Pharmacy System

White Box Testing

Function: Search Button (search_page.java).

Fun. Located: From 134 - To 178.

Code:

```java
private void jButtonsearchActionPerformed(java.awt.event.ActionEvent evt)
    {
        String medicineName=SearchTextField.getText();

      if(medicineName.isEmpty())
       {
           JOptionPane.showMessageDialog(this,"Please , Enter your a medicine name");
           return;
       }
 Connection con = null;
 Statement stmt = null;
 ResultSet result = null;
        try
        {   ...........................................................................................


           if(result.next())
           {
               int amount = result.getInt("amount");
               notes = result.getString("notes");
               if(amount==0)
               JOptionPane.showMessageDialog(this,"medicine out of stock "+notes);
               else JOptionPane.showMessageDialog(this,"medicine available "+notes);

           }
           else
           {
               JOptionPane.showMessageDialog(this,"Invalid medicine name");
           }

        }catch(Exception ex)
        {
...........................................................................................
        }
        finally
        {
            ...........................................................................................
        }
    }
```
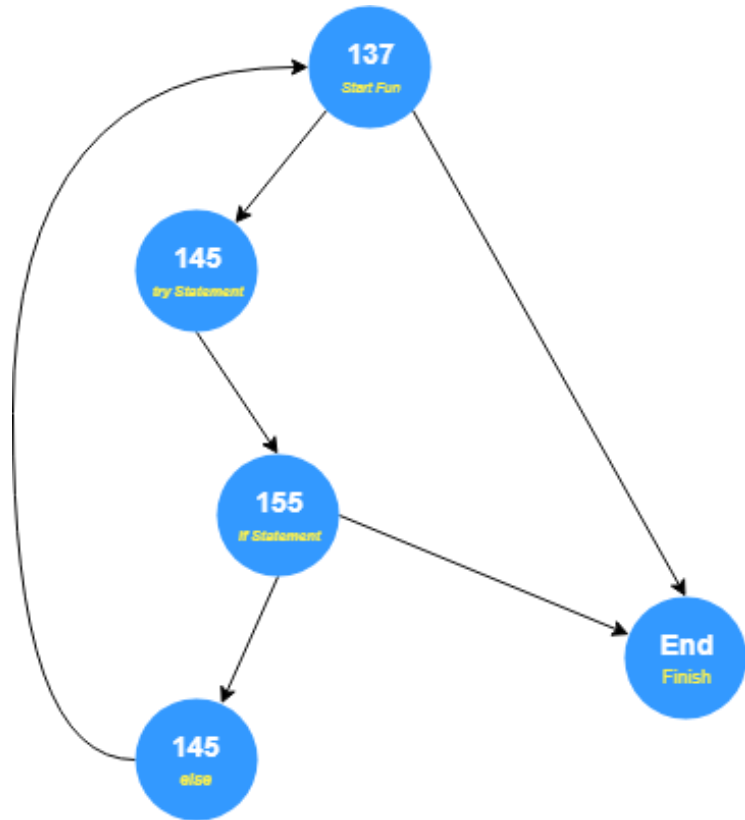
Testing Graph:

Cyclomatic Complexity:

- V(G)= Closed Path +1 = 2+1= 3.
- V(G)= Predicates + 1 = 2 + 1 = 3.
- V(G)= E-N +2 = 6-5+2 = 3.

Paths:

#1: 137,END.

#2: 137,145,155,145,137.

Function: Add Amount Button <Tab:Edit Amount> (Data_Entry.java).

Fun. Located: From 354 - To 410.

