LAPORAN PRAKTIKUM
LATIHAN EXCEPTION HANDLING
MODUL 5

Oleh :

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S1SI-07-C

PROGRAM STUDI S1 SISTEM INFORMASI

FAKULTAS REKAYASA INDUSTRI

UNIVERSITAS TELKOM PURWOKERTO

I. GUIDED

1. Buat project baru pada Netbeans. Pada saat membuat project, hilangkan centang pada Create Main Class
2. Tambahkan package baru dengan nama perpustakaan dengan cara klik kanan pada Source Packages → New → Java Package...
3. Pada package perpustakaan, buat Class baru dengan nama Buku
4. Tambahkan tampilan program untuk input data dengan cara klik kanan pada package perpustakaan → New →JFrame Form... , beri nama InputBuku
5. Buat tampilan seperti di bawah ini:

No.	Component	Variable Name
1	JPanel	
2	JScrollPane	
3	JTextField	txtJudul
4	JTextField	txtPengarang
5	JTextField	txtIsbn
6	JButton	btnSubmit
7	JTable	tblBuku
8	JLabel	lblKeterangan

6. Jalankan project lalu coba tambahkan data, maka akan muncul data pada tabel. Namun ketika form kosong lalu klik tambah data, maka akan ada data kosong yang masuk pada tabel. Hal ini bisa diantisipasi dengan membuat user defined exception.
7. Buat sebuah class baru dengan nama ValidasiInputException
8. Ubah kode pada Class buku
9. Klik 2x pada tombol Tambah Data, ubah kode berikut
10. Jalankan project, coba tambahkan data baru. Ketika form kosong maka akan muncul peringatan pada bagian bawah aplikasi

Jawab:

Buku:

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to
change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this
template
 */
package Perpustakaan;

/**
 *
 * @author LENOVO
 */
public class Buku {
```

```java
    private String judul;
    private String pengarang;
    private String isbn;

    public Buku(String judul, String pengarang, String isbn){
        this.judul = judul;
        this.pengarang = pengarang;
        this.isbn = isbn;
    }

    public String getJudul() {
        return judul;
    }

    public String getPengarang() {
        return pengarang;
    }

    public String getIsbn() {
        return isbn;
    }

}
```

Penjelasan: Source kode diatas merupakan kelas buku yang dimana didalam kode tersebut terdapat judul,pengarang dan nomor ISBN.

Input Data:

```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 Perpustakaan;

import javax.swing.table.DefaultTableModel;

/**
 *
 * @author LENOVO
 */
public class InputData extends javax.swing.JFrame {

    /**
     * Creates new form Okeaman
     */
    public InputData() {
        initComponents();
    }
```

```java
    /**
     * 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")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jPanel1 = new javax.swing.JPanel();
        Isbn = new javax.swing.JPanel();
        TxtJudul = new javax.swing.JLabel();
        txtISBN = new javax.swing.JLabel();
        txtPengarang = new javax.swing.JLabel();
        TabJudul = new javax.swing.JTextField();
        TabPengarang = new javax.swing.JTextField();
        NoIsbn = new javax.swing.JTextField();
        jScrollPane2 = new javax.swing.JScrollPane();
        TabelBuku = new javax.swing.JTable();
        TabelData = new javax.swing.JButton();
        jLabel1 = new javax.swing.JLabel();

        jTable1.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null},
                {null, null, null, null}
            },
            new String [] {
                "Title 1", "Title 2", "Title 3", "Title 4"
            }
        ));
        jScrollPane1.setViewportView(jTable1);

        javax.swing.GroupLayout          jPanel1Layout          =          new
javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGap(0, 100, Short.MAX_VALUE)
        );
        jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGap(0, 100, Short.MAX_VALUE)
        );
```

```java
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        TxtJudul.setText("Judul Buku");

        txtISBN.setText("No ISBN");

        txtPengarang.setText("Pengarang");

        TabPengarang.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                TabPengarangActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout IsbnLayout = new javax.swing.GroupLayout(Isbn);
        Isbn.setLayout(IsbnLayout);
        IsbnLayout.setHorizontalGroup(

IsbnLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(IsbnLayout.createSequentialGroup()
            .addGap(31, 31, 31)

.addGroup(IsbnLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(TxtJudul)
                .addComponent(txtPengarang)
                .addComponent(txtISBN))
            .addGap(56, 56, 56)

