



**UMS**  
UNIVERSITI MALAYSIA SABAH

**KP14603 OBJECT ORIENTED PROGRAMMING**

**SEMESTER 2**

**ASSIGNMENT 2 :  
“SMK TUAN GUSI SHEILDS SYSTEM”**

**LECTURE : MADAM SITI HASNAH TANALOL**

|           |                            |
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## INTRODUCTION

For this project, I choose to create an Health Information System which " SMK TUAN GUSI SHEILDS SYSTEM" . This system function to check whether the Teacher who teaching at there is safe go to school or not because of right now our world is in pandemic covid19 and it can be dangerous especially for the students who school at there because why when one student has infected it also can infected his or her family and friend also. On this system, the user scope is Teachers and Clerks who work at SMK TUAN GUSI, the user just have to take the assessment that provided 3 questions, and the result will be sent at their email for 3 day office hours.

### a. Java Code

<https://github.com/khairunsofiah/JavaFx-SmkTuanGusiSheild.git>

(githubs)

<https://drive.google.com/file/d/11FweUb-5b1RwQybVGHxoun5JbwWQrdSC/view?usp=sharing>  
(video)

2.

## b. Object Oriented Concept Implementation

### 1. CLASS

```
//Implementation class concept oop  
public class SmkTaunGusiSheilds implements ActionListener {
```

```
//Implementation class concept oop  
public class SmkTuanGusi2 implements ActionListener {
```

```
//Implementation class concept oop  
public class SmkTuanGusi3 implements ActionListener{
```

```
//Implementation class concept oop  
public class SmkTuanGusi4 implements ActionListener{
```

## 2. ENCAPSULATION

```
// Implementation of Encapsulation concept OOP
private JPanel panel = new JPanel();
public JFrame myFrame2 = new JFrame("SMK TAUN GUSI SHIELD");
public JLabel hello = new JLabel();
public JLabel welcome = new JLabel();
public JLabel staysave = new JLabel();
public JLabel click = new JLabel();
public JButton button = new JButton ("Please take COVID-19 Screening Tool ");
public JLabel message = new JLabel();
```

```
// Implementation of Encapsulation concept OOP
private JLabel title;
private JPanel panel = new JPanel();
private JFrame myFrame = new JFrame ("SMK TAUN GUSI SHIELD");
private JLabel Login = new JLabel();
private JTextField txtmyLogin = new JTextField();
private JLabel Password = new JLabel();
private JPasswordField txtmyPassword = new JPasswordField();
public JButton buttonLogin = new JButton ("LOGIN");
public JButton buttonReset = new JButton ("RESET");
public JLabel message;
```

```
// Implementation of Encapsulation concept OOP
private JFrame myFrame3 = new JFrame("SMK TAUN GUSI SHIELD");
public JLabel label1 = new JLabel();
public JLabel quest1 = new JLabel();
public Checkbox checkbox1 = new Checkbox();
public Checkbox checkbox2 = new Checkbox();
public Checkbox checkbox3 = new Checkbox();
public Checkbox checkbox4 = new Checkbox();
public Checkbox checkbox5 = new Checkbox();
public Checkbox checkbox6 = new Checkbox();
public Checkbox checkbox7 = new Checkbox();
public Checkbox checkbox8 = new Checkbox();
public JButton button = new JButton ("NEXT");
```

```
//Implementation of Encapsulation concept OOP
private JFrame myFrame4 = new JFrame("SMK TAUN GUSI SHIELD");
public JLabel quest2 = new JLabel ();
public JRadioButton radioButton = new JRadioButton();
public JRadioButton radioButton2 = new JRadioButton();
public JLabel quest3 = new JLabel ();
public JComboBox answer3= new JComboBox();
public JButton Submit = new JButton("Submit");
public JTextArea result = new JTextArea ();
public JButton Logout = new JButton ("Logout");
```

