

# **DIGITAL ASSIGNMENT-3**

**Name-** SAM METHUSELAH

**Reg No-** 19BCE1698

**Video Link-**

[https://drive.google.com/file/d/17uf1J8UX\\_1xKfgCF7CtkhH7UWbVRyNcM/view?usp=sharing](https://drive.google.com/file/d/17uf1J8UX_1xKfgCF7CtkhH7UWbVRyNcM/view?usp=sharing)

**Q1)**

**Code-**

**da3.java-**

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import javafx.application.Application;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.control.ComboBox;
import javafx.scene.control.Label;
import javafx.scene.control.RadioButton;
import javafx.scene.control.TextField;
import javafx.scene.control.ToggleGroup;
import javafx.scene.layout.HBox;
import javafx.scene.layout.VBox;
import javafx.scene.paint.Color;
import javafx.scene.text.Font;
import javafx.stage.Stage;
```

```
public class da3 extends Application
{
```

```

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

@Override
public void start(Stage primaryStage) throws Exception
{
    Label tag;
    Button register, status, update, display;

    tag=new Label("Select a option-");
    tag.setTextFill(Color.CHOCOLATE);
    tag.setFont(new Font("Arial",24));
    register=new Button("Register");
    status=new Button("Check details");
    update=new Button("Update details");
    display=new Button("Display records");

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

        @Override
        public void handle(ActionEvent arg0)
        {
            Label nameLabel, ageLbl, genLbl, phLbl, statLbl,
vac;

            TextField name, age, ph;
            Button submit;

            nameLabel=new Label("Enter your name:");
            name=new TextField();
            ageLbl=new Label("Enter your age:");
            age=new TextField();
            genLbl=new Label("Select gender:");
            ToggleGroup group=new ToggleGroup();
            RadioButton male=new RadioButton("Male");
            RadioButton female=new RadioButton("Female");
            male.setToggleGroup(group);
            female.setToggleGroup(group);
            vac=new Label("Preferred vaccine");
            ToggleGroup group1=new ToggleGroup();
            RadioButton covi=new
RadioButton("Covishield");
            RadioButton cov=new RadioButton("Covaxin");
            covi.setToggleGroup(group1);
            cov.setToggleGroup(group1);
            phLbl= new Label("Phone Number:");
            ph = new TextField();

```

```

        statlbl=new Label("Vaccinated?");
        ComboBox<String> status=new
ComboBox<String>();
        status.getItems().add("No");
        submit=new Button("Submit");

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

                @Override
                public void handle(ActionEvent arg0) {
                        try
                        {
                                Connection conn=null;

                                Class.forName("com.mysql.cj.jdbc.Driver").newInstance();

                                conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/
vaccine","root","");

                                System.out.println("Connection
successful");

                                String gender = null;
                                String vacc = null;
                                String sts= "No";
                                if(male.isSelected())
                                        gender="Male";
                                if(female.isSelected())
                                        gender="Female";
                                if(covi.isSelected())
                                        vacc="Covishield";
                                if(cov.isSelected())
                                        vacc="Covaxin";
                                String sql;
                                sql="insert into cowin values
                                (? ,? ,? ,? ,? ,?)";

                                PreparedStatement
                                stmt=conn.prepareStatement(sql);

                                stmt.setString(1,
                                name.getText());

                                stmt.setString(2,
                                age.getText());

                                stmt.setString(3, gender);
                                stmt.setString(4, vacc);
                                stmt.setString(5,

                                stmt.setString(6, sts);
                                if(name.getText().isEmpty())
                                {

```

```

        System.out.println("Field empty");
                                System.exit(0);
                                }

        System.out.println("Successfully inserted");
                                stmt.execute();
                                }
                                catch(Exception e)
                                {
                                        System.out.println("Connection
not successful");

                                        System.out.println(e);
                                }
                                }
        });

        VBox root1=new VBox();

        root1.getChildren().addAll(namelbl,name,agelbl,age,genlbl,male
,female,vac,covi,cov,phlbl,ph,statlbl,status,submit);
        root1.setSpacing(20);
        Scene sc1=new Scene(root1);
        primaryStage.setScene(sc1);
        primaryStage.setHeight(600);
        primaryStage.setWidth(700);
        primaryStage.show();
    }

});