Code:

```java
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
        String name=jTextField2.getText();
        System.err.println("ww");
        String am =jTextField3.getText();
        int amount=Integer.parseInt(am);
        int Amount = 0;

        if(name.isEmpty()){
            JOptionPane.showMessageDialog(this, "Please enter medicine name");
            return;
        }
        if(am.isEmpty()){
            JOptionPane.showMessageDialog(this, "Please amount Of Medicine");
            return;
        }

        Connection con = null;
        Statement comand=null;
        ResultSet rst =null;
        try {
            ……………………………………………………………………………

          String a="select * from medicine "+"WHERE m_name='"+name+"'";
          rst = comand.executeQuery(a);

           if(rst.next())
            {
                Amount = rst.getInt("amount");
            }
            {
                JOptionPane.showMessageDialog(this,"Invalid medicine name");
            }
         String sql = ("UPDATE medicine set amount="+(amount+Amount)+"WHERE
m_name='"+name+"'") ;

                int affectsRows = comand.executeUpdate(sql);

            if(affectsRows == 1)
            {
                JOptionPane.showMessageDialog(this, "Successful Update Amount ");
            }
            else
            {
                JOptionPane.showMessageDialog(this, "Incorrect Amount !!!");
            }
```
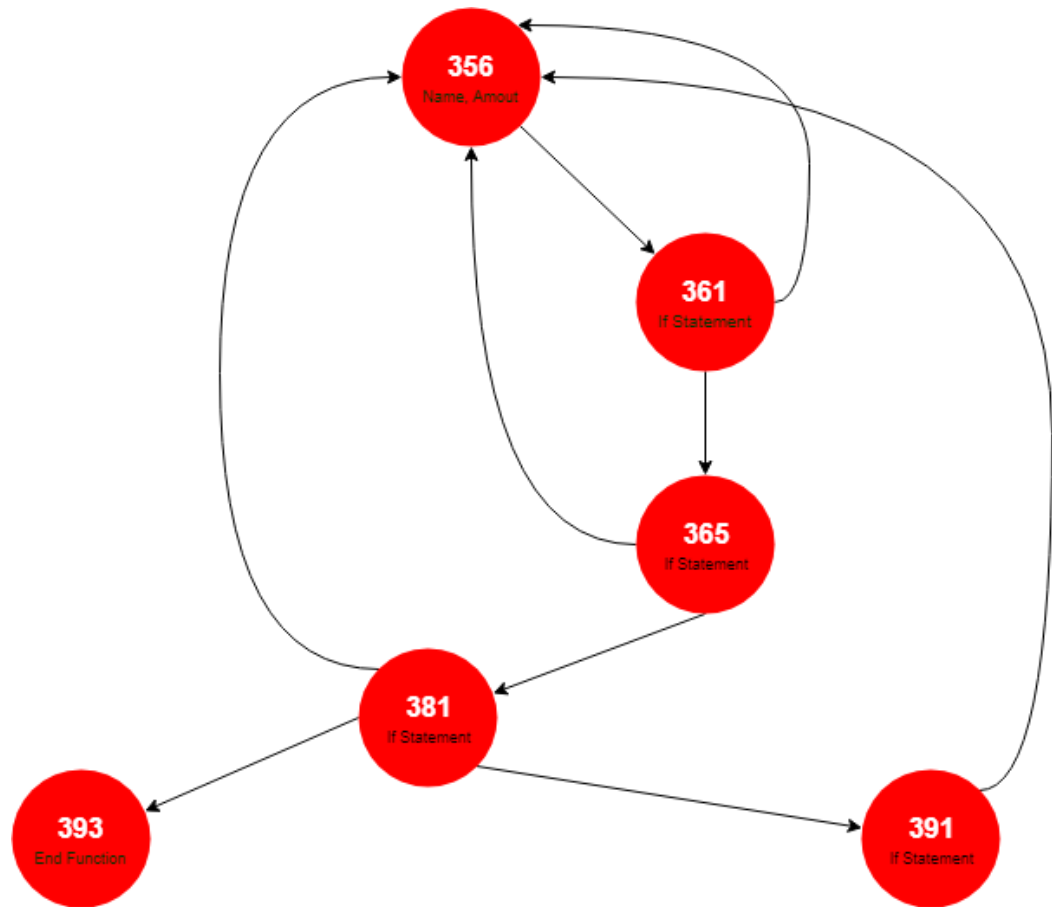
Testing Graph:

Cyclomatic Complexity:

- $V(G)=$ Closed Path $+1 = 4+1= 5.$
- $V(G)=$ Predicates $+ 1 = 4 + 1 = 5.$
- $V(G)=$ E-N $+2 = 9-6+2 = 5.$

Paths:

#1: 356,361,365,381,393.
#2: 356,361,356.
#3: 356,361,365,356.
#4: 356,361,365,381,356.
#5: 356,361,365,381,391,356