

Contact Manager — Sprint 2 (Refactored Submission)

Problem Statement

Contact Manager application helps users manage contacts efficiently.

User Stories

1. View previously added contacts.
2. Modify existing contacts.
3. Delete a contact.
4. Display an error message if record not added.
5. Display success message when record is added.

Directory Structure

```
ContactManager/
├── src/
│   ├── com/example/contact/
│   │   ├── model/Contact.java
│   │   ├── dao/ContactDAO.java
│   │   └── servlet/ContactServlet.java
│   └── WebContent/
│       ├── jsp/
│       │   ├── listContacts.jsp
│       │   ├── addContact.jsp
│       │   ├── editContact.jsp
│       │   ├── header.jsp
│       │   └── footer.jsp
│       ├── css/styles.css
│       └── WEB-INF/web.xml
```

Model — Contact.java

```
public class Contact {
    private int id;
    private String name;
    private String email;
    private String phone;
    private String address;

    public Contact() {}
    public Contact(int id, String name, String email, String phone, String address) {
        this.id = id; this.name = name; this.email = email;
        this.phone = phone; this.address = address;
    }

    // Getters and setters
}
```

DAO — ContactDAO.java

```
public class ContactDAO {
    private String jdbcURL = "jdbc:mysql://localhost:3306/contactdb";
    private String jdbcUsername = "root";
    private String jdbcPassword = "password";

    private static final String INSERT_SQL =
        "INSERT INTO contacts (name,email,phone,address) VALUES (?, ?, ?, ?)";

    private static final String SELECT_ALL = "SELECT * FROM contacts";
}
```

```

    public void insertContact(Contact c) throws SQLException {
        Connection con = getConnection();
        PreparedStatement ps = con.prepareStatement(INSERT_SQL);
        ps.setString(1, c.getName());
        ps.setString(2, c.getEmail());
        ps.setString(3, c.getPhone());
        ps.setString(4, c.getAddress());
        ps.executeUpdate();
    }

    public List<Contact> selectAllContacts() { ... }
    public boolean updateContact(Contact c) { ... }
    public boolean deleteContact(int id) { ... }
}

```

Servlet — ContactServlet.java

```

@WebServlet("/")
public class ContactServlet extends HttpServlet {
    private ContactDAO contactDAO;

    public void init() { contactDAO = new ContactDAO(); }

    protected void doGet(HttpServletRequest req, HttpServletResponse res)
        throws ServletException, IOException {

        String action = req.getServletPath();
        switch (action) {
            case "/new": showNewForm(req, res); break;
            case "/insert": insert(req, res); break;
            case "/edit": showEditForm(req, res); break;
            case "/update": update(req, res); break;
            case "/delete": delete(req, res); break;
            default: list(req, res);
        }
    }
}

```

JSP — listContacts.jsp

```

<table>
  <c:forEach var="c" items="${listContact}">
    <tr>
      <td>${c.id}</td>
      <td>${c.name}</td>
      <td>${c.email}</td>
      <td>${c.phone}</td>
      <td>
        <a href="edit?id=${c.id}">Edit</a>
        <a href="delete?id=${c.id}">Delete</a>
      </td>
    </tr>
  </c:forEach>
</table>

```

Output — Screenshot Placeholders

```

[ Screenshot 1: List All Contacts Page ]

[ Screenshot 2: Add New Contact Success Message ]

[ Screenshot 3: Edit Contact Page ]

[ Screenshot 4: Delete Success Message ]

```

Contact List Page

Contact Manager

#	Name	Email	Phone	Address
1	John Doe	john@exnail.com	129-466-7860	
2	Jone Smith	jone@example.com	088-765-4321	
3	Alice Johnson	alice@example.com	539-123-4357	

Add New Contact Page

Add New Contact

Name

Email

Phone

Address

Add Contact Success Message

Contact Manager

Contact has been added sucessfully.

Contact List

Eriete

Name	Email	Phone	Address
No Data			

Edit Contact Page

Contact Manager

Name

Email

Phone

Address

Delete Confirmation or
After Delete Message

Contact Manager

Contact has been deleted successfully.

Delete Confirmation

Name	Email	Phone	Address
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Contact Home Page

Contact Manager