



**NAMIBIA UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY

## Topic: **Phonebook Application**

Student Name	Student Number
Iiyambo T. Nangombe	224049844

## Display Module

**Function:** DisplayContacts()

**Purpose:** Displays all contacts currently stored in the phonebook.

## Pseudocode

BEGIN

    Prompt user for contact details

    Get Contacts

    If (Contacts name and number not found) THEN

        Display “No contacts available”

    END

ELSE If (contact name AND number found) THEN

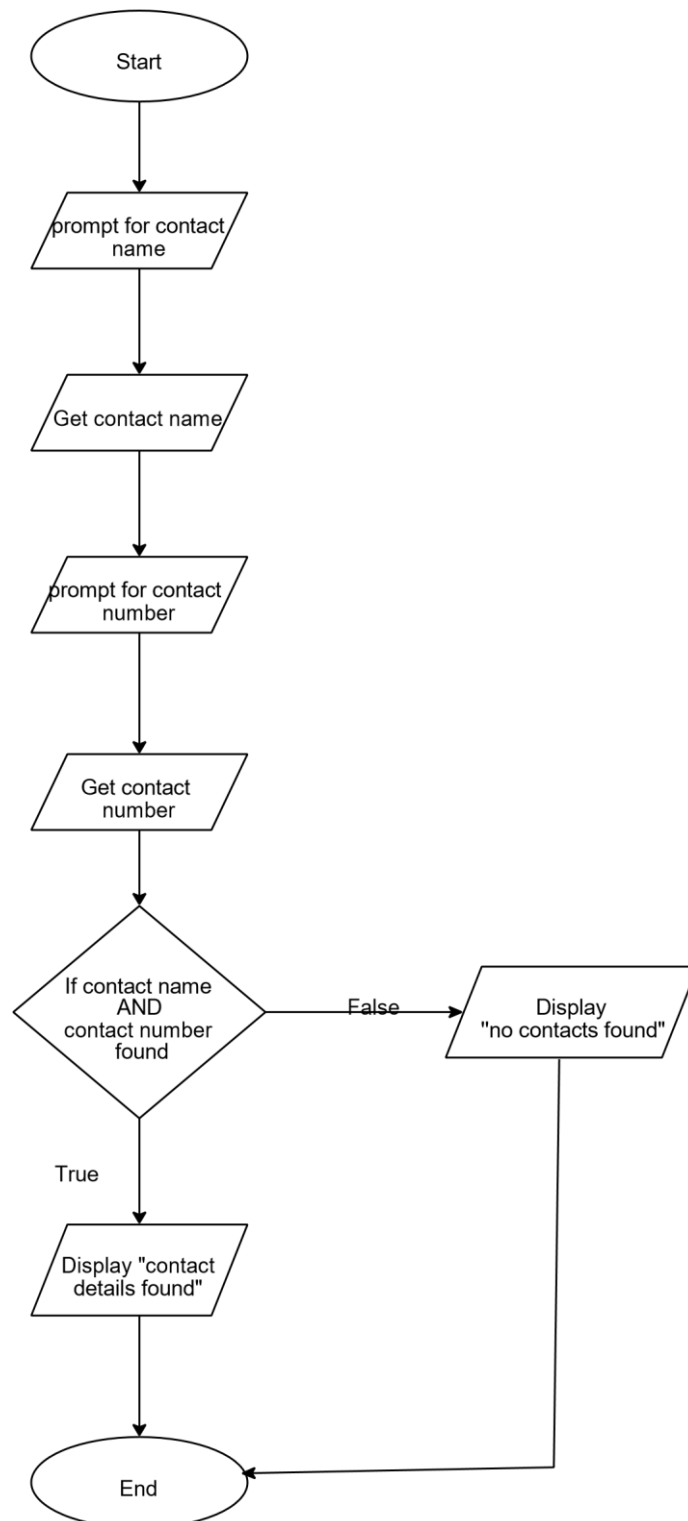
    Display “Contact Details found”

    END IF

END IF

END

## Flowchart



## Codes

```
private void cnDisplayActionPerformed(java.awt.event.ActionEvent evt) {  
  
    Connection conn = null;  
    PreparedStatement pstmt = null;  
    ResultSet rs = null;  
  
    try {  
        // Establish the connection  
        conn = connectionToDB.getConnection();  
  
        String query = "SELECT * FROM contact";  
  
        // Prepare the statement  
        pstmt = conn.prepareStatement(query);  
  
        // Execute the query and get the result set  
  
        rs = pstmt.executeQuery();  
  
        ResultSetMetaData rsmd = rs.getMetaData();  
        int columnCount = rsmd.getColumnCount();  
  
        // Create an array for column names  
  
        String[] columnNames = new String[columnCount];  
        for (int i = 1; i <= columnCount; i++) {  
            columnNames[i - 1] = rsmd.getColumnName(i);  
        }  
  
        // Create a DefaultTableModel to store the data  
        DefaultTableModel model = new DefaultTableModel(columnNames, 0);  
  
        // Set the model for the table (jTable1)  
        jTable1.setModel(model);  
  
        // Clear the table before adding new data  
        model.setRowCount(0);  
  
        // Iterate through the result set and add data to the table
```

```

while (rs.next()) {
    Object[] row = new Object[columnCount];

    for (int i = 1; i <= columnCount; i++) {
        row[i - 1] = rs.getObject(i); // Get the object from each column
    }

    // Add the row to the table model
    model.addRow(row);
}

} catch (SQLException e) {
    // Show an error dialog if an exception occurs
    JOptionPane.showMessageDialog(this, "An error occurred: " + e.getMessage(), "Error",
JOptionPane.ERROR_MESSAGE);
} finally {
    // Close the resources
    try {
        if (rs != null) rs.close();
        if (pstmt != null) pstmt.close();
        if (conn != null) conn.close();
    } catch (SQLException e) {
        e.printStackTrace();
    }
}
}
}

```