**Pseudo Code for User Story ID 1**

**User Story:** As a user, I want to receive a password setup link in my email when a manager adds me to the system so that I can securely set up my password and access the system by logging in.

**Pseudo Code:**

BEGIN

Class UserAuthenticationFlow:

Method add\_new\_user(request: Request)

Steps:

1. Generate unique token with 24-hour expiry

2. Send email to user with setup-password link containing the token

Method setup\_password\_page(request: Request)

Steps:

1. Extract token from request

2. If token is invalid or expired:

Show "Link expired/invalid"

Else:

Display password setup page

Method submit\_new\_password(request: Request)

Steps:

1. Extract NewPassword and ConfirmPassword from request

2. If NewPassword != ConfirmPassword:

Show error "Passwords do not match" under confirm field

Else:

Update user password in database

Invalidate token

Redirect to login page

Method login\_user(request: Request)

Steps:

1. Extract email and password from request

2. If email not found or password invalid:

Show error "Invalid email or password" under email field

Else:

Create user session

Redirect to dashboard

Method forgot\_password(request: Request)

Steps:

1. Redirect to password reset flow

END

Test Scenarios:

1. Manager adds new user → should send email with token link

2. Expired or invalid token in setup-password → should show "Link expired/invalid"

3. Valid token in setup-password → should display password setup page

4. Passwords do not match → should show error under confirm field

5. Passwords match → should update password, invalidate token, and redirect to login

6. Invalid login credentials → should show "Invalid email or password" under email field

7. Valid login → should create session and redirect to dashboard

8. Forgot password clicked → should redirect to password reset flow