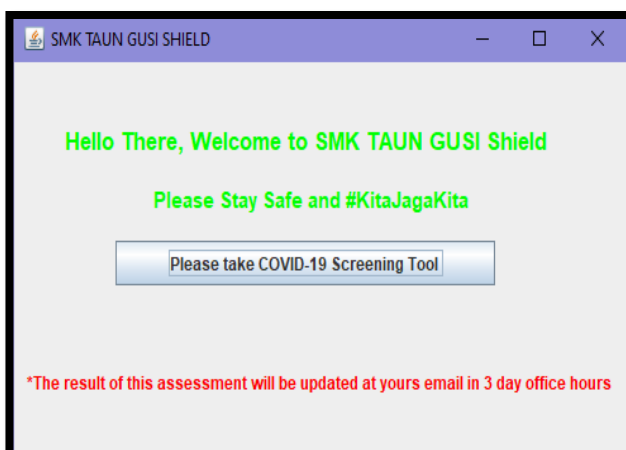
### c. Read and Write Implementation

1.

a) User insert input username and password



b) Output will appear 2 condition if valid picture 1 will appear if invalid picture 2 will appear.



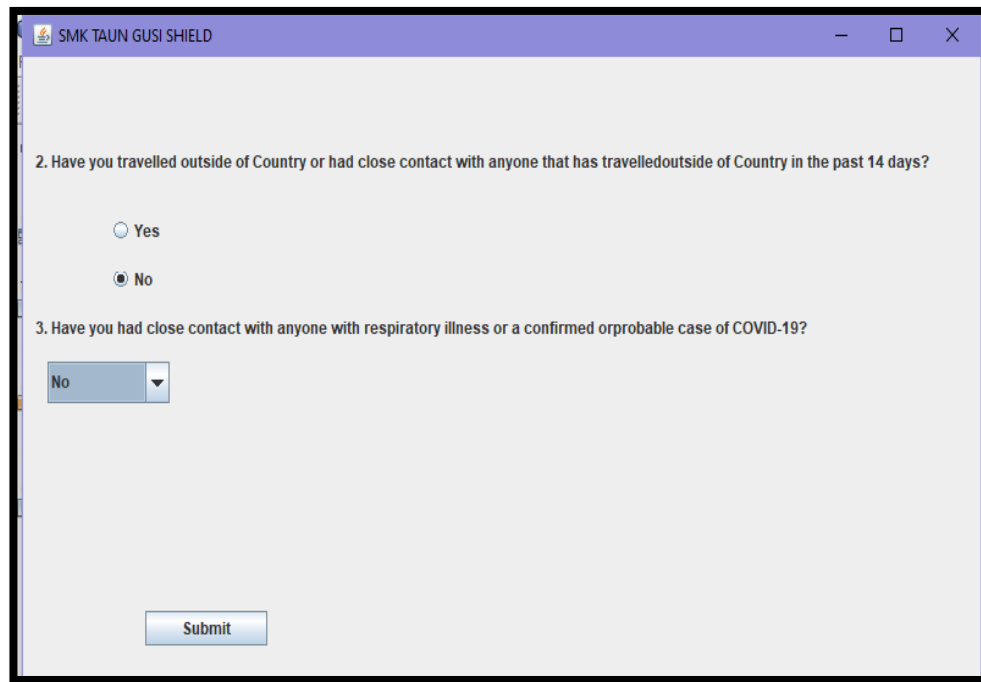
**Picture 1**



**Picture 2**

2.

a ) Input click the radiobutton and combobox



The screenshot shows a window titled "SMK TAUN GUSI SHIELD". Inside, there are two questions:

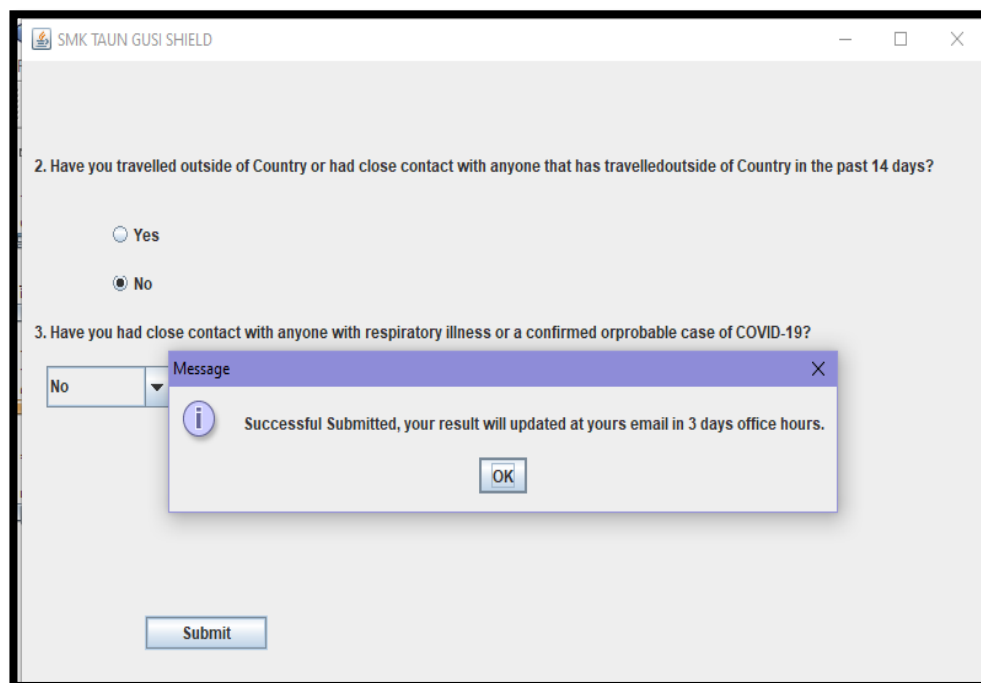
2. Have you travelled outside of Country or had close contact with anyone that has travelled outside of Country in the past 14 days?

☐ Yes  
☒ No

3. Have you had close contact with anyone with respiratory illness or a confirmed or probable case of COVID-19?

At the bottom center is a "Submit" button.

b ) Output click button submit will pop-out message



This screenshot shows the same application window as before, but with a "Message" dialog box overlaid. The dialog box contains an information icon, the text "Successful Submitted, your result will updated at yours email in 3 days office hours.", and an "OK" button. The "Submit" button in the background form is still visible.

#### d. User Manual (How to use the system)

1. Login, user have to insert username and password using id Card number



The screenshot shows a web application window titled "SMK TAUN GUSI SHIELD". The main heading is "SMK TUAN GUSI SHIELD LOGIN FORM" in green. Below the heading, there are two input fields: "USERNAME (ID\_CARD):" with the value "980120125710" and "PASSWORD:" with masked characters ".....". A blue "LOGIN" button is positioned below the password field.

2. If user insert invalid username or password it will appear "Invalid username or password", and it will automatically reset username and password for user



The screenshot shows the same web application window. The heading "SMK TUAN GUSI SHIELD LOGIN FORM" is still present. The input fields for "USERNAME (ID\_CARD):" and "PASSWORD:" are now empty. Below the password field, the text "Invalid username or Password" is displayed in red. The blue "LOGIN" button remains at the bottom.



3. After user successful login, this page will appear and user just have to click the button "Please take COVID-19 Screening Tool" for start the assessment.



