DIGITAL ASSIGNMENT 1

CSE1007 / JAVA PROGRAMMING / GUI APPLICATION

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DIGITAL ASSIGNMENT 1

REGNO: 20BCE2893

Digital Assignment 1(DA1 Due Date: 17.11.2021)

Question: Design a GUI application (Maximum marks: 10)

Rubrics for the assessment of the digital assignment

Components	Max. Marks	Fair 0 – 25%	Better 26 – 50%	Good 51 – 75%	Excellent 76 – 100%
[1] JavaFx UI controls [2]JJavaFX Menus and events [3]Design an application using above components	10	JavaFx UI controls described satisfactorily	UI controls and menus described satisfactorily	UI controls ,menus and events described satisfactorily	Satisfied all the components with the relevant design on time[Design should be on your own]

SIMPLE FAMILY FORM:

CONSIST OF : UI CONTROLS, MENUS AND EVENTS

EVENT	WORK	BUTTON
Action Event (Event)	Clear the form	(Menu item) clear
Action Event (Action Event)	Takes all values of form and update to mysql database	Submit button
OnMouseClick	Green background color changes in submit button	Submit button

Code:

```java
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.scene.Scene;
import javafx.scene.SubScene;
import javafx.scene.input.MouseEvent;
import javafx.scene.control.*;
import javafx.scene.paint.Color;
import javafx.scene.shape.Circle;
import javafx.scene.text.Font;
import javafx.scene.text.Text;
import javafx.stage.Stage;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.Statement;
import javafx.geometry.Pos;
import javafx.scene.layout.BorderPane;
import javafx.scene.layout.GridPane;
import javafx.scene.layout.VBox;
import java.time.format.DateTimeFormatter;

public class App extends Application {

    @Override
    public void start(Stage primaryStage) throws Exception {
        primaryStage.setTitle("simple form");
        BorderPane bordr = new BorderPane();

        MenuBar menubar = new MenuBar();
        Menu FileMenu = new Menu("File");
        MenuItem filemenu1 = new MenuItem("Form");
        MenuItem filemenu2 = new MenuItem("Clear");
        bordr.setTop(menubar);
        FileMenu.getItems().addAll(filemenu1, filemenu2);
        menubar.getMenus().addAll(FileMenu);

        Text txt = new Text("Name");
        txt.setFont(Font.font("Verdana", 20));
        txt.setStroke(Color.WHITESMOKE);
        TextField name = new TextField();

        Text txt1 = new Text("Relationship");
        txt1.setFont(Font.font("Verdana", 20));
```

```java
        txt1.setStroke(Color.WHITESMOKE);
        ChoiceBox relation = new ChoiceBox();
        relation.getItems().addAll("Wife", "Father", "Mother", "Sister",
"Brother", "Grandpa", "Grandma", "Son",
                "Daughter");

        Text txt2 = new Text("DOB");
        txt2.setFont(Font.font("Verdana", 20));
        txt2.setStroke(Color.WHITESMOKE);
        DatePicker dob = new DatePicker();

        Text txt3 = new Text("Favourite color");
