

UiMain.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.mycompany.examtest;

/**
 *
 * @author Admins
 */
public class UiMain extends javax.swing.JFrame {

    private static final java.util.logging.Logger logger = java.util.logging.Logger.getLogger(UiMain.class.getName());
    private FrameLogin login = null;
    /**
     * Creates new form UiMain
     */
    public UiMain() {
        initComponents();
        jMenuBar1.setVisible(false);
        ShowMenu();
    }

    @SuppressWarnings("unchecked")
    // Generated Code
}

private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {
    NewMemberSpy newMember = new NewMemberSpy();
    jDesktopPanel1.add(newMember);
    newMember.setVisible(true);
}

private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {
    MemberListSpy MemberList = new MemberListSpy();
    jDesktopPanel1.add(MemberList);
    MemberList.setVisible(true);
}

private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {
    getContentPane().removeAll(); //  aunกอกย่างให้เป็นบ้าา
    repaint(); // รีเฟรชหน้าจอให้ว่าง
    showLoginDialog();
}

private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
    System.exit(0);
}

private void showLoginDialog() {
    new UiMain().setVisible(true); //  เมื่อต้องการปิด Dialog ที่ปัจจุบัน
    this.dispose(); //  ปิดหน้าจอปัจจุบัน (ການເລືອກແບບຂໍ້ຕູ້ຄູ້ ຄືອົບດ່ວຍເປີດໃຫຍ່)
}
*/
/* @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    Look and feel setting code (optional)

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(() -> new UiMain().setVisible(true));
}

```

สร้างหน้าต่าง UiMain

Login Member

```

private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {
    NewMemberSpy newMember = new NewMemberSpy();
    jDesktopPanel1.add(newMember);
    newMember.setVisible(true);
}

private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {
    MemberListSpy MemberList = new MemberListSpy();
    jDesktopPanel1.add(MemberList);
    MemberList.setVisible(true);
}

private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {
    getContentPane().removeAll(); //  aunกอกย่างให้เป็นบ้าา
    repaint(); // รีเฟรชหน้าจอให้ว่าง
    showLoginDialog();
}

private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
    System.exit(0);
}

private void showLoginDialog() {
    new UiMain().setVisible(true); //  เมื่อต้องการปิด Dialog ที่ปัจจุบัน
    this.dispose(); //  ปิดหน้าจอปัจจุบัน (ການເລືອກແບບຂໍ້ຕູ້ຄູ້ ຄືອົບດ່ວຍເປີດໃຫຍ່)
}
*/
/* @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    Look and feel setting code (optional)

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(() -> new UiMain().setVisible(true));
}

```

สร้างหน้าต่าง Login และ UiMain ขึ้นมาใหม่

LoginSpy.java

```

package com.mycompany.examtest;

/**
 *
 * @author Admins
 */
public interface LoginSpy {
    void LoginValue(boolean pPass);
}

```

สร้าง LoginSpy เนื่องจาก pPass true = Login
True False = Fail

FrameLogin.java

```

/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JInternalFrame.java to edit this template
 */
package com.mycompany.examtest;

/**
 *
 * @author Admins
 */
public class FrameLogin extends javax.swing.JInternalFrame {

    private LoginSpy spy;
    /**
     * Creates new form FrameLogin
     */
    public FrameLogin() {
        initComponents();
        this.spy = spy ;
    }

    public FrameLogin(LoginSpy spy) {
        initComponents();
        this.spy = spy ;
    }

    @SuppressWarnings("unchecked")
    // Generated Code
}

private void usernameActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    String user = username.getText();
    String pass = password.getText();
    String pass = new String(password.getPassword());
    if (user.equals("admin") && pass.equals("1234")) {
        //ตรวจสอบว่าได้รับมาจากหน้าจอ UiMain หรือไม่
        if (spy != null) {
            spy.LoginValue(true);
        }
        this.dispose(); // ปิดหน้าจอ
    } else {
        javax.swing.JOptionPane.showMessageDialog(this,
            "Invalid Username or Password",
            "Message",
            javax.swing.JOptionPane.WARNING_MESSAGE);
    }
}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    username.setText("");
    password.setText("");
    ResetForm();
}

```

ตรวจสอบว่าได้รับมาจากหน้าจอ UiMain หรือไม่
ให้ก้าวสุดท้ายแล้วก็แจ้งเรื่อง รหัสผ่าน

เมื่อได้รับผลลัพธ์แล้ว ก็ต้องส่ง Menu แต่ก้าวเดียว รหัสผ่าน

Invalid Username or Password

OK

Username

Password

Reset Form

Logout

NewMemberSpy.java

(ปี Reload)