.addGroup(IsbnLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(TabJudul)
                .addComponent(TabPengarang)
                .addComponent(NoIsbn, javax.swing.GroupLayout.DEFAULT_SIZE, 170,
Short.MAX_VALUE))
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
        IsbnLayout.setVerticalGroup(

IsbnLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(IsbnLayout.createSequentialGroup()
            .addContainerGap()

.addGroup(IsbnLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(TxtJudul)
```

```java
                .addComponent(TabJudul, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,        22,
Short.MAX_VALUE)

.addGroup(IsbnLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
                .addComponent(txtPengarang)
                .addComponent(TabPengarang,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)

.addGroup(IsbnLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BAS
ELINE)
                .addComponent(txtISBN)
                .addComponent(NoIsbn,   javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addContainerGap())
    );

    TabelBuku.setModel(new javax.swing.table.DefaultTableModel(
        new Object [][] {

        },
        new String [] {
            "Judul", "Pengarang", "ISBN"
        }
    ) {
        boolean[] canEdit = new boolean [] {
            false, true, true
        };

        public boolean isCellEditable(int rowIndex, int columnIndex) {
            return canEdit [columnIndex];
        }
    });
    jScrollPane2.setViewportView(TabelBuku);
    if (TabelBuku.getColumnModel().getColumnCount() > 0) {
        TabelBuku.getColumnModel().getColumn(0).setResizable(false);
    }

    TabelData.setText("Tambah Data");
    TabelData.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            TabelDataActionPerformed(evt);
```

```
        }
    });

    jLabel1.setText("Keterangan");

    javax.swing.GroupLayout                    layout                    =                    new
javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(Isbn,                    javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jScrollPane2,
javax.swing.GroupLayout.PREFERRED_SIZE,                    384,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGroup(layout.createSequentialGroup()
                .addGap(144, 144, 144)
                .addComponent(TabelData,
javax.swing.GroupLayout.PREFERRED_SIZE,                    170,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1,
javax.swing.GroupLayout.PREFERRED_SIZE,                    125,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap(19, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(28, 28, 28)
            .addComponent(Isbn,            javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(TabelData)
            .addGap(23, 23, 23)
            .addComponent(jScrollPane2,
javax.swing.GroupLayout.PREFERRED_SIZE,                    176,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(jLabel1)
```

```java
                .addContainerGap(31, Short.MAX_VALUE))
        );

        pack();
    }// </editor-fold>

    private void TabelDataActionPerformed(java.awt.event.ActionEvent evt) {
        String judul = TabJudul.getText();
        String pengarang = txtPengarang.getText();
        String isbn = txtISBN.getText();

        Buku buku = new Buku(judul, pengarang, isbn);

        DefaultTableModel data = (DefaultTableModel)TabelBuku.getModel();
        data.addRow(new        Object[]{buku.getJudul(),        buku.getPengarang(),
buku.getIsbn()});


    }

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

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional)
">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look
and feel.
         *                    For                    details                    see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for        (javax.swing.UIManager.LookAndFeelInfo        info        :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(InputData.class.getName()).log(java.util.logging.L
evel.SEVERE, null, ex);
        } catch (InstantiationException ex) {
```

```java
            java.util.logging.Logger.getLogger(InputData.class.getName()).log(java.util.logging.L
evel.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

            java.util.logging.Logger.getLogger(InputData.class.getName()).log(java.util.logging.L
evel.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

            java.util.logging.Logger.getLogger(InputData.class.getName()).log(java.util.logging.L
evel.SEVERE, null, ex);
        }
        //</editor-fold>
        //</editor-fold>