        txt3.setFont(Font.font("Verdana", 20));
        txt3.setStroke(Color.WHITESMOKE);
        ChoiceBox choiceBox1 = new ChoiceBox();
        choiceBox1.getItems().addAll("red", "Black", "Blue", "Yellow", "Green",
"Gray", "Silver");

        Text text3 = new Text("Favourite_Place");
        text3.setFont(Font.font("Verdana", 20));
        text3.setStroke(Color.WHITESMOKE);
        ChoiceBox box = new ChoiceBox();
        box.getItems().addAll("Kashmir", "Haryana", "Mumbai", "Jaipur", "Delhi",
"Vellore");

        Text text4 = new Text("Phone Number");
        text4.setFont(Font.font("Verdana", 20));
        text4.setStroke(Color.WHITESMOKE);
        TextField phone = new TextField();

        Text text5 = new Text("Favourite food");
        text5.setFont(Font.font("Verdana", 20));
        text5.setStroke(Color.WHITESMOKE);
        TextField textField1 = new TextField();

        Text text6 = new Text("Your Dream");
        text6.setFont(Font.font("Verdana", 20));
        text6.setStroke(Color.WHITESMOKE);
        TextField dream = new TextField();

        Button button1 = new Button("Submit");
        button1.setShape(new Circle(50));
        button1.setOnMouseClicked(new EventHandler<MouseEvent>() {
            @Override
            public void handle(MouseEvent mouseEvent) {
```

```java
                        button1.setStyle("-fx-background-color: green; -fx-text-fill:
white;");

                }
        });
        ((MenuItem) filemenu2).setOnAction(new EventHandler<ActionEvent>() {
                @Override
                public void handle(ActionEvent Event) {
                        name.clear();
                        phone.clear();
                        textField1.clear();
                        dream.clear();

                }
        });

        button1.setOnAction(new EventHandler<ActionEvent>() {
                @Override
                public void handle(ActionEvent actionEvent) {
                        String n1 = name.getText();
                        String n2 = (String) relation.getValue();
                        String n3 =
dob.getValue().format(DateTimeFormatter.ofPattern("yyyy-MM-dd"));
                        String n4 = (String) choiceBox1.getValue();
                        String n5 = (String) box.getValue();
                        String n6 = phone.getText();
                        String n7 = (String) textField1.getText();
                        String n8 = (String) dream.getText();
                        System.out.println(n1);
                        System.out.println(n2);
                        System.out.println(n3);
                        System.out.println(n4);
                        System.out.println(n5);
                        System.out.println(n6);
                        System.out.println(n7);

                        System.out.println(n8);
