Microwave Oven

Requirements:

- **Java Code**
- **NetBeans IDE**
- **Documentation**

Groupmates:

Name : Jhon Brix G. Brion

Pair : Shane Marie Mon

Deadline : March 17 2022

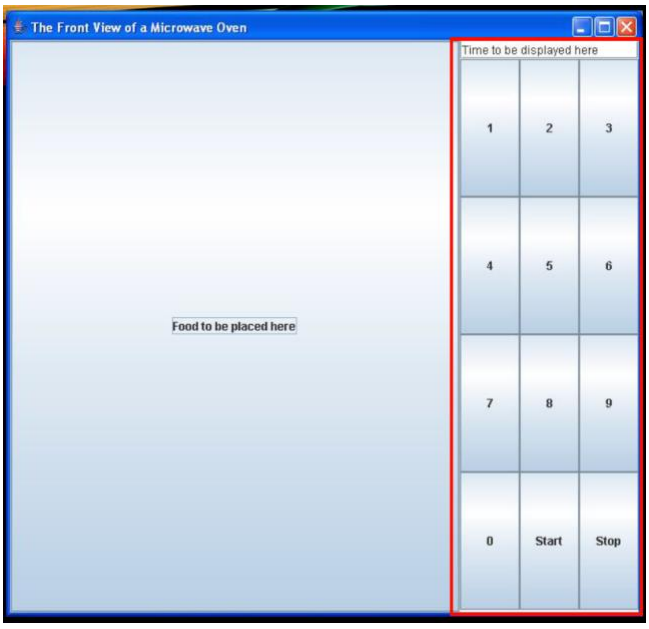
Subject : ComProg LAB 3

Contributions : BRION – Java Program Software Developent

MON – Java Documentation

Lecture Activity Problem:

1. Create a microware oven interface using JButtons and Layout Manager for positioning.
2. Sample Output:



Here are the source code that we used. See description in every photo below.

```
JPanel OvenBackground, ButtonsPanel, Microwave, Title;
JButton one, two, three, four, five, six, seven, eight, nine, zero, Enter, Reset;
JLabel Product, cooking;
JTextField Input;
```

In this part of the Java Swing, we have covered basic Swing components, including `JButton`, `JLabel`, `JTextField`, and JPanel.

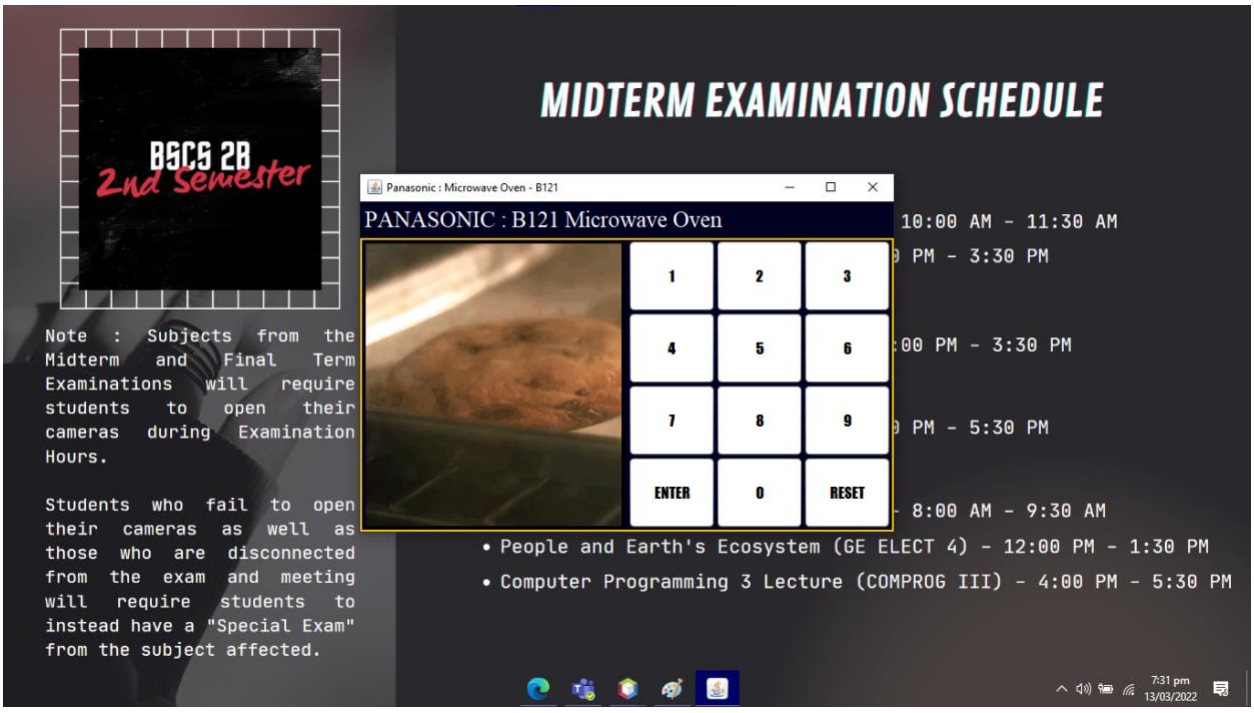
```
package javaswingoven;

import java.awt.BorderLayout;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.GridLayout;
import java.awt.Image;
import java.awt.Toolkit;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import javax.swing.ImageIcon;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JPanel;
import javax.swing.JTextField;
import javax.swing.SwingConstants;
```

These are the Imports that are included in the Java Project.

```
// Oven Background (JPanel) Declarations.

add(OvenBackground, BorderLayout.CENTER);
OvenBackground.setBackground(new java.awt.Color(0, 0, 32));
OvenBackground.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(255, 200, 0), 2, false));
OvenBackground.setLayout(new GridLayout(1,2,3,3));
OvenBackground.setVisible(true);

// Microwave (JPanel) Declarations.
OvenBackground.add(Microwave);
Microwave.setBackground(new java.awt.Color(255, 255, 255));
Microwave.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(0, 0, 0), 2, false));
Microwave.setLayout(new GridLayout(1,1,0,0));
Microwave.setVisible(true);

Microwave.add(cooking, BorderLayout.NORTH);
cooking.setBackground(new java.awt.Color(255, 255, 255));
cooking.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(0, 0, 0), 2, false));
cooking.setLayout(new GridLayout(1,1,0,0));
cooking.setVisible(true);

ImageIcon findPersonelPicture = new ImageIcon("src\\Resources\\Cookies.gif");
Image importPersonelPicture = findPersonelPicture.getImage();
//Image scalePersonelPicture = importPersonelPicture.getScaledInstance(cooking.getWidth(), cooking.getHeight(), Image.SCALE_SMOOTH);
ImageIcon scaledPersonelPicture = new ImageIcon(importPersonelPicture);
cooking.setIcon(scaledPersonelPicture);
```

This block of code is where we designed the background of the oven.

```java
// JFrame Declaration
final int FrameWidth  = 600;
final int FrameHeight = 400;

// JFrame Size.
setSize(FrameWidth, FrameHeight);
setMinimumSize(new java.awt.Dimension(FrameWidth, FrameHeight));

// JFrame Decoration.
setUndecorated(false);
setOpacity(1.0f);
setTitle("Panasonic : Microwave Oven - B121");
setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
setLocationRelativeTo(null);
pack( );
setLayout(new BorderLayout( ));
```



And here is the final output of our microwave oven.

Grade Matrix:

Interface	30%
Components Use:	30%
Documentation	40%
	100%