



## [pertemuan 11]

### Identitas

- NPM : 223040033
- Nama : Muhammad Fauzan Dwi Putera
- Kelas : A
- URL Repository Github :

[https://github.com/Fauzan2617/pp2-](https://github.com/Fauzan2617/pp2-2024_223040033_A/tree/main/Latihan%20Pertemuan%20-%2011/Pertemuan%2010/jfc-mvc)

[2024\\_223040033\\_A/tree/main/Latihan%20Pertemuan%20-%2011/Pertemuan%2010/jfc-mvc](https://github.com/Fauzan2617/pp2-2024_223040033_A/tree/main/Latihan%20Pertemuan%20-%2011/Pertemuan%2010/jfc-mvc)

### Penjelasan Kode

Jika berkas **tidak memiliki output**, gunakan tabel ini.

[UserController.java]
-----------------------



```
[package controller;
import model.*;
import view.UserView;

import javax.swing.*;
import java.awt.event.ActionEvent; import
java.awt.event.ActionListener; import
java.util.List;
public class UserController {
private UserView view;
private UserMapper mapper;

    public UserController(UserView view, UserMapper mapper) {
this.view = view;          this.mapper = mapper;
        this.view.addAddUserListener(new AddUserListener());
this.view.addRefreshListener(new RefreshListener());    }
    class AddUserListener implements ActionListener {
        @Override
        public void actionPerformed(ActionEvent e) {
            String name = view.getNameInput();
            String email = view.getEmailInput();
            if (!name.isEmpty() && !email.isEmpty()) {
                User user = new User();
                user.setName(name);          user.setEmail(email);
                mapper.insertUser(user);
                JOptionPane.showMessageDialog(view, "User added
successfully!");    } else {
                JOptionPane.showMessageDialog(view, "Please fill in all
fields.");    }
        }
    }
}
```

```
    }
    class RefreshListener implements ActionListener {
        @Override
        public void actionPerformed(ActionEvent e) {
            List<User> users = mapper.getAllUsers();
            String[] userArray = users.stream()
                .map(u -> u.getName() + " (" + u.getEmail() + ")")
                .toArray(String[]::new);
            view.setUserList(userArray);
        }
    }
}
]
```

### Penjelasan

[Code dari user Controller]



### [MyBatisUtil.java]

```
[package model;
import
org.apache.ibatis.io.Resources;
import org.apache.ibatis.session.*;
import java.io.IOException;

public class MyBatisUtil {
    private static SqlSessionFactory sqlSessionFactory;
    static
    {
        try {
            sqlSessionFactory = new SqlSessionFactoryBuilder()
                .build(Resources.getResourceAsStream("mybatisconfig.xml"));
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
    public static SqlSession
    getSqlSession() { return
    sqlSessionFactory.openSession(); }
}
]
```

### Penjelasan

[Model sql]

### [UserMapper.java]

```
[package model;
```

```
import java.util.List;
import org.apache.ibatis.annotations.*;
public interface UserMapper
{
    @Select("SELECT * FROM users")
    List<User> getAllUsers();

    @Insert("INSERT INTO users (name, email) VALUES (#{name}, #{email})")
    void insertUser(User user);
}
]
```

### Penjelasan

[Model sql]



### [User.java]

```
[package model;
public class User {
private int id;
private String name;
private String email;

    // Getters dan Setters
    public int getId() { return id; }
public void setId(int id) { this.id = id; }
public String getName() { return name; }
    public void setName(String name) { this.name = name; }
public String getEmail() { return email; }
    public void setEmail(String email) { this.email = email; }
}

]
```

### Penjelasan

[Model sql user]

### [UserView.java]

```
[package view;

import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionListener;

public class UserView extends JFrame {
    private JTextField txtName = new JTextField(20);
private JTextField txtEmail = new JTextField(20);
private JButton btnAdd = new JButton("Add User");
private JButton btnRefresh = new JButton("Refresh");
private JList<String> userList = new JList<>();
}
```



```
private DefaultListModel<String> listModel = new
DefaultListModel<>();

public UserView() {
    setTitle("User Management");
    setSize(400, 300);
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    JPanel panel = new JPanel(new GridLayout(5, 1));
    panel.add(new JLabel("Name:"));
    panel.add(txtName);
    panel.add(new JLabel("Email:"));
    panel.add(txtEmail);

    JPanel buttonPanel = new JPanel();
    buttonPanel.add(btnAdd);
    buttonPanel.add(btnRefresh);
    panel.add(buttonPanel);
    userList.setModel(listModel);
    add(panel, BorderLayout.NORTH);
    add(new JScrollPane(userList),
    BorderLayout.CENTER);    }    public String
getNameInput() {        return txtName.getText();
    }    public String
getEmailInput() {        return
txtEmail.getText();
    }
    public void setUserList(String[] users)
{        listModel.clear();        for
(String user : users) {
listModel.addElement(user);
        }
    }
    public void addAddUserListener(ActionListener listener)
{        btnAdd.addActionListener(listener);    }
    public void addRefreshListener(ActionListener listener)
{        btnRefresh.addActionListener(listener);    }
}
```

### Penjelasan

[View user]

### Penjelasan Kode

Jika **berkas memiliki output**, gunakan tabel ini.