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

    @Override
    public void handle(ActionEvent arg0)
    {
        Label namelbl=new Label("Enter name:");
        TextField name=new TextField();
        Button submit=new Button("Submit");

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

            @Override
            public void handle(ActionEvent arg0)
            {
                try

```

```

        {
            Connection conn=null;

            Class.forName("com.mysql.cj.jdbc.Driver").newInstance();

            conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/
vaccine","root","");

            System.out.println("Connection
successful");

            String sql;
            sql="select * from cowin where
Name=?";

            PreparedStatement
            stmt=conn.prepareStatement(sql);
            stmt.setString(1,
            name.getText());

            ResultSet rs =
            while(rs.next())
            {
                String n =
                String a =
                String g =
                String p =
                String ph =
                String st =

                rs.getString("Name");
                rs.getString("Age");
                rs.getString("Gender");
                rs.getString("Preferred_Vaccine");
                rs.getString("PhoneNo");
                rs.getString("Status");

                System.out.println(n+"\t"+a+"\t"+g+"\t"+p+"\t"+ph+"\t"+st);
            }

            System.out.println("Successfully displayed");
        }
        catch(Exception e)
        {
            System.out.println("Connection
not successful");

            System.out.println(e);
        }
    }

});
VBox root3=new VBox();

```

```

root3.getChildren().addAll(namelbl,name,submit);
        root3.setSpacing(20);
        Scene sc3=new Scene(root3);
        primaryStage.setScene(sc3);
        primaryStage.setHeight(600);
        primaryStage.setWidth(700);
        primaryStage.show();
    }
});

update.setOnAction(new EventHandler<ActionEvent>()
{
    @Override
    public void handle(ActionEvent arg0)
    {
        Label namelbl=new Label("Enter name:");
        TextField name=new TextField();
        Label agelbl=new Label("Enter age:");
        TextField age=new TextField();
        Label statlbl=new Label("Update Status");
        ComboBox<String> status=new
ComboBox<String>();
        status.getItems().add("Yes");
        Button submit=new Button("Submit");

        submit.setOnAction(new
EventHandler<ActionEvent>()
        {
            @Override
            public void handle(ActionEvent arg0) {
                try
                {
                    Connection conn=null;

                    Class.forName("com.mysql.cj.jdbc.Driver").newInstance();

                    conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/
vaccine","root","");

                    System.out.println("Connection
successful");

                    String sts="Yes";
                    String sql;
                    sql="update cowin set Status=?
where Name=? and Age=?";

                    PreparedStatement
stmt=conn.prepareStatement(sql);

                    stmt.setString(1,sts);

```

```

stmt.setString(2,name.getText());

stmt.setString(3,age.getText());
                                int i=stmt.executeUpdate();
                                if(i>0)
                                {

System.out.println("Successfully updated");
                                }
                                else
                                {

System.out.println("Record not found");
                                System.exit(0);
                                }
                                }
                                catch(Exception e) {
                                System.out.println("Connection
not successful");
                                System.out.println(e);
                                }
                                }

    });
    VBox root2=new VBox();

    root2.getChildren().addAll(nameLbl,name,ageLbl,age,statLbl,sta
tus,submit);

    root2.setSpacing(20);
    Scene sc2=new Scene(root2);
    primaryStage.setScene(sc2);
    primaryStage.setHeight(600);
    primaryStage.setWidth(700);
    primaryStage.show();
}

});

display.setOnAction(new EventHandler<ActionEvent>()
{
    @Override
    public void handle(ActionEvent arg0)
    {
        try
        {
            Connection conn=null;

Class.forName("com.mysql.cj.jdbc.Driver").newInstance();

```

```

        conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/
vaccine","root","");
        System.out.println("Connection
successful");

        String y="Yes";
        String b="No";
        String sql;
        sql="select * from cowin where Status=?";
        PreparedStatement
stmt=conn.prepareStatement(sql);
        PreparedStatement
stmt1=conn.prepareStatement(sql);
        stmt.setString(1, y);
        stmt1.setString(1, b);
        ResultSet rs = stmt.executeQuery();
        ResultSet rs1 = stmt1.executeQuery();
        System.out.println("Vaccinated people:");
        while(rs.next())
        {
            String n = rs.getString("Name");
            String a = rs.getString("Age");
            String g = rs.getString("Gender");
            String p =
rs.getString("Preferred_Vaccine");
            String ph = rs.getString("PhoneNo");
            String st = rs.getString("Status");