```
/*
 * Click nbfs://nghost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nghost/SystemFileSystem/Templates/GUIForms/_InternalFrame.java to edit this template
 */
package com.mycompany.examtest;
import javax.swing.JInternalFrame;
/** 
 * @author Admins
 */
public class NewMemberSpy extends javax.swing.JInternalFrame {
    /**
     * Creates new form NewMemberSpy
     */
    public NewMemberSpy() {
        initComponents(); //สักดิบ
    }
    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // Generated Code
    private void jButtonActionPerformed(java.awt.event.ActionEvent evt) {
        String id = memberId.getText().trim();
        String fName = firstname.getText().trim();
        String lName = lastname.getText().trim();
        String mClass = memberclass.getText().trim();
        String Email = email.getText().trim();
        String Phone = phone.getText().trim();

        if ((id.isEmpty()) || fName.isEmpty() || lName.isEmpty() || mClass.isEmpty() || Email.isEmpty() || Phone.isEmpty()) {
            javax.swing.JOptionPane.showMessageDialog(this,
                "Please fill in the information in the table completely.", "Message", javax.swing.JOptionPane.WARNING_MESSAGE);
            return;
        }

        if (mClass.equals("First") && lName.equals("Business") && Email.equals("Economy")) {
            javax.swing.JOptionPane.showMessageDialog(this,
                "Invalid Member Class ( Member Class First, BusinessEconomy )", "Message", javax.swing.JOptionPane.WARNING_MESSAGE);
            return;
        }

        if (MemberListSpy.getModel() != null) {
            String[] rowData = {id, fName, lName, mClass, Email, Phone};
            MemberListSpy.getDataStore().add(rowData);

            // Save File
            String filePath = "UserData.bin";

            try {
                java.io.FileOutputStream file = new java.io.FileOutputStream(filePath);
                java.io.ObjectOutputStream writer = new java.io.ObjectOutputStream(file);

                // บันทึกไฟล์เป็น dataStore ลงในไฟล์
                writer.writeObject(MemberListSpy.getDataStore());
                writer.close(); //ต้องการเคลื่อนย่อลงมาไฟล์
                file.close();
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    }
}
```

Member ID	A_makin_trueDimaond
First Name	Mekin
Last Name	trueDimond
Member Class	(First, Business, Economy)
Business	
Email	trueDimond_twssq@gmail.com
Phone No.	02 725 8000
Save	
Close	

```
        } catch(Exception ex) {
            System.out.println("Failed to write " + filePath + ":" + ex);
            javax.swing.JOptionPane.showMessageDialog(this, "Error Saving File: " + ex.getMessage());
        }

        memberid.setText("");
        firstname.setText("");
        lastname.setText("");
        memberclass.setText("");
        email.setText("");
        phone.setText("");

        javax.swing.JOptionPane.showMessageDialog(this, "Save Complete!");

    } else {
        javax.swing.JOptionPane.showMessageDialog(this, "Error Save Member List");
    }

    บันทึกว่า Save 成功แล้ว
}

private void Button2ActionPerformed(java.awt.event.ActionEvent evt) {
    dispose();
    บันทึกว่า Add member
}

// Variables declaration - do not modify
private javax.swing.JTextField email;
private javax.swing.JTextField firstname;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JTextField lastname;
private javax.swing.JTextField memberclass;
private javax.swing.JTextField memberid;
private javax.swing.JTextField phone;

// End of variables declaration
```

```
/* Click http://nbnhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click http://nbnhost/SystemFileSystem/Templates/GUIForms/jInternalFrame.java to edit this template
 */
package com.mycompany.examtest;

/**
 * @author Admins
 */
public class MemberListSpy extends javax.swing.jInternalFrame {
    public static java.util.ArrayList<String> dataStore = new java.util.ArrayList();
    public static javax.swing.table.DefaultTableModel model;
    JButton jButton;
    JScrollPane jScrollPane;
    JTable jTable;
    declaration

    /**
     * Creates new form MemberListSpy
     */
    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    // Variables declaration - do not modify
    // End of variables declaration
}

jPerformed(java.awt.event.ActionEvent evt) {
    dataBin();
    jTable.setModel (javax.swing.table.DefaultTableModel) jTable1.getModel();
}

public void saveFile() {
    String fileSavePath = "C:\\Users\\Admin\\Desktop\\MemberList.txt";
    try {
        File file = new File(fileSavePath);
        if (!file.exists()) {
            file.createNewFile();
        }
        FileOutputStream fos = new FileOutputStream(file);
        ObjectOutputStream oos = new ObjectOutputStream(fos);
        oos.writeObject(dataStore);
        oos.close();
        JOptionPane.showMessageDialog(this, "บันทึกสำเร็จ");
    } catch (Exception ex) {
        JOptionPane.showMessageDialog(this, "เกิดข้อผิดพลาดในการบันทึกไฟล์: " + ex.getMessage());
    }
}

