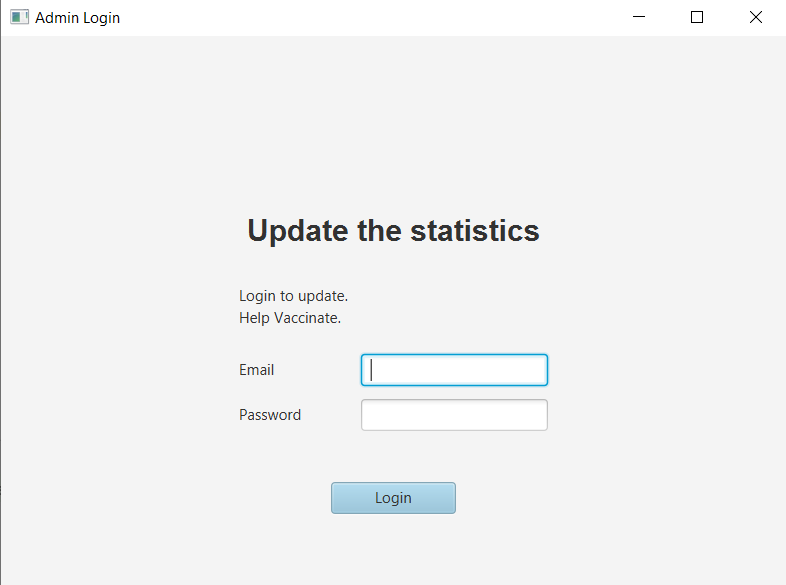
Insertion to Database:

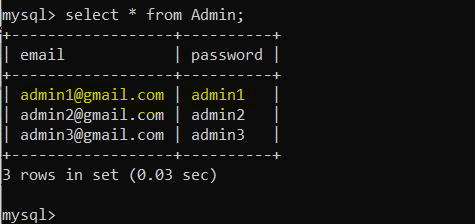


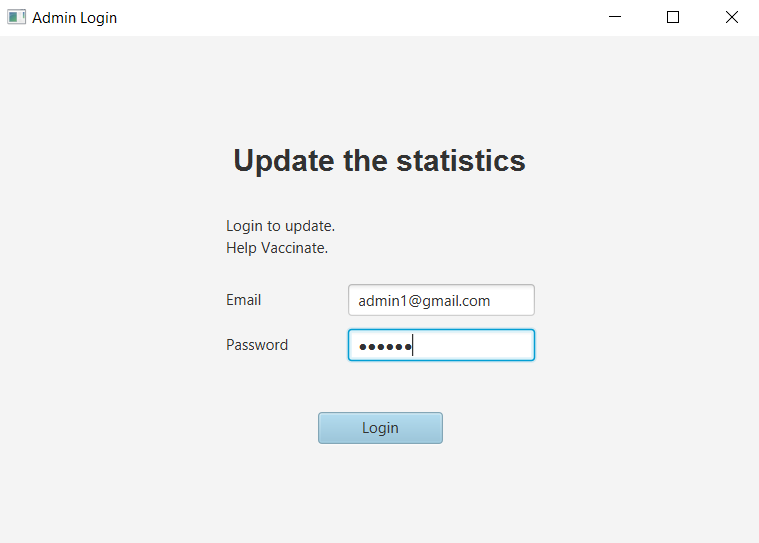
Console Notifs:

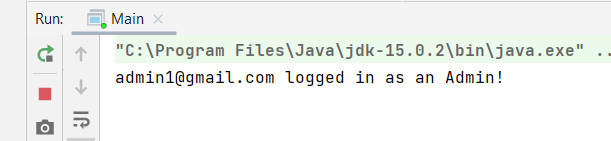


Admin Login:

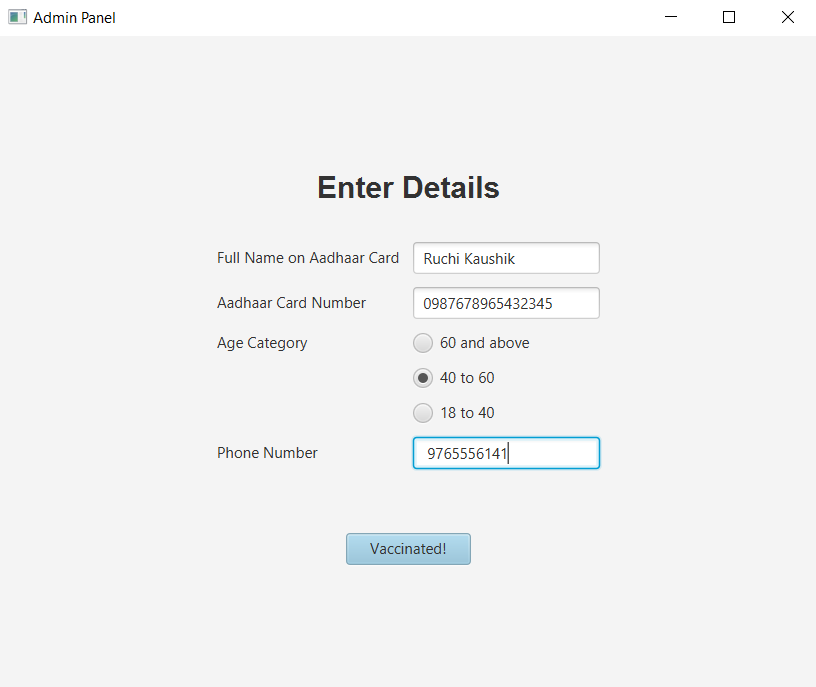


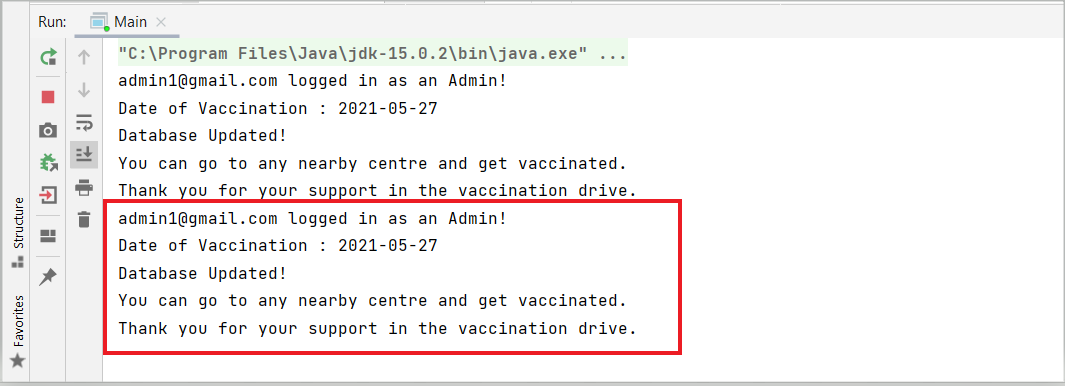


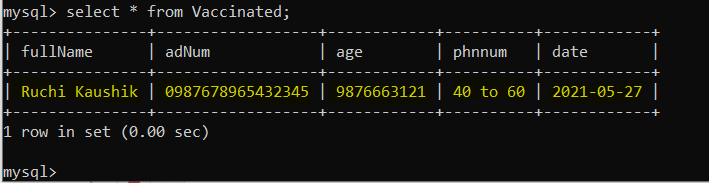




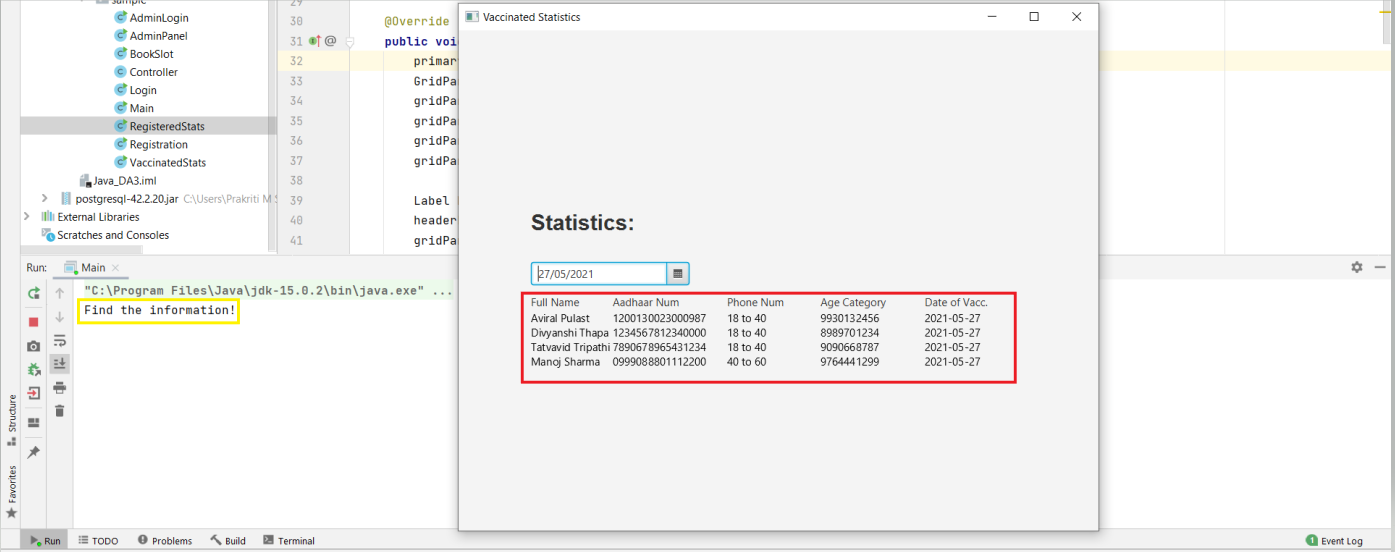
Admin Panel:



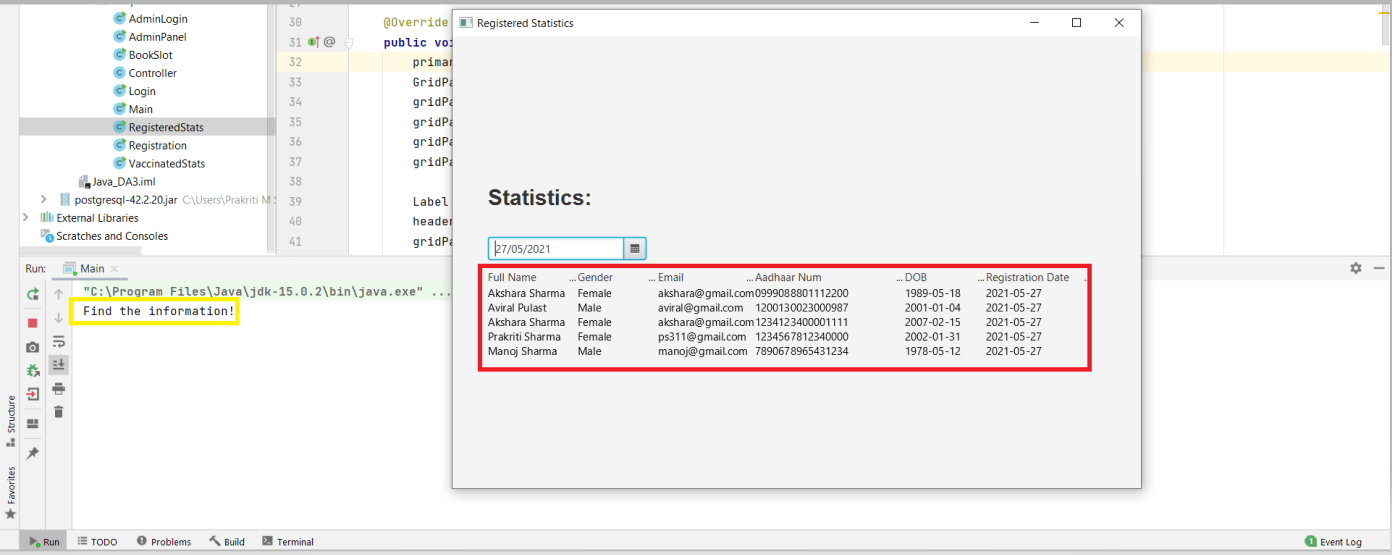




Vaccinated Statistics Page:



Registered Statistics page:



**4.PASTED CODE.**

Main.java

**package** sample;  
  
**import** javafx.application.Application;  
**import** javafx.geometry.HPos;  
**import** javafx.geometry.Insets;  
**import** javafx.geometry.Pos;  
**import** javafx.scene.Scene;  
**import** javafx.scene.control.Button;  
**import** javafx.scene.control.Label;  
**import** javafx.scene.layout.GridPane;  
**import** javafx.scene.text.Font;  
**import** javafx.scene.text.FontWeight;  
**import** javafx.stage.Stage;  
  
**public class** Main **extends** Application {  
  
 String[] **args**;  
  
