

Sulekha Classified Ads Platform – High Level Design (HLD) Document

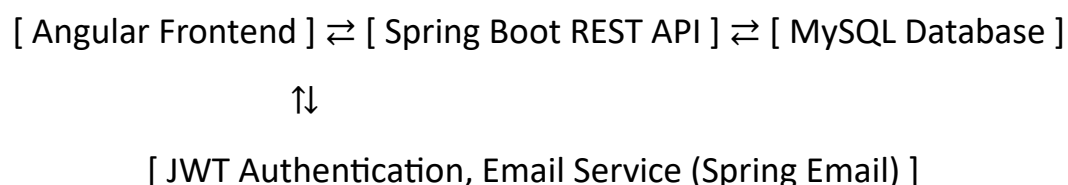
1. System Overview

This project is a **classified ads web application** where users can post, search, and manage advertisements. The system supports multiple user roles: **Admin, Registered User, and Guest User**. The application provides personalized dashboards for users to manage their listings and for admins to moderate content, manage users, and maintain categories.

Technology Stack:

- **Frontend:** Angular
 - **Backend:** Spring Boot (Java)
 - **RESTful API Communication**
 - **Database:** MySQL
 - **Security:** JWT Authentication
 - **Email Service:** Spring Email
-

2. System Architecture



3. Page-wise High Level Design

i) Login Page

- **Flow:**
User enters credentials → API call → Role validation → Redirect to relevant dashboard
 - **API Endpoint:**
POST /api/auth/login
-

- **Request Body:**

json

```
{  
  "username": "user1",  
  "password": "password123"  
}
```

- **Response:**

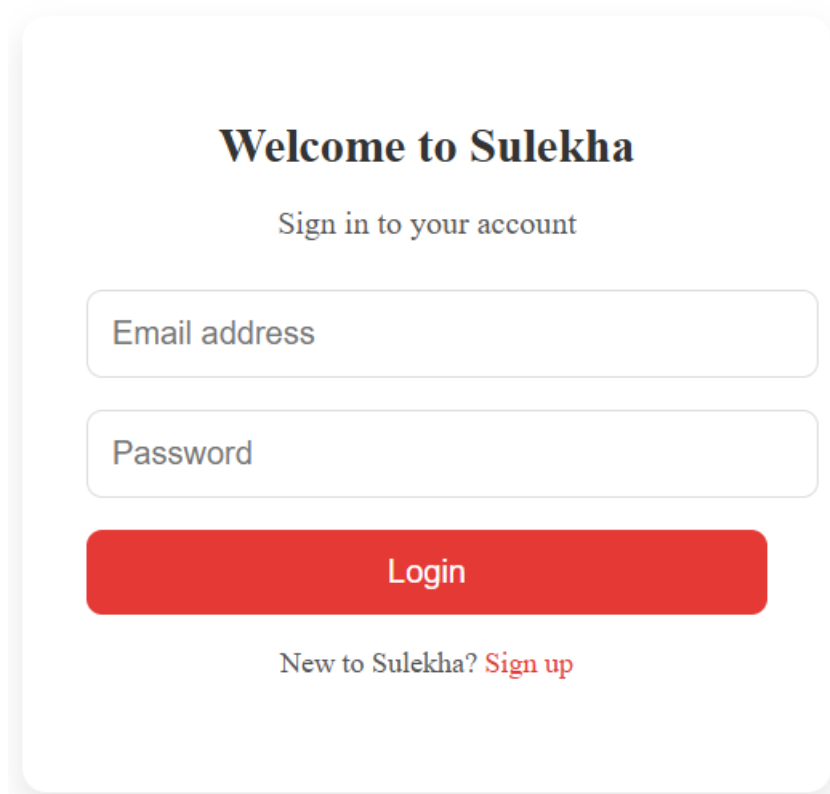
json

```
b {  
  "status": "success",  
  "role": "admin",  
  "token": "JWT_TOKEN"  
}
```

- **Redirects:**

- Admin → /admin/dashboard
- User → /user/dashboard

- **Page Layout:**



The image shows a login form for 'Sulekha'. It has a title 'Welcome to Sulekha', a subtitle 'Sign in to your account', two input fields for 'Email address' and 'Password', a red 'Login' button, and a link 'New to Sulekha? Sign up'.