public void loadFile() {
    String fileLoadPath = "C:\\Users\\Admin\\Desktop\\MemberList.txt";
    try {
        File file = new File(fileLoadPath);
        if (file.exists()) {
            FileInputStream fis = new FileInputStream(file);
            ObjectInputStream ois = new ObjectInputStream(fis);
            dataStore = (ArrayList<String>) ois.readObject();
            ois.close();
        }
    } catch (Exception ex) {
        JOptionPane.showMessageDialog(this, "เกิดข้อผิดพลาดในการโหลดไฟล์: " + ex.getMessage());
    }
}

public void dataBin() {
    dataStore.clear();
    jTable.setModel (new javax.swing.table.DefaultTableModel(dataStore, new String[] {"Member ID", "First Name", "Last Name", "Member Class"}));
}

public void addMember() {
    String memberId = jTextField1.getText();
    String fName = jTextField2.getText();
    String lName = jTextField3.getText();
    String memberClass = jTextField4.getText();
    dataStore.add(memberId);
    dataStore.add(fName);
    dataStore.add(lName);
    dataStore.add(memberClass);
    jTable.setModel (new javax.swing.table.DefaultTableModel(dataStore, new String[] {"Member ID", "First Name", "Last Name", "Member Class"}));
}

public void updateMember() {
    int selectedRow = jTable.getSelectedRow();
    if (selectedRow > -1) {
        String memberId = jTextField1.getText();
        String fName = jTextField2.getText();
        String lName = jTextField3.getText();
        String memberClass = jTextField4.getText();
        dataStore.set(selectedRow, memberId);
        dataStore.set(selectedRow + 1, fName);
        dataStore.set(selectedRow + 2, lName);
        dataStore.set(selectedRow + 3, memberClass);
        jTable.setModel (new javax.swing.table.DefaultTableModel(dataStore, new String[] {"Member ID", "First Name", "Last Name", "Member Class"}));
    }
}

public void deleteMember() {
    int selectedRow = jTable.getSelectedRow();
    if (selectedRow > -1) {
        dataStore.remove(selectedRow);
        dataStore.remove(selectedRow + 1);
        dataStore.remove(selectedRow + 2);
        dataStore.remove(selectedRow + 3);
        jTable.setModel (new javax.swing.table.DefaultTableModel(dataStore, new String[] {"Member ID", "First Name", "Last Name", "Member Class"}));
    }
}

public void searchMember() {
    String searchValue = jTextField5.getText();
    ArrayList<String> filteredData = new ArrayList();
    for (String item : dataStore) {
        if (item.contains(searchValue)) {
            filteredData.add(item);
        }
    }
    jTable.setModel (new javax.swing.table.DefaultTableModel(filteredData, new String[] {"Member ID", "First Name", "Last Name", "Member Class"}));
}

public void sortMember() {
    String sortColumn = (String) jComboBox1.getSelectedItem();
    if (sortColumn.equals("Member ID")) {
        dataStore.sort();
    } else if (sortColumn.equals("First Name")) {
        dataStore.sort();
    } else if (sortColumn.equals("Last Name")) {
        dataStore.sort();
    } else if (sortColumn.equals("Member Class")) {
        dataStore.sort();
    }
    jTable.setModel (new javax.swing.table.DefaultTableModel(dataStore, new String[] {"Member ID", "First Name", "Last Name", "Member Class"}));
}

public void reload() {
    jTable.setModel (new javax.swing.table.DefaultTableModel(dataStore, new String[] {"Member ID", "First Name", "Last Name", "Member Class"}));
}

public void clear() {
    dataStore.clear();
    jTable.setModel (new javax.swing.table.DefaultTableModel(dataStore, new String[] {"Member ID", "First Name", "Last Name", "Member Class"}));
}

public void exit() {
    System.exit(0);
}
```

The screenshot shows a Java Swing application window titled "Countinue Array". Inside the window, there is a JTable with columns: Member ID, First Name, Last Name, Member Class, Email, and Phone No. A context menu is open over the table, with the following options:

- Count: 4
- Insert
- Delete
- Move Up
- Move Down

Below the table, the text "Count = 0" and "Row = 0" is displayed.

At the bottom left, another code snippet is shown:

```
11 public class MemberListSpy extends javax.swing.JInternalFrame {  
12     public static javax.swing.table.DefaultTableModel model;  
13  
14     public MemberListSpy() {  
15         initComponents();  
16         model = (javax.swing.table.DefaultTableModel) jTable1.getModel();  
17     }  
18 }
```

The screenshot shows the Android Studio interface. On the left, there is some Java code: `x.getMessage());`. In the center, there is a green button with the text "สร้างตาราง". On the right, there is a blue header bar with the text "How to save image". Below the header, the project structure is visible under the "Projects" tab, showing a package named "ExamTest" containing "src", "main", "java", and "resources" directories.

