**Registration Page Design Document**

**Overview**

The Registration Page is the entry point for new users to create accounts in the Airiam RAG Service. This page provides a structured form for collecting essential user information, establishing credentials, and initiating the user onboarding process. The registration flow may vary depending on whether the system is configured for open registration or invite-only access.

This document outlines the functionality, design elements, and implementation details for the Registration Page. It provides developers with a clear understanding of components, interactions, and expected user experience. Each UI element is described with its purpose, behavior, and technical implementation details.

The Registration Page is designed to be user-friendly while ensuring proper validation and security measures are in place. It may include options for different authentication methods and should smoothly guide users toward account creation with minimal friction.

**Page Components and Functionality**

**1. Page Layout**

**Container**

* **Centered Card**: White card with shadow on light gray/blue background
* **Responsive Behavior**:
  + Full width on mobile with appropriate padding
  + Max width (e.g., md or lg breakpoint) on larger screens
  + Centered vertically and horizontally on the page

**Branding**

* **Logo**: Airiam logo at the top of the card
* **Title**: "Create your account" or similar heading
* **Subtitle** (optional): Brief explanation or welcome message

**2. Registration Form**

**Personal Information Section**

* **Full Name Field**:
  + Label: "Full Name"
  + Type: Text input
  + Icon: User/person icon
  + Validation: Required, minimum length (2 characters)
  + Error state: Red outline and error message if invalid
* **Email Field**:
  + Label: "Email Address"
  + Type: Email input
  + Icon: Envelope icon
  + Validation: Required, valid email format
  + Error state: Red outline and error message if invalid

**Password Section**

* **Password Field**:
  + Label: "Password"
  + Type: Password input with show/hide toggle
  + Icon: Lock icon
  + Validation: Required, minimum strength requirements
  + Error state: Red outline and error message if invalid
* **Password Strength Indicator** (optional):
  + Visual indicator of password strength (bar or text)
  + Color-coded (red to green)
  + Updates in real-time as user types
* **Confirm Password Field**:
  + Label: "Confirm Password"
  + Type: Password input with show/hide toggle
  + Icon: Lock icon
  + Validation: Must match password field
  + Error state: Red outline and error message if passwords don't match

**Tenant Information (for multi-tenant systems)**

* **Tenant Selection Dropdown** (if user is joining existing tenant):
  + Label: "Select Organization"
  + Type: Dropdown or searchable select
  + Content: List of available tenants the user can join
  + Visibility: Only shown if user has a tenant invite or system allows tenant selection
* **Tenant Creation Fields** (if user is creating new tenant):
  + Organization Name: Text input for new tenant name
  + Domain (optional): Text input for tenant domain
  + Visibility: Only shown if system allows tenant creation during registration

**Terms and Privacy Agreement**

* **Checkbox**:
  + Label: "I agree to the Terms of Service and Privacy Policy"
  + Links: Terms of Service and Privacy Policy documents
  + Validation: Required (must be checked)
  + Error state: Error message if form is submitted without checking

**3. Action Buttons**

**Register Button**

* **Label**: "Create Account" or "Sign Up"
* **Style**: Primary button, full width
* **States**:
  + Normal: Primary color
  + Hover: Slightly darker shade
  + Loading: Spinner or loading indicator during submission
  + Disabled: Grayed out when form is invalid

**Alternative Options**

* **Sign In Link**:
  + Text: "Already have an account? Sign in"
  + Action: Link to login page
  + Position: Below the register button
* **Social Login Buttons** (if supported):
  + Options: Google, Microsoft, Apple, etc.
  + Style: Brand-colored buttons with icons
  + Text: "Continue with [Provider]"
  + Divider: "Or" text between form and social options

**4. Success and Error States**

**Form Validation Errors**

* **Inline Field Errors**:
  + Displayed below the relevant field
  + Red text with appropriate icon
  + Clear description of the validation issue
* **Form Submission Error**:
  + Displayed at the top of the form
  + Red background with white text
  + Clear explanation of what went wrong

**Success State**

* **Visual Feedback**:
  + Green checkmark or success icon
  + "Account created successfully" message
  + Brief explanation of next steps
* **Next Steps Options**:
  + Automatic redirect to login
  + "Proceed to login" button
  + Information about verification email (if applicable)