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new InputData().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify
    private javax.swing.JPanel Isbn;
    private javax.swing.JTextField NoIsbn;
    private javax.swing.JTextField TabJudul;
    private javax.swing.JTextField TabPengarang;
    private javax.swing.JTable TabelBuku;
    private javax.swing.JButton TabelData;
    private javax.swing.JLabel TxtJudul;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JScrollPane jScrollPane2;
    private javax.swing.JTable jTable1;
    private javax.swing.JLabel txtISBN;
    private javax.swing.JLabel txtPengarang;
    // End of variables declaration
}
```

Penjelasan: Program diatas merupakan kelas input data yang dimana menggunakan kelas Jfanel.

Soal nomor 8:

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package Perpustakaan;

/**
 *
 * @author LENOVO
 */
public class Bukuu {
    package Perpustakaan;
/**
 * @author Tegar Ferdian Firmansyah
```

```java
*/
public class Buku {
    private String judul;
    private String pengarang;
    private String isbn;
    private String tahunTerbit;
    private String harga;
    private String kategori;

    public Buku(String judul, String pengarang, String isbn, String tahunTerbit,
    String harga, String kategori) throws ValidasiInputException {
    if (judul.isEmpty()) {
        throw new ValidasiInputException("Judul buku tidak boleh kosong!");
    }
    if (pengarang.isEmpty()) {
        throw new ValidasiInputException("Pengarang tidak boleh kosong!");
    }
    if (!isbn.matches("\\d{13}")) {
        throw new ValidasiInputException("ISBN harus 13 digit angka!");
    }
    if (!tahunTerbit.matches("\\d{4}")) {
        throw new ValidasiInputException("Tahun Terbit harus 4 digit angka!");
    }
    try {
        long hargaNumber = Long.parseLong(harga);
        if (hargaNumber < 0) {
            throw new ValidasiInputException("Harga tidak boleh angka negatif!");
        }
    } catch (NumberFormatException e) {
        throw new ValidasiInputException("Input harus berupa angka!");
    }
    if (kategori == null || kategori.isEmpty()) {
        throw new ValidasiInputException("Kategori harus dipilih!");
    }

    this.judul = judul;
    this.pengarang = pengarang;
    this.isbn = isbn;
    this.tahunTerbit = tahunTerbit;
    this.harga = harga;
    this.kategori = kategori;

    }

    public String getJudul() {
        return judul;
    }

    public String getPengarang() {
        return pengarang;
```

```
    }

    public String getIsbn() {
        return isbn;
    }

    public String getTahunTerbit() {
        return tahunTerbit;
    }

    public String getHarga() {
        return harga;
    }

    public String getKategori() {
        return kategori;
    }
}

}
```

Penjelasan: Program diatas merupakan ubahan dari kelas Buku .

II. UNGUIDED

Tambahkan inputan berikut pada aplikasi:

1. Tahun Terbit: Validasi untuk angka empat digit.

2. Harga Buku: Validasi untuk angka positif.

3. Kategori Buku: Validasi untuk input tidak kosong. (dalam bentuk Dropdown)

Jawab:

Kode Program:

```
/*
 * 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 Perpustakaan;

import java.awt.Color;
import javax.swing.table.DefaultTableModel;


 * @author LENOVO
 */
public class InputBuku extends javax.swing.JFrame {
```

```java
public InputBuku() {
    initComponents();
}


@SuppressWarnings("unchecked")

private void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    txtJudul = new javax.swing.JTextField();
    txtPengarang = new javax.swing.JTextField();
    txtIsbn = new javax.swing.JTextField();
    BtnSubmit = new javax.swing.JButton();
    jLabel4 = new javax.swing.JLabel();
    txttahunTerbit = new javax.swing.JTextField();
    jLabel5 = new javax.swing.JLabel();
    txtHarga = new javax.swing.JTextField();
    jLabel6 = new javax.swing.JLabel();
    cbxKategori = new javax.swing.JComboBox<>();
    lblKeterangan = new javax.swing.JLabel();
    jScrollPane2 = new javax.swing.JScrollPane();
    tblBuku = new javax.swing.JTable();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    jLabel1.setText("Judul Buku");

    jLabel2.setText("Nama Pengarang");

    jLabel3.setText("No ISBN");

    BtnSubmit.setText("Tambah Data");
    BtnSubmit.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            BtnSubmitActionPerformed(evt);
        }
    });

    jLabel4.setText("Tahun Terbit Buku");

    jLabel5.setText("Harga Buku");

    jLabel6.setText("Kategori Buku");
```

```java
        cbxKategori.setModel(new          javax.swing.DefaultComboBoxModel<>(new
String[] { null, "Novel", "Komik", "Sejarah" }));

    javax.swing.GroupLayout             jPanel1Layout           =           new
javax.swing.GroupLayout(jPanel1);
    jPanel1.setLayout(jPanel1Layout);
    jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addContainerGap()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
LEADING)
            .addComponent(jLabel1)
            .addComponent(jLabel2)
            .addComponent(jLabel3)
            .addComponent(jLabel4)
            .addComponent(jLabel5)
            .addComponent(jLabel6))
        .addGap(85, 85, 85)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
LEADING, false)
            .addComponent(BtnSubmit, javax.swing.GroupLayout.DEFAULT_SIZE,
199, Short.MAX_VALUE)
            .addComponent(txtJudul)
            .addComponent(txtPengarang)
            .addComponent(txtIsbn)
            .addComponent(txttahunTerbit)
            .addComponent(txtHarga)
            .addComponent(cbxKategori,                                       0,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addContainerGap()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)
            .addComponent(jLabel1)
            .addComponent(txtJudul, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)
```

```java
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)
            .addComponent(jLabel2)
            .addComponent(txtPengarang,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)
            .addComponent(jLabel3)
            .addComponent(txtIsbn,  javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)
            .addComponent(jLabel4)
            .addComponent(txttahunTerbit,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)
            .addComponent(jLabel5)
            .addComponent(txtHarga,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)
            .addComponent(jLabel6)
            .addComponent(cbxKategori,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,      11,
Short.MAX_VALUE)
        .addComponent(BtnSubmit)
        .addGap(19, 19, 19))
    );
```

```java
        lblKeterangan.setText("Keterangan");

        tblBuku.setModel(new javax.swing.table.DefaultTableModel(
            new Object [][] {

            },
            new String [] {
                "Judul", "Pengarang", "ISBN", "Tahun", "Harga", "Kategori"
            }
        ));
        jScrollPane2.setViewportView(tblBuku);

        javax.swing.GroupLayout                    layout                    =                    new
javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)
                    .addComponent(jPanel1,    javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(lblKeterangan)
                        .addGap(0, 0, Short.MAX_VALUE))
                    .addComponent(jScrollPane2,
javax.swing.GroupLayout.DEFAULT_SIZE, 472, Short.MAX_VALUE))
                .addContainerGap())
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jPanel1,    javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(jScrollPane2, javax.swing.GroupLayout.DEFAULT_SIZE,
107, Short.MAX_VALUE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(lblKeterangan)
                .addContainerGap())
        );

        pack();
    }
```

```java
    private void BtnSubmitActionPerformed(java.awt.event.ActionEvent evt) {
        try {
            String judul = txtJudul.getText();
            String pengarang = txtPengarang.getText();
            String isbn = txtIsbn.getText();
            String tahunTerbit = txttahunTerbit.getText();
            String harga = txtHarga.getText();
            String kategori = (String) cbxKategori.getSelectedItem();


            Buku buku = new Buku(judul, pengarang, isbn, tahunTerbit, harga, kategori);


            DefaultTableModel data = (DefaultTableModel)
            tblBuku.getModel();
            data.addRow(new Object[]{buku.getJudul(),
            buku.getPengarang(), buku.getIsbn(),
            buku.getTahunTerbit(), buku.getHarga(),
            buku.getKategori()});


            txtJudul.setText("");
            txtPengarang.setText("");
            txtIsbn.setText("");
            txttahunTerbit.setText("");
            txtHarga.setText("");
            cbxKategori.setSelectedIndex(0);
            lblKeterangan.setForeground(Color.GREEN);
            lblKeterangan.setText("Buku berhasil ditambahkan!");

            } catch (ValidasiInputException e) {
                lblKeterangan.setForeground(Color.RED);
                lblKeterangan.setText("Error: " + e.getMessage());
            }

    }

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {

        try {
            for         (javax.swing.UIManager.LookAndFeelInfo          info          :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
```

```java
        }
      } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(InputBuku.class.getName()).log(java.util.logging.
Level.SEVERE, null, ex);
      } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(InputBuku.class.getName()).log(java.util.logging.
Level.SEVERE, null, ex);
      } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(InputBuku.class.getName()).log(java.util.logging.
Level.SEVERE, null, ex);
      } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(InputBuku.class.getName()).log(java.util.logging.
Level.SEVERE, null, ex);
      }

      java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
          new InputBuku().setVisible(true);
        }
      });
    }


    private javax.swing.JButton BtnSubmit;
    private javax.swing.JComboBox<String> cbxKategori;
    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.JPanel jPanel1;
    private javax.swing.JScrollPane jScrollPane2;
    private javax.swing.JLabel lblKeterangan;
    private javax.swing.JTable tblBuku;
    private javax.swing.JTextField txtHarga;
    private javax.swing.JTextField txtIsbn;
    private javax.swing.JTextField txtJudul;
    private javax.swing.JTextField txtPengarang;
    private javax.swing.JTextField txttahunTerbit;

}
```

Penjelasan : Pada program ini menambahkanTahun terbit,harga buku dan kategori buku
dalam pada kategori buku hanya dalam bentuk dropdown.