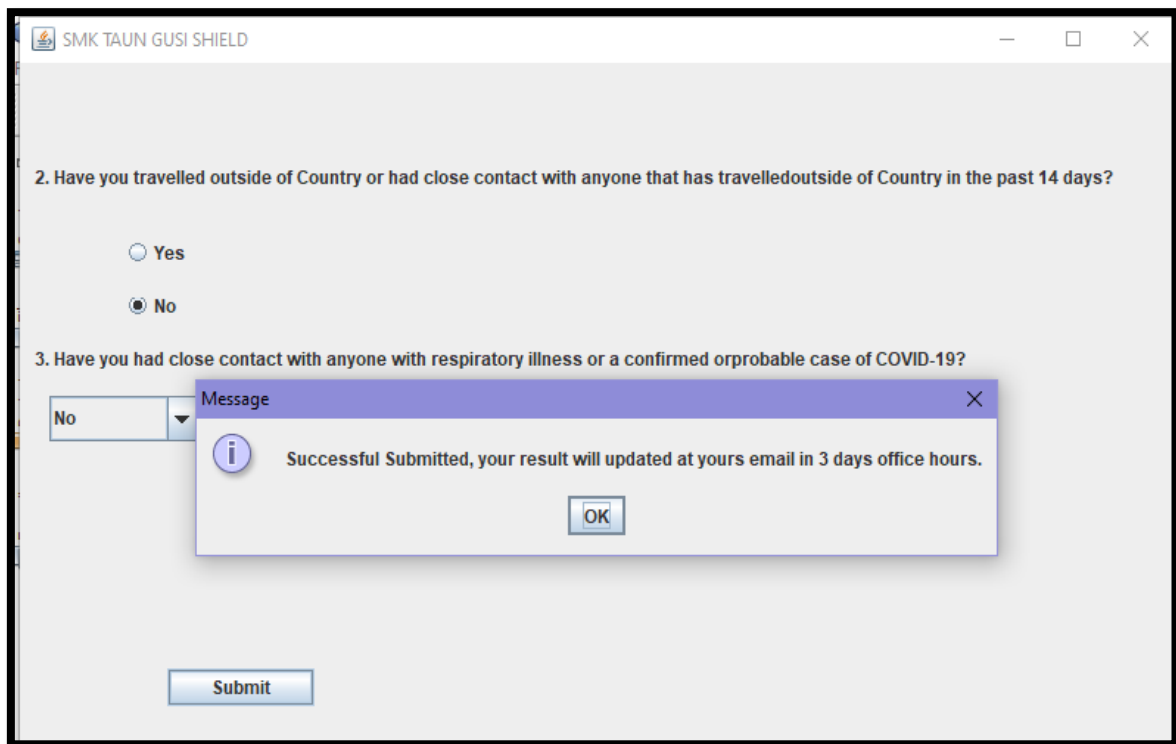
4. Next, user just have to click the checkbox to answer the question given and click button "Next" to another question.

The screenshot shows a software window titled "SMK TAUN GUSI SHIELD". Inside, under the heading "Screening Questions", is question 1: "1. Do you have any of the following new or worsening symptoms or signs?". Below the question is a list of symptoms, each preceded by an unchecked checkbox: "New or worsening cough", "Shortness of breath", "Sore throat", "Runny nose, sneezing or nasal congestion", "Hoarse voice", "Difficulty swallowing", "New smell or taste disorder(s)", and "Headache". The option "No all above" is preceded by a checked checkbox. At the bottom of the list is a blue button labeled "NEXT".

5. User can proceed answer the question given by click the RadioBox and Combobox for selection answer.

The screenshot shows the same software window with question 2: "2. Have you travelled outside of Country or had close contact with anyone that has travelled outside of Country in the past 14 days?". Below the question are two radio button options: "Yes" (unchecked) and "No" (checked). Below question 2 is question 3: "3. Have you had close contact with anyone with respiratory illness or a confirmed or probable case of COVID-19?". Below question 3 is a combobox menu with "No" selected. At the bottom of the window is a blue button labeled "Submit".

6. After finished answer, click button "Submit" for submit the assessment and the message "Successful Submitted, your result will updated at your email in 3 days office hours" will appear to notify the user.