            System.out.println(n+"\t"+a+"\t"+g+"\t"+p+"\t"+ph+"\t"+st);
        }

        System.out.println("Registered people:");
        while(rs1.next())
        {
            String n = rs1.getString("Name");
            String a = rs1.getString("Age");
            String g = rs1.getString("Gender");
            String p =
rs1.getString("Preferred_Vaccine");
            String ph = rs1.getString("PhoneNo");
            String st = rs1.getString("Status");

            System.out.println(n+"\t"+a+"\t"+g+"\t"+p+"\t"+ph+"\t"+st);
        }
    }
    catch(Exception e)
    {
        System.out.println("Connection not
successful");
        System.out.println(e);
    }
}

```



```

        }
    }

});

HBox root=new HBox();

//controls added to
layout
    root.getChildren().addAll(tag,new
Label("\n"),register,status,update,display);
    root.setSpacing(20);
    Scene sc=new Scene(root);

//layout added to scene
    primaryStage.setScene(sc);

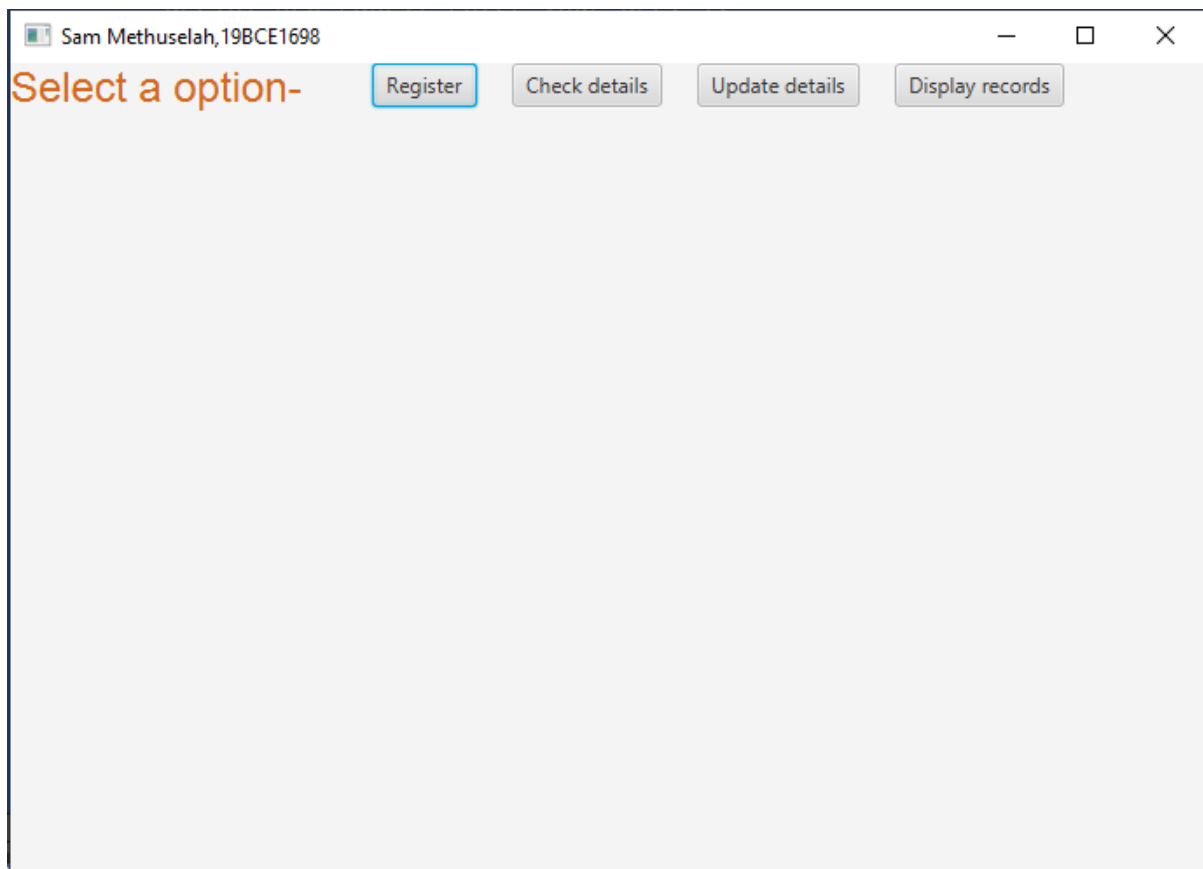
//scene added to stage
    primaryStage.setHeight(500);
    primaryStage.setWidth(700);
    primaryStage.setTitle("Sam Methuselah,19BCE1698");
    primaryStage.show();
}