### [main.java]

```
[import model.MyBatisUtil;
import model.UserMapper;
import org.apache.ibatis.session.SqlSession;
import view.UserView;
import controller.UserController;

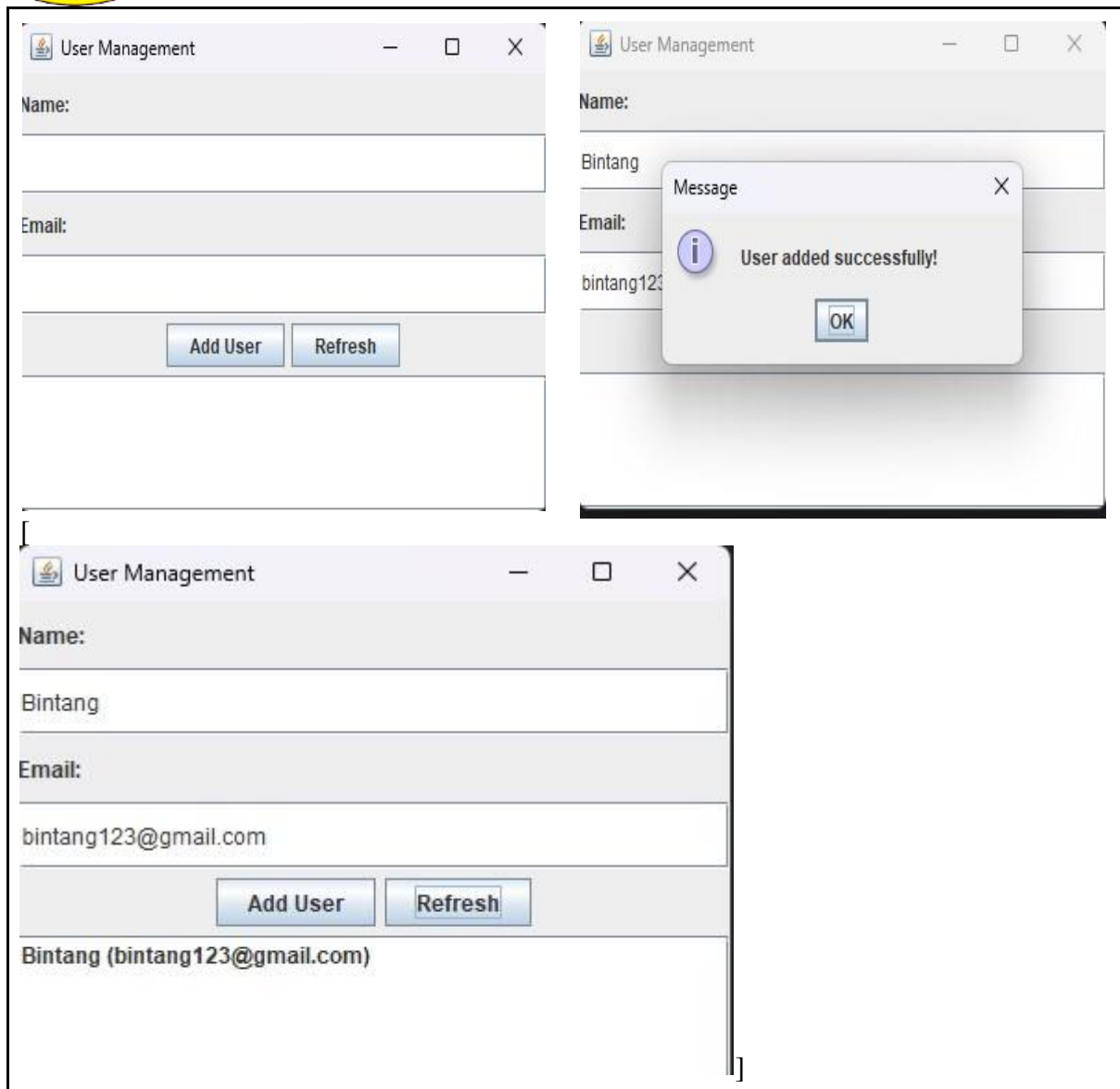
public class Main {
    public static void main(String[] args) {
        SqlSession session = MyBatisUtil.getSqlSession();
        UserMapper mapper = session.getMapper(UserMapper.class);
        UserView view = new UserView();
        new UserController(view, mapper);

        view.setVisible(true);
    }
}
```

### Penjelasan

[output main jfc-mvc]

### Output



Catatan:

- Silakan modifikasi dan tambahkan informasi sesuai dengan proyek yang Anda kerjakan baik pada tanda [kalimat].
- Sesuaikan nama file laporan dengan format **Tugas[Pertemuan ke-X]\_PP1\_NPM**  
Contoh: Tugas[P10]\_PP1\_203040104
- Sesuaikan judul laporan dengan format **Laporan Tugas Pertemuan ke-X** Contoh:  
Laporan Tugas Pertemuan ke-10