



NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Topic: **PhoneBook Application**

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DSA Project

Group: 20

DELETE MODULE

Function: DeleteContact(String name)

Purpose: Deletes a contact from the phonebook.

PSEUDOCODE

START

DATA: contact name

PHONE: contact phone number

NEXT: pointer to next contact

PREV: pointer to previous contact

CONSTRUCTOR Node(name, phone, email)

DATA = name

PHONE = phone

NEXT = NULL

PREV = NULL

FUNCTION deleteAtGivenPos(head)

TEMP = head

DISPLAY "Enter position where you want to delete"

GET position

 i = 1

 WHILE(i < position - 1)

 IF temp.next is null

 DISPLAY "Contact not found"

 RETURN head

 ENDIF

 TEMP = TEMP.NEXT

 i = i + 1

 ENDWHILE

 IF temp.next is null

 DISPLAY "Contact not found"

 RETURN head

 ENDIF

nextnode = temp.next

temp.next = nextnode.next

 IF nextnode.next is not null

 nextnode.next.prev = temp

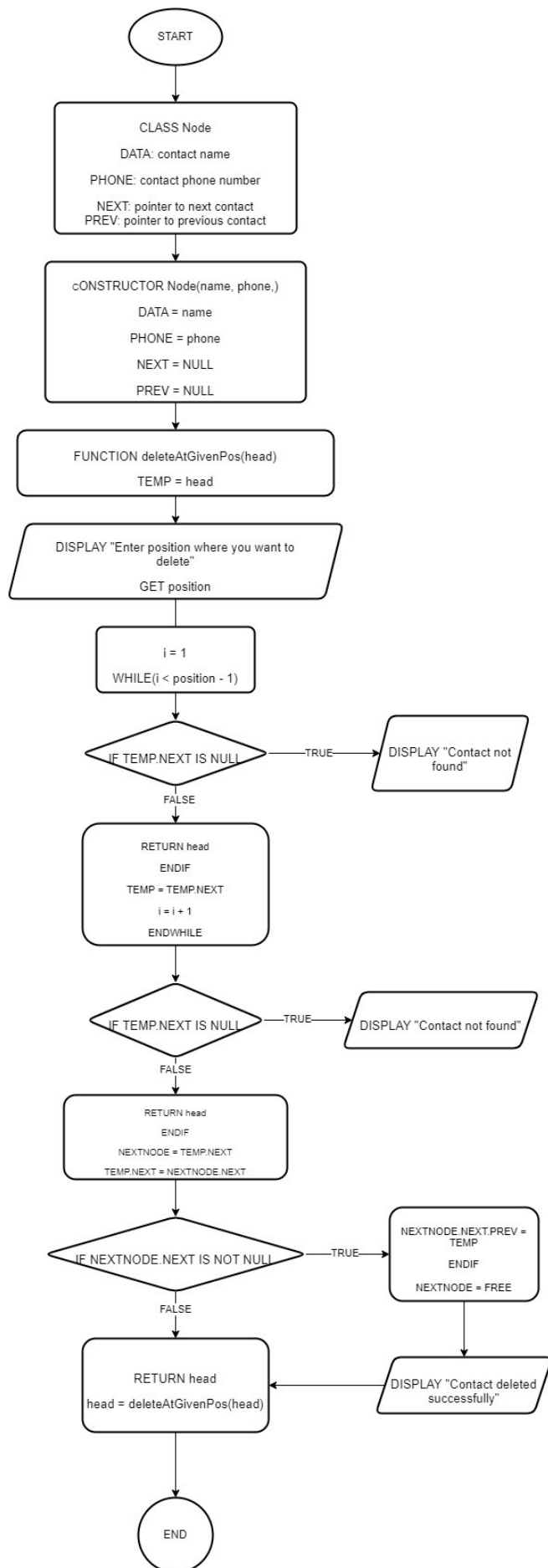
 ENDIF

```
nextnode = free  
DISPLAY "Contact deleted successfully"  
RETURN head
```

```
    head = deleteAtGivenPos(head)
```

```
END
```

FLOWCHART



CODE

```
private void cnDeleteActionPerformed(java.awt.event.ActionEvent evt) {  
  
    int selectedRow = jTable1.getSelectedRow();  
    Connection conn = null;  
    if (selectedRow != -1) {  
        // Get the ID of the selected row (assuming it's in the first column)  
        DefaultTableModel model = (DefaultTableModel) jTable1.getModel();  
        Object id = model.getValueAt(selectedRow, 0); // Adjust the column index if needed  
  
        try {  
            // Establish database connection  
            conn = connectionToDB.getConnection();  
  
            // Prepare DELETE SQL query  
            String sql = "DELETE FROM contact WHERE Id = ?";  
            PreparedStatement pstmt = conn.prepareStatement(sql);  
            pstmt.setObject(1, id);  
  
            // Execute delete  
            int deletedRows = pstmt.executeUpdate();  
  
            if (deletedRows > 0) {  
                // Remove the row from the table model  
                model.removeRow(selectedRow);  
                JOptionPane.showMessageDialog(null, "Row deleted successfully.");  
            } else {  
                JOptionPane.showMessageDialog(null, "Deletion failed or row not found in the  
database.");  
            }  
  
            // Close the PreparedStatement  
            pstmt.close();  
  
        } catch (SQLException e) {  
            e.printStackTrace();  
            JOptionPane.showMessageDialog(null, "An error occurred: " + e.getMessage(),  
"Error", JOptionPane.ERROR_MESSAGE);  
        } finally {  
            // Close the connection in the finally block  
            try {  
                if (conn != null) {  
                    conn.close();  
                }  
            }  
        }  
    }  
}
```

```
    }  
  } catch (SQLException e) {  
    e.printStackTrace();  
  }  
}  
} else {  
  JOptionPane.showMessageDialog(null, "Please select a row to delete.");  
}  
  
}
```