 **public static void** main(String[] args) {  
 args = args;  
 *launch*(args);  
  
 *//For running individual pages  
 //Registration.launch(Registration.class,args);  
 //Login.launch(Login.class,args);  
 //BookSlot.launch(BookSlot.class, args);  
 //AdminLogin.launch(AdminLogin.class,args);  
 //AdminPanel.launch(AdminPanel.class,args);  
 //VaccinatedStats.launch(VaccinatedStats.class, args);  
 //RegisteredStats.launch(RegisteredStats.class,args);* }  
  
 @Override  
 **public void** start(Stage primaryStage) **throws** Exception {  
 primaryStage.setTitle(**"Home Page"**);  
 GridPane gridPane = **new** GridPane();  
 gridPane.setAlignment(Pos.***CENTER***);  
 gridPane.setPadding(**new** Insets(40, 40, 40, 40));  
 gridPane.setHgap(10);  
 gridPane.setVgap(10);  
  
 Label headerLabel = **new** Label(**"MiNiCoWin"**);  
 headerLabel.setFont(Font.*font*(**"Arial"**, FontWeight.***BOLD***, 24));  
 gridPane.add(headerLabel, 0, 0, 2, 1);  
 GridPane.*setHalignment*(headerLabel, HPos.***CENTER***);  
 GridPane.*setMargin*(headerLabel, **new** Insets(20, 0, 20, 0));  
  
 Button registerButton = **new** Button(**"Register"**);  
 registerButton.setDefaultButton(**true**);  
 registerButton.setPrefWidth(200);  
 gridPane.add(registerButton, 0, 2, 2, 1);  
 GridPane.*setHalignment*(registerButton, HPos.***CENTER***);  
 GridPane.*setMargin*(registerButton, **new** Insets(20, 0, 20, 0));  
  
 Button loginButton = **new** Button(**"Login"**);  
 loginButton.setDefaultButton(**true**);  
 loginButton.setPrefWidth(200);  
 gridPane.add(loginButton, 0, 4, 2, 1);  
 GridPane.*setHalignment*(loginButton, HPos.***CENTER***);  
 GridPane.*setMargin*(loginButton, **new** Insets(20, 0, 20, 0));  
  
 Button adminButton = **new** Button(**"Admin"**);  
 adminButton.setDefaultButton(**true**);  
 adminButton.setPrefWidth(200);  
 gridPane.add(adminButton, 0, 6, 2, 1);  
 GridPane.*setHalignment*(adminButton, HPos.***CENTER***);  
 GridPane.*setMargin*(adminButton, **new** Insets(20, 0, 20, 0));  
  
 Button VaccButton = **new** Button(**"Vaccinated Stats"**);  
 VaccButton.setDefaultButton(**true**);  
 VaccButton.setPrefWidth(200);  
 gridPane.add(VaccButton, 0, 8, 2, 1);  
 GridPane.*setHalignment*(VaccButton, HPos.***CENTER***);  
 GridPane.*setMargin*(VaccButton, **new** Insets(20, 0, 20, 0));  
  
 Button RegButton = **new** Button(**"Registered Stats"**);  
 RegButton.setDefaultButton(**true**);  
 RegButton.setPrefWidth(200);  
 gridPane.add(RegButton, 0, 10, 2, 1);  
 GridPane.*setHalignment*(RegButton, HPos.***CENTER***);  
 GridPane.*setMargin*(RegButton, **new** Insets(20, 0, 20, 0));  
  
 registerButton.setOnAction(actionEvent -> {  
 **try** {  
 **new** Registration().start(primaryStage);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 });  
 loginButton.setOnAction(actionEvent -> {  
 **try** {  
 **new** Login().start(primaryStage);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 });  
 adminButton.setOnAction(actionEvent -> {  
 **try** {  
 **new** AdminLogin().start(primaryStage);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 });  
 VaccButton.setOnAction(actionEvent -> {  
 **try** {  
 **new** VaccinatedStats().start(primaryStage);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 });  
 RegButton.setOnAction(actionEvent -> {  
 **try** {  
 **new** RegisteredStats().start(primaryStage);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 });  
  
 Scene scene = **new** Scene(gridPane, 900, 700);  
  
 primaryStage.setScene(scene);  
  
 primaryStage.show();  
 }  
}

AdminLogin.java

**package** sample;  
  
**import** javafx.application.Application;  
**import** javafx.geometry.HPos;  
**import** javafx.geometry.Insets;  
**import** javafx.geometry.Pos;  
**import** javafx.scene.Scene;  
**import** javafx.scene.control.\*;  
**import** javafx.scene.layout.GridPane;  
**import** javafx.scene.paint.Color;  
**import** javafx.scene.text.Font;  
**import** javafx.scene.text.FontWeight;  
**import** javafx.stage.Stage;  
  
**import** java.sql.Connection;  
**import** java.sql.DriverManager;  
**import** java.sql.PreparedStatement;  
**import** java.sql.ResultSet;  
  
**public class** AdminLogin **extends** Application {  
 *//UI Views* **private** String **password**;  
 **private** String **email**;  
 **private** Label **dbResultLbl**;  
  
 **public static void** main(String[] args) {  
  
 *launch*(args);  
 }  
  
 @Override  
 **public void** start(Stage primaryStage) **throws** Exception {  
 primaryStage.setTitle(**"Admin Login"**);  
 GridPane gridPane = **new** GridPane();  
 gridPane.setAlignment(Pos.***CENTER***);  
 gridPane.setPadding(**new** Insets(40, 40, 40, 40));  
 gridPane.setHgap(10);  
 gridPane.setVgap(10);  
  
 Label headerLabel = **new** Label(**"Update the statistics"**);  
 headerLabel.setFont(Font.*font*(**"Arial"**, FontWeight.***BOLD***, 24));  
 gridPane.add(headerLabel, 0, 0, 2, 1);  
 GridPane.*setHalignment*(headerLabel, HPos.***CENTER***);  
 GridPane.*setMargin*(headerLabel, **new** Insets(20, 0, 20, 0));  
  
 *//Labels* Label emailLabel = **new** Label(**"Email"**);  
 Label passLabel = **new** Label(**"Password"**);  
 Label infoLabel = **new** Label(**"Login to update.\nHelp Vaccinate."**);  
  
 *//Input fields* TextField emailField = **new** TextField();  
 PasswordField passwordField = **new** PasswordField();  
  
 *//GridPane adjustments* gridPane.addRow(3, emailLabel, emailField);  
 gridPane.addRow(4,passLabel,passwordField);  
 gridPane.addRow(1,infoLabel);  
  