                        try {
                                Class.forName("com.mysql.cj.jdbc.Driver");
                                String url = "jdbc:mysql://localhost:3306/javafx";
                                String username = "root";
                                String password = "";
                                Connection con = DriverManager.getConnection(url, username,
password);
```

```java
                    String query = "insert into anish20bce2893 values('" + n1 +
"','" + n2 + "','" + n3 + "','" + n4
                            + "','" + n5 + "','" + n6 + "','" + n7 + "','" + n8 +
"');";
                    Statement stmt = con.createStatement();
                    stmt.executeUpdate(query);
                    System.out.println("success");
                    con.close();
                } catch (Exception e) {
                    System.out.println("Exception !! be careful");
                }
            }
        });
        GridPane pane = new GridPane();
        pane.setVgap(10);
        pane.setHgap(10);
        pane.setAlignment(Pos.CENTER);
        pane.addRow(0, txt, name);
        pane.addRow(1, txt1, relation);
        pane.addRow(2, txt2, dob);
        pane.addRow(3, txt3, choiceBox1);
        pane.addRow(4, text3, box);
        pane.addRow(5, text4, phone);
        pane.addRow(6, text5, textField1);
        pane.addRow(7, text6, dream);
        pane.addRow(8, button1);
        pane.setStyle("-fx-background-color: #015a57");
        SubScene subone = new SubScene(bordr, 400, 20);
        SubScene subtwo = new SubScene(pane, 600, 600);
        VBox root = new VBox(10);

        root.getChildren().addAll(subone, subtwo);
        Scene scene = new Scene(root, 600, 600);
        primaryStage.setScene(scene);
        primaryStage.show();
    }

    public static void main(String[] args) {
        launch(args);
    }
}
```
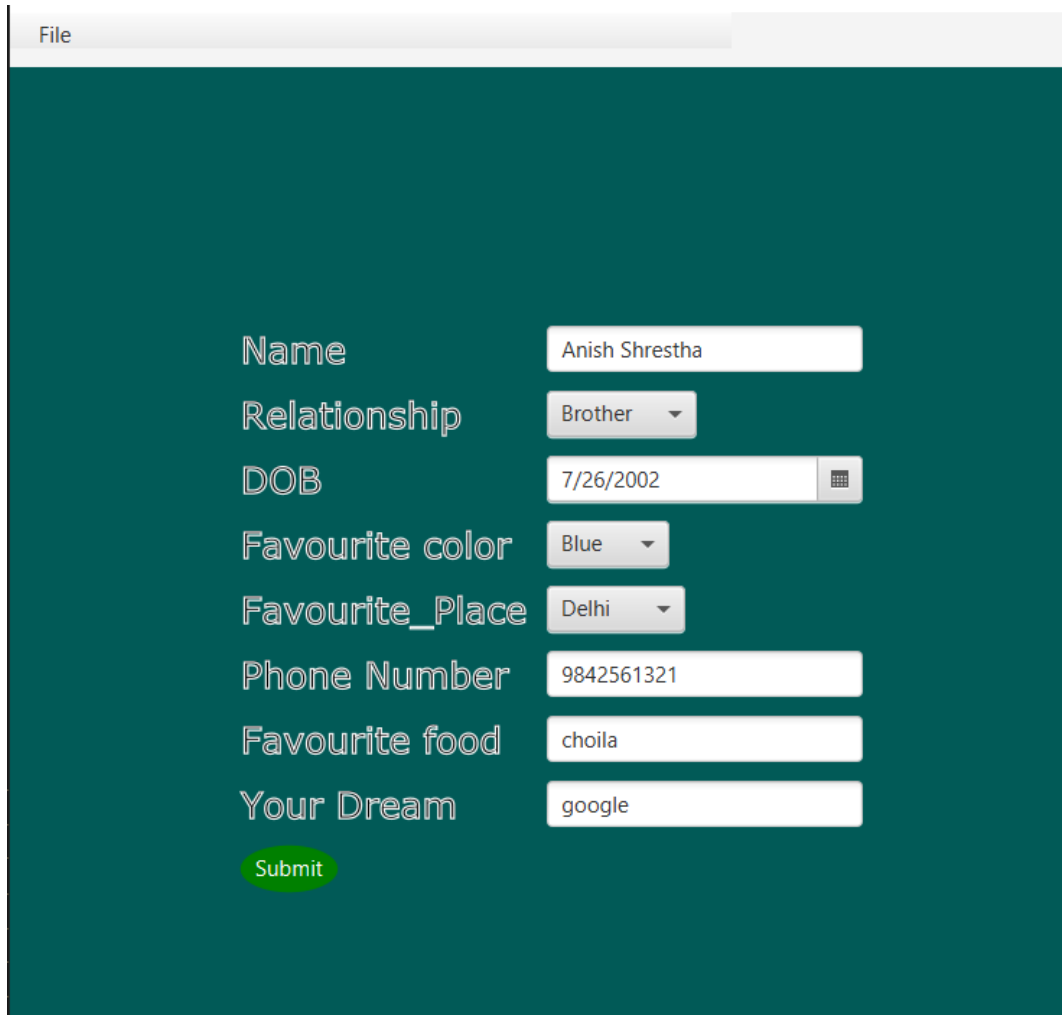
When submit the button goes green…

Name	Anish Shrestha
Relationship	Brother
DOB	7/26/2002
Favourite color	Blue
Favourite_Place	Delhi
Phone Number	9842561321
Favourite food	choila
Your Dream	google

Submit

Console after submission:

```
CodeDetailsInExceptionMessag
Anish Shrestha
Brother
2002-07-26
Blue
Delhi
9842561321
choila
google
success
```

Store in my sql database (xampp used)

Showing rows 0 - 1 (2 total, Query took 0.0006 seconds.)

SELECT * FROM `anish20bce2893`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 ☑   Filter rows: Search this table

+ Options

Name	Relationship	DOB	F_color	F_place	Phnno	F_food	Dream
anish shrestha	Brother	2021-11-05	Blue	Vellore	9845621307	Choila	google
Anish Shrestha	Brother	2002-07-26	Blue	Delhi	9842561321	choila	google

☐ Show all | Number of rows: 25 ☑   Filter rows: Search this table

Query results operations

Two queries were updated…

Clear button clears the text field..