

Product Requirements Document (PRD) for User Registration Form

1. Background

The User Registration Form is a key component of the application, allowing users to create an account. This form will capture essential user information, authenticate identities, and ensure a seamless onboarding experience.

2. Key Outputs

- User Account Creation
- Email Verification
- Account Activation
- Welcome Email

3. User Action Mapping

User Action	System Response
Enter registration details	Validate input fields
Submit form	Store data and trigger verification email
Click verification link	Verify account and activate user profile
Login with credentials	Authenticate and redirect to dashboard

4. Process Flow

- User accesses the registration page.
- User fills in the form with relevant information.
- Form data is validated on the client and server side.
- On successful validation, an account is created, and a verification email is sent.
- User clicks the verification link to activate the account.
- System updates the account status to active.
- User can now log in using credentials.

5. Workflow

User → Registration Form → Input Validation → Data Storage → Email Trigger → Verification Link → Account Activation → Successful Registration

6. Specifications

- Frontend:** ReactJS (Client-side form validation)
- Backend:** Java Spring Boot (API for registration and verification)
- Database:** MySQL (Store user data)

- **Email Service:** AWS SES
- **Authentication:** JWT
- **Validation:** Form validation with regex and server-side checks

7. Functional Specifications

7.1 Registration Form Fields

- First Name (Required)
- Last Name (Required)
- Email (Required, unique, valid format)
- Password (Required, min 8 characters, one special character)
- Confirm Password (Match Password)

7.2 Validation Rules

- Empty field check
- Password strength enforcement
- Email format validation
- Duplicate email check

7.3 Error Messages

- "Email is invalid"
- "Passwords do not match"
- "This email is already registered"
- "Password must contain at least 8 characters with one special character"

7.4 Success Criteria

- Form submission without errors
- Successful email verification
- User login with verified account

7.5 Edge Cases

- Invalid email or password format
- Network failures during registration
- Email not received
- Multiple verification attempts

8. Conclusion

This registration form will ensure a secure, seamless onboarding process while capturing essential user information. The combination of client-side and server-side validation, along with email verification, will enhance user experience and security.