  
 *//Submit Button* Button submitButton = **new** Button(**"Login"**);  
 submitButton.setDefaultButton(**true**);  
 submitButton.setPrefWidth(100);  
 gridPane.add(submitButton, 0, 6, 2, 1);  
 GridPane.*setHalignment*(submitButton, HPos.***CENTER***);  
 GridPane.*setMargin*(submitButton, **new** Insets(20, 0, 20, 0));  
  
 submitButton.setOnAction(actionEvent -> {  
 *//getData* **email** = emailField.getText();  
 **password** = passwordField.getText();  
 checkDataFromDatabase(primaryStage);  
 });  
 Scene scene = **new** Scene(gridPane, 900, 700);  
  
 primaryStage.setScene(scene);  
  
 primaryStage.show();  
 }  
  
 **private void** checkDataFromDatabase(Stage primaryStage) {  
 **try** {  
 *//DB Connection* String connectionUrl = **"jdbc:mysql://localhost:3306/DA3"**;  
 Connection dbConnection = DriverManager.*getConnection*(connectionUrl, **"root"**, **"root"**);  
 *// create a statement object to send to database* String insertQuery = **"select \* from admin where email=? and password=?"**;  
 PreparedStatement preparedStatement = dbConnection.prepareStatement(insertQuery);  
 *// prepare all data before insert it* preparedStatement.setString(1, **email**);  
 preparedStatement.setString(2, **password**);  
 *// return 0 if not insert it Or 1 if inserted* ResultSet sqlResult = preparedStatement.executeQuery();  
 **boolean** status = sqlResult.next();  
*// System.out.println(sqlResult.next() + " " + sqlResult.next());* preparedStatement.close();  
 **if** (status) {  
 **try** {  
 **new** AdminPanel().start(primaryStage);  
 System.***out***.println(**email** + **" "** +**"logged in as an Admin!"**);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 }  
 } **catch** (Exception e) {  
 **dbResultLbl**.setTextFill(Color.***RED***);  
 **dbResultLbl**.setText(**"Error: "** + e.getMessage());  
 }  
 }  
}

AdminPanel.java

**package** sample;  
  
**import** javafx.application.Application;  
**import** javafx.geometry.HPos;  
**import** javafx.geometry.Insets;  
**import** javafx.geometry.Pos;  
**import** javafx.scene.Scene;  
**import** javafx.scene.control.\*;  
**import** javafx.scene.layout.GridPane;  
**import** javafx.scene.paint.Color;  
**import** javafx.scene.text.Font;  
**import** javafx.scene.text.FontWeight;  
**import** javafx.stage.Stage;  
  
**import** java.sql.Connection;  
**import** java.sql.Date;  
**import** java.sql.DriverManager;  
**import** java.sql.PreparedStatement;  
  
**public class** AdminPanel **extends** Application {  
  
 **private** String **age**;  
 **private** String **fullName**;  
 **private** Date **date**;  
 **private** String **phnnum**;  
 **private** String **adNum**;  
 **private** Label **dbResultLbl**;  
  
 **public static void** main(String[] args) {  
  
 *launch*(args);  
 }  
  
 @Override  
 **public void** start(Stage primaryStage) **throws** Exception {  
 primaryStage.setTitle(**"Admin Panel"**);  
 GridPane gridPane = **new** GridPane();  
 gridPane.setAlignment(Pos.***CENTER***);  
 gridPane.setPadding(**new** Insets(40, 40, 40, 40));  
 gridPane.setHgap(10);  
 gridPane.setVgap(10);  
  
 Label headerLabel = **new** Label(**"Enter Details"**);  
 headerLabel.setFont(Font.*font*(**"Arial"**, FontWeight.***BOLD***, 24));  
 gridPane.add(headerLabel, 0, 0, 2, 1);  
 GridPane.*setHalignment*(headerLabel, HPos.***CENTER***);  
 GridPane.*setMargin*(headerLabel, **new** Insets(20, 0, 20, 0));  
  
 *//Labels* Label AadhaarLabel = **new** Label(**"Aadhaar Card Number"**);  
 Label phNumLabel = **new** Label(**"Phone Number"**);  
 Label ageLabel = **new** Label(**"Age Category"**);  
 Label dateLabel = **new** Label(**"Date of Vaccination"**);  
 **dbResultLbl** = **new** Label();  
 *//Input fields* TextField nameField = **new** TextField();  
 TextField AadhaarField = **new** TextField();  
 TextField phNumField = **new** TextField();  
 *//DatePicker* DatePicker dateField = **new** DatePicker();  
 *//RadioButtons* ToggleGroup tg = **new** ToggleGroup();  
 RadioButton first = **new** RadioButton(**"60 and above"**);  
 RadioButton second = **new** RadioButton(**"40 to 60"**);  
 RadioButton third = **new** RadioButton(**"18 to 40"**);  
 first.setToggleGroup(tg);  
 second.setToggleGroup(tg);  
 third.setToggleGroup(tg);  
  
 *//GridPane adjustments* gridPane.addRow(1, **new** Label(**"Full Name on Aadhaar Card"**), nameField);  
 gridPane.addRow(2, AadhaarLabel, AadhaarField);  
 gridPane.addRow(3, ageLabel);  
 gridPane.addRow(3, first);  
 gridPane.add(second, 1, 4, 1, 1);  
 gridPane.add(third, 1, 5, 1, 1);  
 gridPane.addRow(6, phNumLabel, phNumField);  
  
 Button submitButton = **new** Button(**"Vaccinated!"**);  
 submitButton.setDefaultButton(**true**);  
 submitButton.setPrefWidth(100);  
 gridPane.add(submitButton, 0, 9, 2, 1);  
 GridPane.*setHalignment*(submitButton, HPos.***CENTER***);  
 GridPane.*setMargin*(submitButton, **new** Insets(20, 0, 20, 0));  
  
 submitButton.setOnAction(actionEvent -> {  
 **age** = ((RadioButton) tg.getSelectedToggle()).getText();  
 **date** = **new** Date(System.*currentTimeMillis*());  
 **phnnum** = phNumField.getText();  
 **fullName** = nameField.getText();  
 **adNum** = AadhaarField.getText();  
 System.***out***.println(**"Date of Vaccination : "** + **date**);  
 addDataToDatabase();  
 **try** {  
 **new** AdminPanel().start(primaryStage);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 System.***out***.println(**"You can go to any nearby centre and get vaccinated.\nThank you for your support in the vaccination drive."**);  
 });  
 Scene scene = **new** Scene(gridPane, 900, 700);  
  
 primaryStage.setScene(scene);  
  
 primaryStage.show();  
 }  
  
 **private void** addDataToDatabase() {  
 **try** {  
 *//DB Connection* String connectionUrl = **"jdbc:mysql://localhost:3306/DA3"**;  
 Connection dbConnection = DriverManager.*getConnection*(connectionUrl, **"root"**, **"root"**);  
 *// create a statement object to send to database* String insertQuery = **"insert into Vaccinated (fullName, adNum, phnnum, age, date) values (?,?,?,?,?)"**;  
 PreparedStatement preparedStatement = dbConnection.prepareStatement(insertQuery);  
 *// prepare all data before insert it* preparedStatement.setString(1, **fullName**);  
 preparedStatement.setString(2, **adNum**);  
 preparedStatement.setString(3, **age**);  
 preparedStatement.setString(4, **phnnum**);  
 preparedStatement.setDate(5, **date**);  
  