**5. Email Verification (if required)**

**Verification Notification**

* **Content**:
  + Message explaining verification email has been sent
  + Instructions to check inbox and spam folders
  + Email address where verification was sent
* **Actions**:
  + "Resend verification email" button (with cooldown timer)
  + "Change email address" option to correct mistakes
  + "Continue to login" button

**Testing Procedures**

**1. Page Layout Testing**

**Responsive Design Testing**

1. **Mobile View Test**:
   * Open the page on mobile device or using responsive mode in browser
   * Verify the form displays properly with appropriate sizing
   * Verify all fields are accessible and usable
2. **Desktop View Test**:
   * Open the page on desktop browser
   * Verify the form is centered with appropriate width
   * Verify visual elements are properly aligned
3. **Branding Test**:
   * Verify logo is displayed correctly
   * Verify title and subtitle text is formatted properly

**2. Form Functionality Testing**

**Personal Information Testing**

1. **Name Field Test**:
   * Leave field empty and try to submit: verify required error
   * Enter a single character: verify minimum length error
   * Enter valid name: verify field accepts input properly
2. **Email Field Test**:
   * Leave field empty and try to submit: verify required error
   * Enter invalid email format: verify format error
   * Enter valid email: verify field accepts input properly
   * If possible, test with already registered email: verify duplicate error

**Password Testing**

1. **Password Field Test**:
   * Leave field empty and try to submit: verify required error
   * Enter weak password: verify strength requirements error
   * Enter valid password: verify field accepts input properly
   * Test show/hide toggle: verify password visibility toggles
2. **Password Strength Indicator Test** (if implemented):
   * Enter progressively stronger passwords
   * Verify indicator updates in real-time
   * Verify color changes appropriately
3. **Confirm Password Test**:
   * Enter different password: verify mismatch error
   * Enter matching password: verify validation passes

**Tenant Information Testing (if applicable)**

1. **Tenant Selection Test**:
   * Verify dropdown shows available tenants
   * Select a tenant and verify it remains selected
   * If searchable, test search functionality
2. **Tenant Creation Test** (if applicable):
   * Enter new tenant information
   * Verify validation on tenant fields
   * Submit and verify tenant is created

**Terms Agreement Testing**

1. **Checkbox Validation Test**:
   * Submit form without checking: verify error message
   * Check the box and verify validation passes
2. **Terms Links Test**:
   * Click Terms of Service link: verify document opens
   * Click Privacy Policy link: verify document opens

**3. Action Button Testing**

**Register Button Testing**

1. **Disabled State Test**:
   * Leave required fields empty
   * Verify button is disabled or submitting causes validation errors
2. **Loading State Test**:
   * Fill form completely and submit
   * Verify button shows loading state during submission
3. **Form Submission Test**:
   * Submit completed form
   * Verify appropriate action (account creation, verification step)

**Alternative Options Testing**

1. **Sign In Link Test**:
   * Click the "Sign in" link
   * Verify navigation to login page
2. **Social Login Test** (if implemented):
   * Click each social login button
   * Verify OAuth flow initializes correctly
   * Complete OAuth and verify account creation

**4. Success and Error States Testing**

**Error Handling Testing**

1. **Network Error Test**:
   * Disable internet connection
   * Submit form and verify network error message
2. **Server Error Test**:
   * Simulate 500 server error
   * Verify appropriate error message
   * Verify form data is preserved
3. **Duplicate Account Test**:
   * Attempt to register with an existing email
   * Verify appropriate error message

**Success Flow Testing**

1. **Complete Registration Test**:
   * Fill all fields correctly and submit
   * Verify success message
   * Verify appropriate next step (login, verification, etc.)

**5. Email Verification Testing (if applicable)**

1. **Verification Email Test**:
   * Complete registration
   * Verify verification email is sent
   * Verify email contains valid verification link
2. **Resend Functionality Test**:
   * Click "Resend verification email"
   * Verify cooldown timer functions
   * Verify new email is sent
3. **Account Activation Test**:
   * Click verification link from email
   * Verify account is activated
   * Verify user can log in after activation