The screenshot shows a software window titled "SMK TAUN GUSI SHIELD". It contains two questions:

2. Have you travelled outside of Country or had close contact with anyone that has travelled outside of Country in the past 14 days?

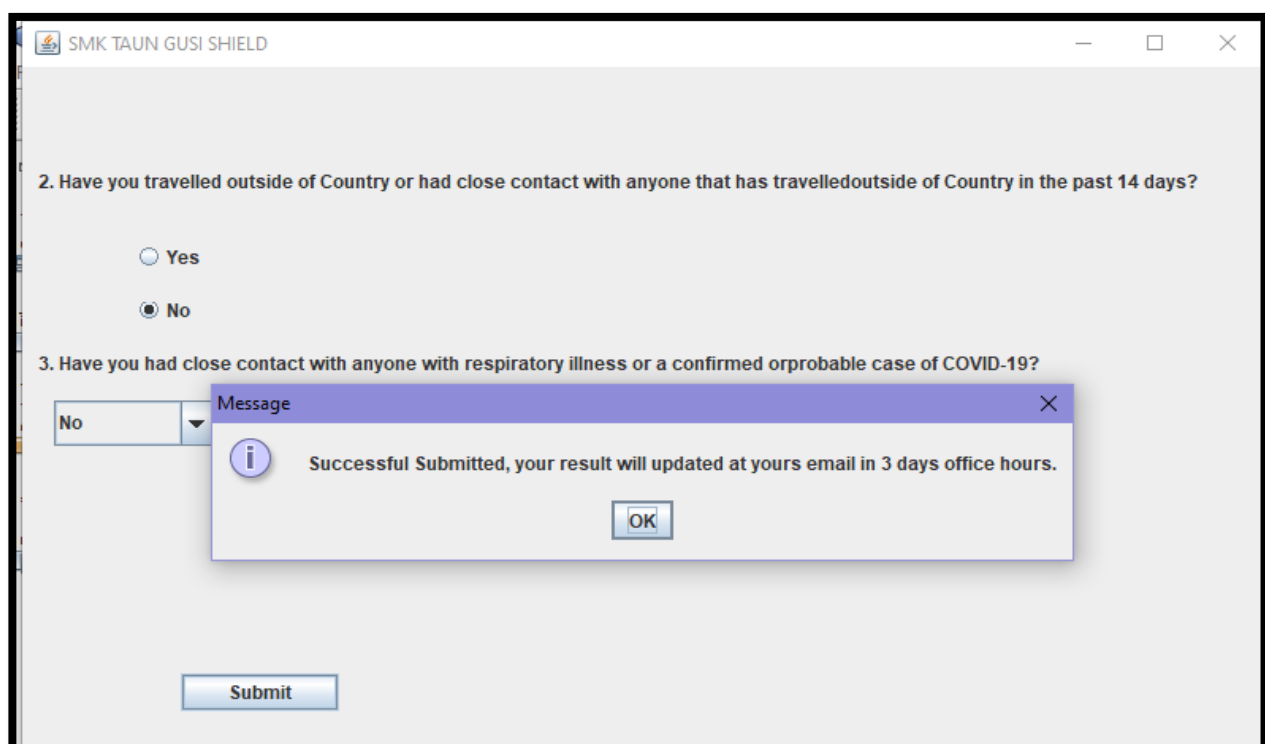
☐ Yes  
☒ No

3. Have you had close contact with anyone with respiratory illness or a confirmed or probable case of COVID-19?

A "Message" dialog box is overlaid on the form, displaying the text: "Successful Submitted, your result will updated at yours email in 3 days office hours." with an "OK" button.

A "Submit" button is located at the bottom of the form.

10. Lastly user, just have to click button "OK" and the system will automatically exit for the user



This screenshot is identical to the one above, showing the "SMK TAUN GUSI SHIELD" window with the same questions and the "Message" dialog box. The "Submit" button is visible at the bottom.