 *// return 0 if not insert it Or 1 if inserted* **int** sqlResult = preparedStatement.executeUpdate();  
 preparedStatement.close();  
 **if** (sqlResult == 1) {  
 *//Emptying all fields after insertion* **dbResultLbl**.setTextFill(Color.***GREEN***);  
 **dbResultLbl**.setText(**"Record successfully inserted.\n"**);  
 System.***out***.println(**"Database Updated!"**);  
 }  
 } **catch** (Exception e) {  
 **dbResultLbl**.setTextFill(Color.***RED***);  
 **dbResultLbl**.setText(**"Error: "** + e.getMessage());  
 }  
 }  
  
}

BookSlot.java

**package** sample;  
  
**import** javafx.application.Application;  
**import** javafx.geometry.HPos;  
**import** javafx.geometry.Insets;  
**import** javafx.geometry.Pos;  
**import** javafx.scene.Scene;  
**import** javafx.scene.control.\*;  
**import** javafx.scene.layout.GridPane;  
**import** javafx.scene.paint.Color;  
**import** javafx.scene.text.Font;  
**import** javafx.scene.text.FontWeight;  
**import** javafx.stage.Stage;  
  
**import** java.sql.Connection;  
**import** java.sql.DriverManager;  
**import** java.sql.PreparedStatement;  
**import** java.time.LocalDate;  
  
**public class** BookSlot **extends** Application {  
 **private** Label **dbResultLbl**;  
 **private** String **phnnum**;  
 **private** String **cfd**;  
 **private** String **age**;  
  
 **public static void** main(String[] args) {  
 *launch*(args);  
 }  
  
 @Override  
 **public void** start(Stage primaryStage) **throws** Exception {  
  
 primaryStage.setTitle(**"Book Slot"**);  
 GridPane gridPane = **new** GridPane();  
 gridPane.setAlignment(Pos.***CENTER***);  
 gridPane.setPadding(**new** Insets(40, 40, 40, 40));  
 gridPane.setHgap(10);  
 gridPane.setVgap(10);  
  
 Label headerLabel = **new** Label(**"Book Slot for Vaccination"**);  
 headerLabel.setFont(Font.*font*(**"Arial"**, FontWeight.***BOLD***, 24));  
 gridPane.add(headerLabel, 0, 0, 2, 1);  
 GridPane.*setHalignment*(headerLabel, HPos.***CENTER***);  
 GridPane.*setMargin*(headerLabel, **new** Insets(20, 0, 20, 0));  
  
 *//Labels* Label phNumLabel = **new** Label(**"Phone Number"**);  
 Label ageLabel = **new** Label(**"Age Category"**);  
 Label cfdLabel = **new** Label(**"Check for Dates"**);  
 **dbResultLbl** = **new** Label();  
  
 *//Input fields* TextField phNumField = **new** TextField();  
 *//RadioButtons* ToggleGroup tg = **new** ToggleGroup();  
 RadioButton first = **new** RadioButton(**"60 and above"**);  
 RadioButton second = **new** RadioButton(**"40 to 60"**);  
 RadioButton third = **new** RadioButton(**"18 to 40"**);  
 first.setToggleGroup(tg);  
 second.setToggleGroup(tg);  
 third.setToggleGroup(tg);  
 *//Date Picker* DatePicker cfdField = **new** DatePicker();  
 *//GridPane adjustments* gridPane.addRow(2, ageLabel);  
 gridPane.addRow(2, first);  
 gridPane.add(second, 1, 3, 1, 1);  
 gridPane.add(third,1,4,1,1);  
 gridPane.addRow(5, phNumLabel,phNumField);  
 gridPane.addRow(6, cfdLabel, cfdField);  
  
 Button submitButton = **new** Button(**"Register"**);  
 submitButton.setDefaultButton(**true**);  
 submitButton.setPrefWidth(100);  
 gridPane.add(submitButton, 0, 8, 2, 1);  
 GridPane.*setHalignment*(submitButton, HPos.***CENTER***);  
 GridPane.*setMargin*(submitButton, **new** Insets(20, 0, 20, 0));  
  
 submitButton.setOnAction(actionEvent -> {  
 **age** = ((RadioButton)tg.getSelectedToggle()).getText();  
 **cfd** = cfdField.getValue().toString();  
 **phnnum** = phNumField.getText();  
 addDataToDatabase();  
 **try** {  
 **new** Main().start(primaryStage);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 System.***out***.println(**"You can go to any nearby centre and get vaccinated.\nThank you for your support in the vaccination drive."**);  
 });  
 Scene scene = **new** Scene(gridPane, 900, 700);  
  
 primaryStage.setScene(scene);  
  
 primaryStage.show();  
 }  
  
 **private void** addDataToDatabase() {  
 **try** {  
 *//DB Connection* String connectionUrl = **"jdbc:mysql://localhost:3306/DA3"**;  
 Connection dbConnection = DriverManager.*getConnection*(connectionUrl, **"root"**, **"root"**);  
 *// create a statement object to send to database* String insertQuery = **"insert into Slots (age, phnnum, cfd) values (?,?,?)"**;  
 PreparedStatement preparedStatement = dbConnection.prepareStatement(insertQuery);  
 *// prepare all data before insert it* preparedStatement.setString(1, **age**);  
 preparedStatement.setString(2, **phnnum**);  
 preparedStatement.setString(3, **cfd**);  
 *// return 0 if not insert it Or 1 if inserted* **int** sqlResult = preparedStatement.executeUpdate();  
 preparedStatement.close();  
 **if** (sqlResult == 1) {  
 *//Emptying all fields after insertion* **dbResultLbl**.setTextFill(Color.***GREEN***);  
 **dbResultLbl**.setText(**"Record successfully inserted.\n"**);  
 System.***out***.println(**"Database Updated!"**);  
 }  
 } **catch** (Exception e) {  
 **dbResultLbl**.setTextFill(Color.***RED***);  
 **dbResultLbl**.setText(**"Error: "** + e.getMessage());  
 }  
 }  
  
