Frontend (React)

college-directory-frontend/

```
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│   └── ...
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│   │   ├── StudentDashboard.js
│   │   ├── FacultyDashboard.js
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│   │   └── auth.js
│   ├── styles/
│   │   └── ...
│   └── ...
├── package.json
└── ...
```

Backend (Java Spring Boot)college-directory-backend/

```
│
├── src/
│   ├── main/
│   │   ├── java/
│   │   │   ├── com/
│   │   │   │   ├── college/
│   │   │   │   │   ├── CollegeDirectoryApplication.java
│   │   │   │   │   ├── controller/
│   │   │   │   │   │   ├── AuthController.java
│   │   │   │   │   │   ├── StudentController.java
│   │   │   │   │   │   ├── FacultyController.java
│   │   │   │   │   │   ├── AdminController.java
```

```
│   │   │   │   │   │   └── ...
│   │   │   │   │   ├── model/
│   │   │   │   │   │   ├── User.java
│   │   │   │   │   │   ├── StudentProfile.java
│   │   │   │   │   │   ├── FacultyProfile.java
│   │   │   │   │   │   ├── AdminProfile.java
│   │   │   │   │   │   ├── Course.java
│   │   │   │   │   │   ├── Enrollment.java
│   │   │   │   │   │   ├── Department.java
│   │   │   │   │   │   └── ...
│   │   │   │   │   ├── repository/
│   │   │   │   │   │   ├── UserRepository.java
│   │   │   │   │   │   ├── StudentProfileRepository.java
│   │   │   │   │   │   ├── FacultyProfileRepository.java
│   │   │   │   │   │   ├── AdminProfileRepository.java
│   │   │   │   │   │   ├── CourseRepository.java
│   │   │   │   │   │   ├── EnrollmentRepository.java
│   │   │   │   │   │   ├── DepartmentRepository.java
│   │   │   │   │   │   └── ...
│   │   │   │   │   ├── service/
│   │   │   │   │   │   ├── AuthService.java
│   │   │   │   │   │   ├── StudentService.java
│   │   │   │   │   │   ├── FacultyService.java
│   │   │   │   │   │   ├── AdminService.java
│   │   │   │   │   │   └── ...
│   │   │   │   │   ├── security/
│   │   │   │   │   │   ├── JwtAuthenticationFilter.java
│   │   │   │   │   │   ├── JwtAuthorizationFilter.java
│   │   │   │   │   │   └── ...
│   │   │   │   │   └── ...
│   │   ├── resources/
│   │   │   ├── application.properties
│   │   │   └── ...
│   └── test/
│       └── ...
├── pom.xml
└── ...
```

Frontend Code

public/index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>College Directory</title>
```

```
</head>
<body>
  <div id="root"></div>
</body>
</html>
```

src/index.js

```
import React from 'react';
import ReactDOM from 'react-dom';
import App from './App';
import './styles/index.css';

ReactDOM.render(
  <React.StrictMode>
    <App />
  </React.StrictMode>,
  document.getElementById('root')
);
```

src/App.js

```
import React from 'react';
import { BrowserRouter as Router, Route, Switch } from 'react-router-dom';
import LoginPage from './components/LoginPage';
import StudentDashboard from './components/StudentDashboard';
import FacultyDashboard from './components/FacultyDashboard';
import AdminDashboard from './components/AdminDashboard';
import './styles/App.css';

function App() {
  return (
    <Router>
      <Switch>
        <Route path="/" exact component={LoginPage} />
        <Route path="/student" component={StudentDashboard} />
        <Route path="/faculty" component={FacultyDashboard} />
        <Route path="/admin" component={AdminDashboard} />
      </Switch>
    </Router>
  );
}

export default App;
```

src/components/LoginPage.js

```
import React, { useState } from 'react';
```

```
import { useHistory } from 'react-router-dom';
import { login } from '../services/auth';
import './LoginPage.css';

const LoginPage = () => {
    const [username, setUsername] = useState('');
    const [password, setPassword] = useState('');
    const [role, setRole] = useState('Student');
    const [error, setError] = useState('');
    const history = useHistory();

    const handleSubmit = async (e) => {
        e.preventDefault();
        try {
            await login({ username, password, role });
            if (role === 'Student') history.push('/student');
            if (role === 'Faculty Member') history.push('/faculty');
            if (role === 'Administrator') history.push('/admin');
        } catch (err) {
            setError('Invalid credentials');
        }
    };

    return (
        <div className="login-page">
            <form onSubmit={handleSubmit}>
                <input
                    type="text"
                    placeholder="Username"
                    value={username}
                    onChange={(e) => setUsername(e.target.value)}
                />
                <input
                    type="password"
                    placeholder="Password"
                    value={password}
                    onChange={(e) => setPassword(e.target.value)}
                />
                <select value={role} onChange={(e) => setRole(e.target.value)}>
                    <option value="Student">Student</option>
                    <option value="Faculty Member">Faculty Member</option>
                    <option value="Administrator">Administrator</option>
                </select>
                <button type="submit">Login</button>
                {error && <p className="error">{error}</p>}
            </form>
        </div>
    );
```

```
};

export default LoginPage;

src/components/StudentDashboard.js
import React from 'react';
import PersonalProfile from './PersonalProfile';
import SearchStudents from './SearchStudents';
import ContactFaculty from './ContactFaculty';
import './StudentDashboard.css';

const StudentDashboard = () => {
  return (
    <div className="student-dashboard">
      <h1>Student Dashboard</h1>
      <PersonalProfile />
      <SearchStudents />
      <ContactFaculty />
    </div>
  );
};

export default StudentDashboard;

src/components/PersonalProfile.js
import React, { useEffect, useState } from 'react';
import { getStudentProfile } from '../services/api';
import './PersonalProfile.css';

const PersonalProfile = () => {
  const [profile, setProfile] = useState(null);

  useEffect(() => {
    const fetchProfile = async () => {
      const data = await getStudentProfile();
      setProfile(data);
    };
    fetchProfile();
  }, []);

  if (!profile) return <p>Loading...</p>;

  return (
    <div className="personal-profile">
      <h2>Personal Profile</h2>
      <img src={profile.photo} alt={profile.name} />
      <p>Name: {profile.name}</p>
      <p>Email: {profile.email}</p>
```

```
<p>Phone: {profile.phone}</p>
<p>Department: {profile.department}</p>
<p>Year: {profile.year}</p>
<h3>Courses</h3>
```