}

```

**P.T.O.->**

## Output-



Database with table-

+ Options						
		Name	Age	Gender	Preferred_Vaccine	PhoneNo
		Status				
		Sam	19	Male	Covaxin	9858483848
		Toshi	20	Female	Covishield	9859695969
		Vedant	20	Male	Covishield	9894948593
		Sumeet	20	Male	Covishield	9839495939

**P.T.O.->**

## Insertion-

Sam Methuselah,19BCE1698

Enter your name:

Sarthak

Enter your age:

20

Select gender:

☒ Male

☐ Female

Preferred vaccine

☐ Covishield

☒ Covaxin

Phone Number:

9090909090

Vaccinated?

No

Submit

Declaration Console

da3 [Java Application] C:\Users\Sam Methuselah\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64

Connection successful  
Successfully inserted

performance_schema	+ Options					
phpmyadmin	Name	Age	Gender	Preferred_Vaccine	PhoneNo	Status
test	Sam	19	Male	Covaxin	9858483848	Yes
vaccine	Toshi	20	Female	Covishield	9859695969	Yes
New	Vedant	20	Male	Covishield	9894948593	No
cowin	Sumeet	20	Male	Covishield	9839495939	No
	Sarthak	20	Male	Covaxin	9090909090	No

## Insertion (without name)-

Sam Methuselah,19BCE1698

Enter your name:

Enter your age:

21

Select gender:

☒ Male

☐ Female

Preferred vaccine

☒ Covishield

☐ Covaxin

Phone Number:

9203939293

Vaccinated?

No

Submit

Declaration Console

<terminated> da3 [Java Application] C:\Users\Sam Methuselah\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x