}

Login.java

**package** sample;  
  
**import** javafx.application.Application;  
**import** javafx.geometry.HPos;  
**import** javafx.geometry.Insets;  
**import** javafx.geometry.Pos;  
**import** javafx.scene.Scene;  
**import** javafx.scene.control.Button;  
**import** javafx.scene.control.Label;  
**import** javafx.scene.control.PasswordField;  
**import** javafx.scene.control.TextField;  
**import** javafx.scene.layout.GridPane;  
**import** javafx.scene.paint.Color;  
**import** javafx.scene.text.Font;  
**import** javafx.scene.text.FontWeight;  
**import** javafx.stage.Stage;  
  
**import** java.sql.Connection;  
**import** java.sql.DriverManager;  
**import** java.sql.PreparedStatement;  
**import** java.sql.ResultSet;  
  
**public class** Login **extends** Application {  
  
 *//UI Views* **private** String **password**;  
 **private** String **email**;  
 **private** Label **dbResultLbl**;  
  
 **public static void** main(String[] args) {  
 *launch*(args);  
 }  
  
 @Override  
 **public void** start(Stage primaryStage) **throws** Exception {  
 primaryStage.setTitle(**"Login Form"**);  
 GridPane gridPane = **new** GridPane();  
 gridPane.setAlignment(Pos.***CENTER***);  
 gridPane.setPadding(**new** Insets(40, 40, 40, 40));  
 gridPane.setHgap(10);  
 gridPane.setVgap(10);  
  
 Label headerLabel = **new** Label(**"Login Form"**);  
 headerLabel.setFont(Font.*font*(**"Arial"**, FontWeight.***BOLD***, 24));  
 gridPane.add(headerLabel, 0, 0, 2, 1);  
 GridPane.*setHalignment*(headerLabel, HPos.***CENTER***);  
 GridPane.*setMargin*(headerLabel, **new** Insets(20, 0, 20, 0));  
  
 *//Labels* Label emailLabel = **new** Label(**"Email"**);  
 Label passLabel = **new** Label(**"Password"**);  
 Label infoLabel = **new** Label(**"Already signed in?\nLogin to book your slot. Help Vaccinate"**);  
 **dbResultLbl** = **new** Label();  
  
 *//Input fields* TextField emailField = **new** TextField();  
 PasswordField passwordField = **new** PasswordField();  
  
 *//GridPane adjustments* gridPane.addRow(3, emailLabel, emailField);  
 gridPane.addRow(4, passLabel, passwordField);  
 gridPane.addRow(1, infoLabel);  
  
 *//Submit Button* Button submitButton = **new** Button(**"Login"**);  
 submitButton.setDefaultButton(**true**);  
 submitButton.setPrefWidth(100);  
 gridPane.add(submitButton, 0, 6, 2, 1);  
 GridPane.*setHalignment*(submitButton, HPos.***CENTER***);  
 GridPane.*setMargin*(submitButton, **new** Insets(20, 0, 20, 0));  
  
 submitButton.setOnAction(actionEvent -> {  
 *//getData* **email** = emailField.getText();  
 **password** = passwordField.getText();  
  
 System.***out***.println(**email** + **" "** + **password**);  
 checkDataFromDatabase(primaryStage);  
  
 });  
 Scene scene = **new** Scene(gridPane, 900, 700);  
  
 primaryStage.setScene(scene);  
  
 primaryStage.show();  
 }  
  
 **private void** checkDataFromDatabase(Stage primaryStage) {  
 **try** {  
 *//DB Connection* String connectionUrl = **"jdbc:mysql://localhost:3306/DA3"**;  
 Connection dbConnection = DriverManager.*getConnection*(connectionUrl, **"root"**, **"root"**);  
 *// create a statement object to send to database* String insertQuery = **"select \* from Register where email=? and password=?"**;  
 PreparedStatement preparedStatement = dbConnection.prepareStatement(insertQuery);  
 *// prepare all data before insert it* preparedStatement.setString(1, **email**);  
 preparedStatement.setString(2, **password**);  
 *// return 0 if not insert it Or 1 if inserted* ResultSet sqlResult = preparedStatement.executeQuery();  
 **boolean** status = sqlResult.next();  
*// System.out.println(sqlResult.next() + " " + sqlResult.next());* preparedStatement.close();  
 **if** (status) {  
 **try** {  
 **new** BookSlot().start(primaryStage);  
 } **catch** (Exception e) {  
 e.printStackTrace();  
 }  
 System.***out***.println(**"Database Updated!"**);  
 }  
 } **catch** (Exception e) {  
 **dbResultLbl**.setTextFill(Color.***RED***);  
 **dbResultLbl**.setText(**"Error: "** + e.getMessage());  
 }  
 }  
}

RegisteredStats.java

**package** sample;  
  
**import** javafx.application.Application;  
**import** javafx.geometry.HPos;  
**import** javafx.geometry.Insets;  
**import** javafx.geometry.Pos;  
**import** javafx.scene.Scene;  
**import** javafx.scene.control.DatePicker;  
**import** javafx.scene.control.Label;  
**import** javafx.scene.layout.GridPane;  
**import** javafx.scene.paint.Color;  
**import** javafx.scene.text.Font;  
**import** javafx.scene.text.FontWeight;  
**import** javafx.scene.text.Text;  
**import** javafx.stage.Stage;  
  
**import** java.sql.\*;  
  
**public class** RegisteredStats **extends** Application {  
  
 Label **dbResultLbl**;  
 Date **date**;  
 GridPane **table**;  
  
 **public static void** main(String[] args) {  
  
 *launch*(args);  
 }  
  
 @Override  
 **public void** start(Stage primaryStage) **throws** Exception {  
 primaryStage.setTitle(**"Registered Statistics"**);  
 GridPane gridPane = **new** GridPane();  
 gridPane.setAlignment(Pos.***CENTER***);  
 gridPane.setPadding(**new** Insets(40, 40, 40, 40));  
 gridPane.setHgap(10);  
 gridPane.setVgap(10);  
  
 Label headerLabel = **new** Label(**"Statistics: "**);  
 headerLabel.setFont(Font.*font*(**"Arial"**, FontWeight.***BOLD***, 24));  
 gridPane.add(headerLabel, 0, 0, 2, 1);  
 GridPane.*setHalignment*(headerLabel, HPos.***LEFT***);  
 GridPane.*setMargin*(headerLabel, **new** Insets(20, 0, 20, 0));  
  
 DatePicker datePicker = **new** DatePicker();  
 **dbResultLbl** = **new** Label();  
  
 datePicker.setOnAction(actionEvent -> {  
 **date** = Date.*valueOf*(datePicker.getValue());  
 VaccinatedDatabase();  
 });  
  