Welcome to Sulekha

Sign in to your account

Email address

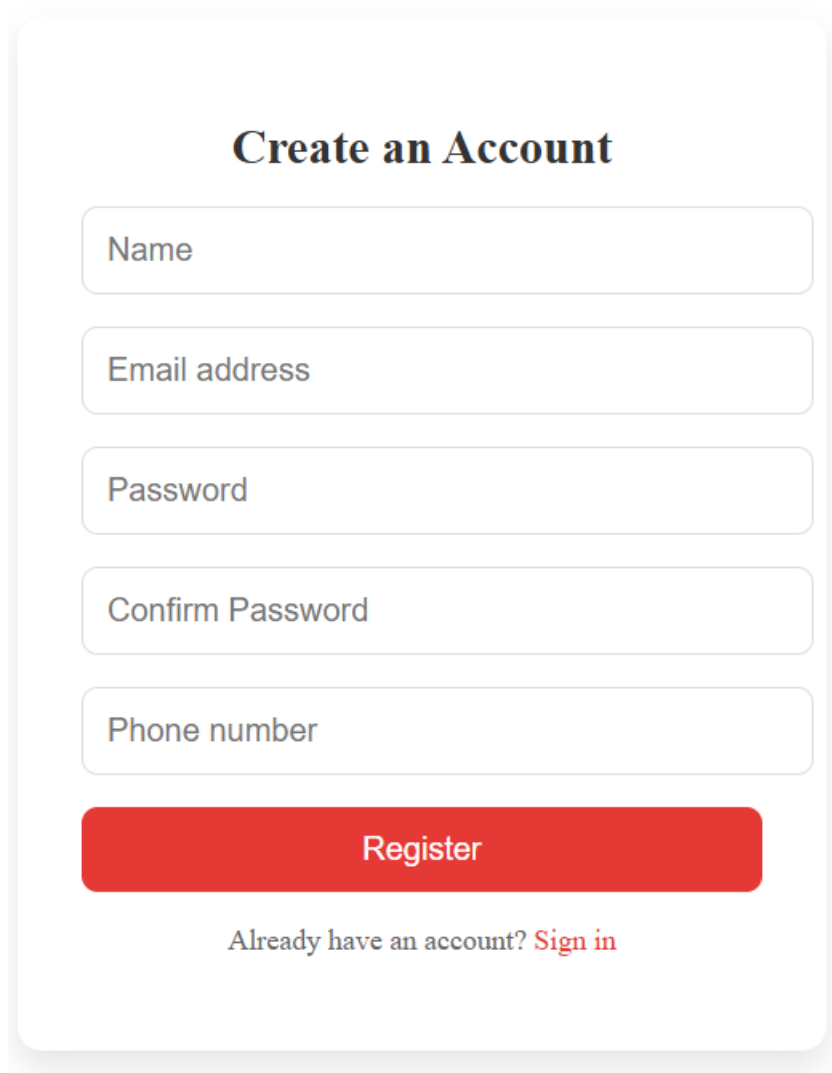
Password

Login

New to Sulekha? [Sign up](#)

ii) Signup Page

- **Flow:**
User registers → Validation → User created in DB → Redirect to login
- **API:** POST /api/auth/register
- **Page Layout:**

A registration form titled "Create an Account" with five input fields: Name, Email address, Password, Confirm Password, and Phone number. Below the fields is a red "Register" button and a link "Sign in" for existing users.

Create an Account

Already have an account? [Sign in](#)

iii) Forgot Password Page

- **Flow:**
User submits email → OTP/email link sent → New password set
- **APIs:**
 - POST /api/auth/forgot-password
 - POST /api/auth/reset-password

iv) Homepage

- **Flow:**
Show featured ads → Search bar → Filters (category, city)

- **APIs:**
 - GET /api/ads/recent
 - GET /api/categories
 - GET /api/cities
-

v) Post Ad Page

- **Flow:**
Form fill → Ad submission → Status = pending
- **API:**
POST /api/ads

Sample Request:

json

CopyEdit

```
{  
  "title": "Honda Activa",  
  "description": "Good condition",  
  "price": 40000,  
  "images": ["img1.jpg"],  
  "categoryId": 3,  
  "cityId": 7,  
  "userId": 12  
}
```

vi) Edit Ad Page

- **API:**
PUT /api/ads/{id}
-

vii) User Dashboard

- **Flow:**
View own ads → Edit/Delete
 - **API:**
GET /api/user/my-ads
-

viii) Admin Dashboard

- **Modules & APIs:**
 - Manage Ads: GET /api/admin/ads
 - Approve/Reject Ads: PUT /api/admin/ads/{id}
 - Manage Users: GET /api/admin/users
 - Manage Categories: POST/PUT/DELETE /api/admin/categories
-

ix) Search Results Page

- **API:**
GET /api/search?query=laptop&city=Delhi
-

x) Contact Us Page

- **API:**
POST /api/contact
-

xi) Ad Details Page

- **APIs:**
 - GET /api/ads/{id}
 - POST /api/ads/{id}/views
-

xii) 404 - Not Found Page

- Standard error page for invalid URLs.