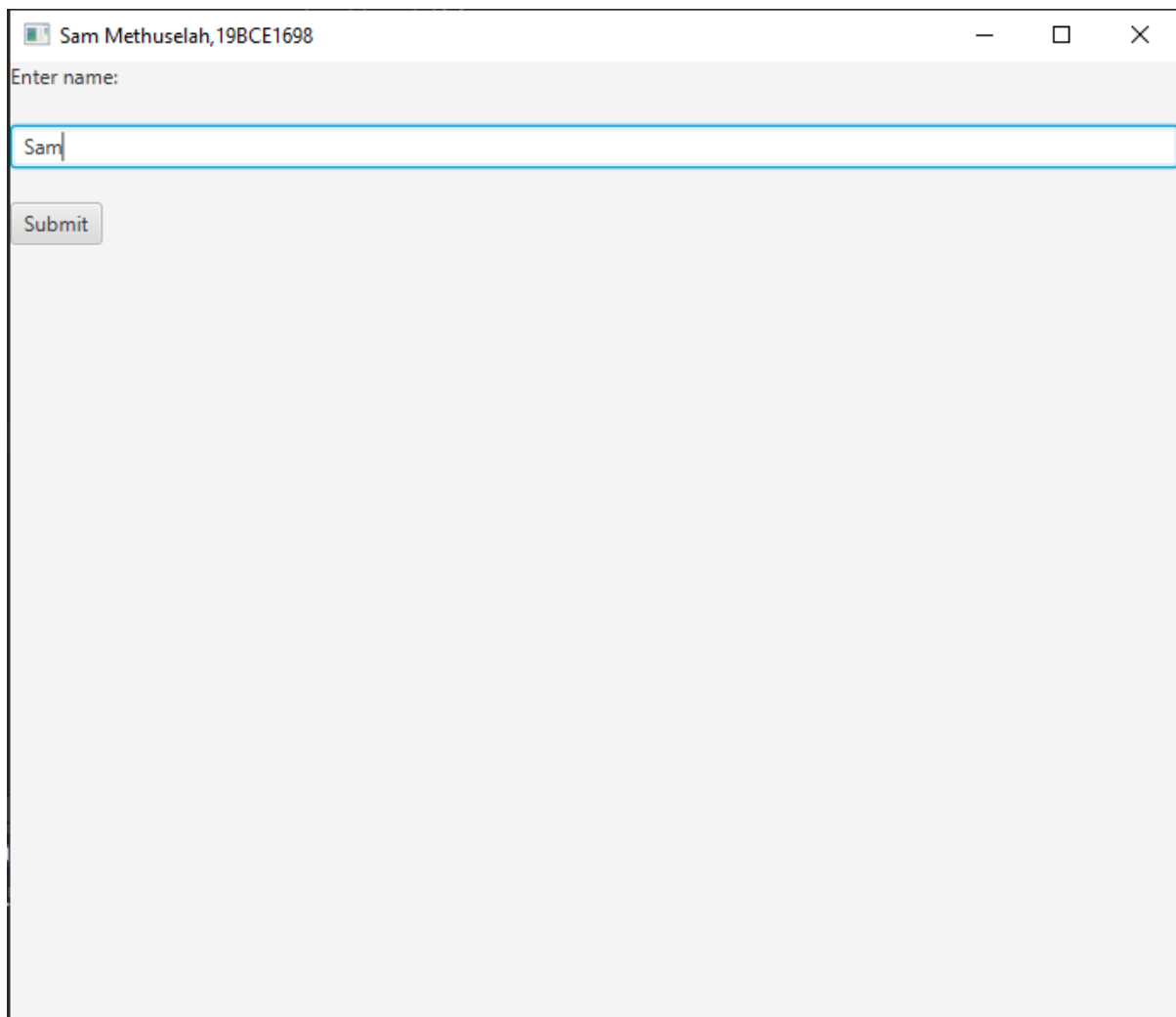
Connection successful

Field empty

## Not inserted-

performance_schema	+ Options					
phpmyadmin	Name	Age	Gender	Preferred_Vaccine	PhoneNo	Status
test	Sam	19	Male	Covaxin	9858483848	Yes
vaccine	Toshi	20	Female	Covishield	9859695969	Yes
New	Vedant	20	Male	Covishield	9894948593	No
cowin	Sumeet	20	Male	Covishield	9839495939	No
	Sarthak	20	Male	Covaxin	9090909090	No

Checking details-

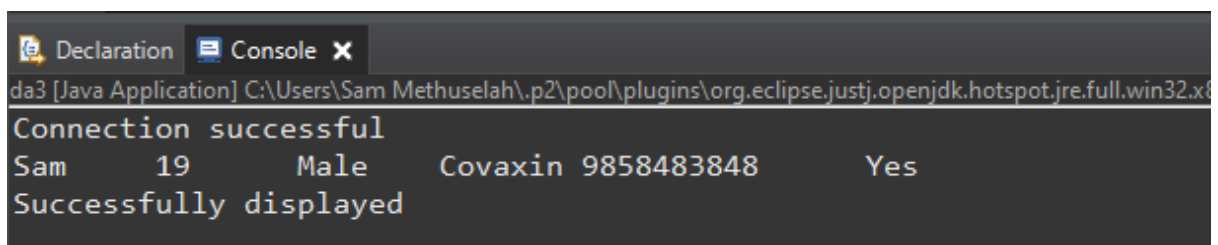


Sam Methuselah,19BCE1698

Enter name:

Sam

Submit



```
da3 [Java Application] C:\Users\Sam Methuselah\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\bin\java.exe
Connection successful
Sam 19 Male Covaxin 9858483848 Yes
Successfully displayed
```

**P.T.O.->**

## Updating Status of Vaccination-

Sam Methuselah,19BCE1698

Enter name:

Sumeet

Enter age:

20

Update Status

Yes

Submit

Declaration Console

da3 [Java Application] C:\Users\Sam Methuselah\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x

Connection successful

Successfully updated

## Updated-

performance_schema	+ Options					
phpmyadmin	Name	Age	Gender	Preferred_Vaccine	PhoneNo	Status
test	Sam	19	Male	Covaxin	9858483848	Yes
vaccine	Toshi	20	Female	Covishield	9859695969	Yes
New	Vedant	20	Male	Covishield	9894948593	No
cowin	Sumeet	20	Male	Covishield	9839495939	Yes
	Sarthak	20	Male	Covaxin	9090909090	No

## Displaying records categorized-