 **table** = **new** GridPane();  
 **table**.addRow(0, **new** Label(**"Full Name "**),  
 **new** Label(**"Gender "**),  
 **new** Label(**"Email "**),  
 **new** Label(**"Aadhaar Num "**),  
 **new** Label(**"DOB "**),  
 **new** Label(**"Registration Date "**));  
  
 gridPane.addRow(1, datePicker);  
 gridPane.addRow(2, **table**);  
  
 Scene scene = **new** Scene(gridPane, 900, 700);  
  
 primaryStage.setScene(scene);  
  
 primaryStage.show();  
 }  
  
 **private void** VaccinatedDatabase() {  
 **try** {  
 *//DB Connection* String connectionUrl = **"jdbc:mysql://localhost:3306/DA3"**;  
 Connection dbConnection = DriverManager.*getConnection*(connectionUrl, **"root"**, **"root"**);  
 *// create a statement object to send to database* String selectQuery = **"select \* from Register where date=?"**;  
 PreparedStatement preparedStatement = dbConnection.prepareStatement(selectQuery);  
 *// prepare all data before insertion* preparedStatement.setDate(1, **date**);  
 *// return 0 if not insert it Or 1 if inserted* ResultSet sqlResult = preparedStatement.executeQuery();  
 **boolean** status = sqlResult.next();  
  
 **int** count = 1;  
 *//getData* **while** (sqlResult.next()) {  
 Text a = **new** Text(sqlResult.getString(**"fullName"**));  
 Text b = **new** Text(sqlResult.getString(**"gender"**));  
 Text c = **new** Text(sqlResult.getString(**"email"**));  
 Text d = **new** Text(sqlResult.getString(**"adNum"**));  
 Text e = **new** Text(sqlResult.getString(**"DOB"**));  
 Text f = **new** Text(sqlResult.getString(**"date"**));  
  
 **table**.addRow(count++, a, b, c, d, e, f);  
 }  
 preparedStatement.close();  
 **if** (status) {  
 **dbResultLbl**.setTextFill(Color.***GREEN***);  
 **dbResultLbl**.setText(**"Record successfully inserted.\n"**);  
 System.***out***.println(**"Find the information!"**);  
 }  
 } **catch** (Exception e) {  
 **dbResultLbl**.setTextFill(Color.***RED***);  
 **dbResultLbl**.setText(**"Error: "** + e.getMessage());  
 }  
 }  
  
}

Registration.java

**package** sample;  
  
**import** javafx.application.Application;  
**import** javafx.geometry.HPos;  
**import** javafx.geometry.Insets;  
**import** javafx.geometry.Pos;  
**import** javafx.scene.Scene;  
**import** javafx.scene.control.\*;  
**import** javafx.scene.layout.GridPane;  
**import** javafx.scene.paint.Color;  
**import** javafx.scene.text.Font;  
**import** javafx.scene.text.FontWeight;  
**import** javafx.stage.Stage;  
  
**import** javax.swing.\*;  
**import** java.sql.Connection;  
**import** java.sql.Date;  
**import** java.sql.DriverManager;  
**import** java.sql.PreparedStatement;  
  
**public class** Registration **extends** Application {  
  
 *//UI Views* **private** TextField **nameField**, **emailField**, **adNumField**;  
 **private** PasswordField **passwordField**;  
 **private** DatePicker **DOBField**;  
 **private** Date **date**;  
 **private** String **DOB**;  
 **private** String **fullName**;  
 **private** String **gender**;  
 **private** String **password**;  
 **private** String **email**;  
 **private** String **adNum**;  
 **private** Label **dbResultLbl**;  
  
 **public static void** main(String[] args) {  
  
 *launch*(args);  
 }  
  
 @Override  
 **public void** start(Stage primaryStage) **throws** Exception {  
 primaryStage.setTitle(**"Registration Form"**);  
 GridPane gridPane = **new** GridPane();  
 gridPane.setAlignment(Pos.***CENTER***);  
 gridPane.setPadding(**new** Insets(40, 40, 40, 40));  
 gridPane.setHgap(10);  
 gridPane.setVgap(10);  
  
 Label headerLabel = **new** Label(**"Registration Form"**);  
 headerLabel.setFont(Font.*font*(**"Arial"**, FontWeight.***BOLD***, 24));  
 gridPane.add(headerLabel, 0, 0, 2, 1);  
 GridPane.*setHalignment*(headerLabel, HPos.***CENTER***);  
 GridPane.*setMargin*(headerLabel, **new** Insets(20, 0, 20, 0));  
  
 *//Labels* Label nameLabel = **new** Label(**"Full Name"**);  
 Label passLabel = **new** Label(**"Password"**);  
 Label genLabel = **new** Label(**"Gender"**);  
 Label adNumLabel = **new** Label(**"Aadhaar Card Number"**);  
 Label emailLabel = **new** Label(**"Email"**);  
 Label DOBLabel = **new** Label(**"DOB"**);  
 **dbResultLbl** = **new** Label();  
  
 *//Input fields* **nameField** = **new** TextField();  
 **emailField** = **new** TextField();  
 **adNumField** = **new** TextField();  
 **passwordField** = **new** PasswordField();  
 *//RadioButtons* ToggleGroup tg = **new** ToggleGroup();  
 RadioButton male = **new** RadioButton(**"Male"**);  
 RadioButton female = **new** RadioButton(**"Female"**);  
 RadioButton others = **new** RadioButton(**"Others"**);  
 female.setToggleGroup(tg);  
 male.setToggleGroup(tg);  
 others.setToggleGroup(tg);  
 *//Date Picker* **DOBField** = **new** DatePicker();  
 *//GridPane adjustments* gridPane.addRow(1, nameLabel, **nameField**);  
 gridPane.addRow(2, genLabel);  
 gridPane.addRow(2, male);  
 gridPane.add(female, 1, 3, 1, 1);  
 gridPane.add(others, 1, 4, 1, 1);  
 gridPane.addRow(5, emailLabel, **emailField**);  
 gridPane.addRow(6, passLabel, **passwordField**);  
 gridPane.addRow(7, adNumLabel, **adNumField**);  
 gridPane.addRow(8, DOBLabel, **DOBField**);  
 gridPane.addRow(11, **dbResultLbl**);  
  
 Button submitButton = **new** Button(**"Register"**);  
 submitButton.setDefaultButton(**true**);  
 submitButton.setPrefWidth(100);  
 gridPane.add(submitButton, 0, 10, 2, 1);  
 GridPane.*setHalignment*(submitButton, HPos.***CENTER***);  
 GridPane.*setMargin*(submitButton, **new** Insets(20, 0, 20, 0));  
  
 submitButton.setOnAction(actionEvent -> {  
 **fullName** = **nameField**.getText();  
 **gender** = ((RadioButton) tg.getSelectedToggle()).getText();  
 **email** = **emailField**.getText();  
 **date** = **new** Date(System.*currentTimeMillis*());  
 System.***out***.println(**"Date of registration : "** + **date**);  
 **adNum** = **adNumField**.getText();  
 **password** = **passwordField**.getText();  
 **DOB** = **DOBField**.getValue().toString();  
 addDataToDatabase();  
 });  
 Scene scene = **new** Scene(gridPane, 900, 700);  
  
 primaryStage.setScene(scene);  
  
 primaryStage.show();  
 }  
  
 **private void** addDataToDatabase() {  
 **try** {  
 *//DB Connection* String connectionUrl = **"jdbc:mysql://localhost:3306/DA3"**;  
 Connection dbConnection = DriverManager.*getConnection*(connectionUrl, **"root"**, **"root"**);  
 *// create a statement object to send to database* String insertQuery = **"insert into Register (fullName,gender,email,adNum,password,DOB,date) values (?,?,?,?,?,?,?)"**;  
 PreparedStatement preparedStatement = dbConnection.prepareStatement(insertQuery);  
 *// prepare all data before insert it* preparedStatement.setString(1, **fullName**);  
 preparedStatement.setString(2, **gender**);  
 preparedStatement.setString(3, **email**);  
 preparedStatement.setString(4, **adNum**);  
 preparedStatement.setString(5, **password**);  
 preparedStatement.setString(6, **DOB**);  
 preparedStatement.setDate(7, **date**);  
 *// return 0 if not insert it Or 1 if inserted* **int** sqlResult = preparedStatement.executeUpdate();  
 preparedStatement.close();  
 **if** (sqlResult == 1) {  
 *//Emptying all fields after insertion* **nameField**.clear();  
 **emailField**.clear();  
 **adNumField**.clear();  
 **passwordField**.clear();  
 **DOBField**.setValue(**null**);  
 *//gender.equals("");* **dbResultLbl**.setTextFill(Color.***GREEN***);  
 **dbResultLbl**.setText(**"Record successfully inserted.\n"**);  
 System.***out***.println(**"Database Updated!"**);  
 }  
 } **catch** (Exception e) {  
 **dbResultLbl**.setTextFill(Color.***RED***);  
 **dbResultLbl**.setText(**"Error: "** + e.getMessage());  
 }  
 }  
}

VaccinatedStats.java

**package** sample;  
  
**import** javafx.application.Application;  
**import** javafx.geometry.HPos;  
**import** javafx.geometry.Insets;  
**import** javafx.geometry.Pos;  
**import** javafx.scene.Scene;  
**import** javafx.scene.control.DatePicker;  
**import** javafx.scene.control.Label;  
**import** javafx.scene.layout.GridPane;  
**import** javafx.scene.paint.Color;  
**import** javafx.scene.text.Font;  
**import** javafx.scene.text.FontWeight;  
**import** javafx.scene.text.Text;  
**import** javafx.stage.Stage;  
  
**import** java.sql.\*;  
  
**public class** VaccinatedStats **extends** Application {  
  
 Label **dbResultLbl**;  
 Date **date**;  
 GridPane **table**;  
  
 **public static void** main(String[] args) {  
  
 *launch*(args);  
 }  
  
 @Override  
 **public void** start(Stage primaryStage) **throws** Exception {  
 primaryStage.setTitle(**"Vaccinated Statistics"**);  
 GridPane gridPane = **new** GridPane();  
 gridPane.setAlignment(Pos.***CENTER***);  
 gridPane.setPadding(**new** Insets(40, 40, 40, 40));  
 gridPane.setHgap(10);  
 gridPane.setVgap(10);  
  
 Label headerLabel = **new** Label(**"Statistics: "**);  
 headerLabel.setFont(Font.*font*(**"Arial"**, FontWeight.***BOLD***, 24));  
 gridPane.add(headerLabel, 0, 0, 2, 1);  
 GridPane.*setHalignment*(headerLabel, HPos.***LEFT***);  
 GridPane.*setMargin*(headerLabel, **new** Insets(20, 0, 20, 0));  
  
 DatePicker datePicker = **new** DatePicker();  
 **dbResultLbl** = **new** Label();  
  
 datePicker.setOnAction(actionEvent -> {  
 **date** = Date.*valueOf*(datePicker.getValue());  
 VaccinatedDatabase();  
 });  
  
 **table** = **new** GridPane();  
 **table**.addRow(0, **new** Label(**"Full Name "**),  
 **new** Label(**"Aadhaar Num "**),  
 **new** Label(**"Phone Num "**),  
 **new** Label(**"Age Category "**),  
 **new** Label(**"Date of Vacc. "**));  
  
 gridPane.addRow(1, datePicker);  
 gridPane.addRow(2, **table**);  
  
 Scene scene = **new** Scene(gridPane, 900, 700);  
  
 primaryStage.setScene(scene);  
  
 primaryStage.show();  
 }  
  
 **private void** VaccinatedDatabase() {  
 **try** {  
 *//DB Connection* String connectionUrl = **"jdbc:mysql://localhost:3306/DA3"**;  
 Connection dbConnection = DriverManager.*getConnection*(connectionUrl, **"root"**, **"root"**);  
 *// create a statement object to send to database* String selectQuery = **"select \* from Vaccinated where date=?"**;  
 PreparedStatement preparedStatement = dbConnection.prepareStatement(selectQuery);  
 *// prepare all data before insertion* preparedStatement.setDate(1, **date**);  
 *// return 0 if not insert it Or 1 if inserted* ResultSet sqlResult = preparedStatement.executeQuery();  
 **boolean** status = sqlResult.next();  
  
 **int** count = 1;  
 *//getData* **while** (sqlResult.next()) {  
 Text a = **new** Text(sqlResult.getString(**"fullName"**));  
 Text b = **new** Text(sqlResult.getString(**"adNum"**));  
 Text c = **new** Text(sqlResult.getString(**"phnnum"**));  
 Text d = **new** Text(sqlResult.getString(**"age"**));  
 Text e = **new** Text(sqlResult.getString(**"date"**));  
  
 **table**.addRow(count++, a, b, c, d, e);  
 }  
 preparedStatement.close();  
 **if** (status) {  
 **dbResultLbl**.setTextFill(Color.***GREEN***);  
 **dbResultLbl**.setText(**"Record successfully inserted.\n"**);  
 System.***out***.println(**"Find the information!"**);  
 }  
 } **catch** (Exception e) {  
 **dbResultLbl**.setTextFill(Color.***RED***);  
 **dbResultLbl**.setText(**"Error: "** + e.getMessage());  
 }  
 }  
  
}