# Instruction Manual

This application is developed as a Windows application using WinUI 3. Attached, you will find the code and a sample application installer for testing.

## Overview

This is a standalone application with a user interface designed for ease of testing without requiring any integration work. When you start the program, you will be greeted by a simple login page. Use the credentials:

Username: user

Password: pass

Once logged in, you will be taken to the OTP verification page. Here, you will find two textboxes where you can enter a valid email address and another one used to verify the OTP. An OTP code will be sent from a pre-configured email address for testing purposes. After the OTP is sent, a 1-minute countdown timer will start. You have up to 10 attempts to verify the code.

## Functionality

### Login Page:

Enter the provided credentials to access the main OTP page.

### OTP Page:

Send OTP: Enter a valid email address (must end with @dso.org.sg) and click "Send OTP". An OTP will be emailed to the provided address.

Verify OTP: Enter the OTP received in your email and click "Verify OTP".

Reset: Click "Reset" to clear the fields and start over.

Validation:

If the verification is successful, the process is considered complete.

If the verification fails or the attempts exceed 10, the application will reset, and you can retry the process.

## Error Handling and Feedback

Invalid Email Domain: If the email domain is incorrect, a message will inform the user that the email address must be from the @dso.org.sg domain.

Failed Email Sending: If the OTP email fails to send, an error message will be displayed.

OTP Timeout: If no valid OTP is entered within 1 minute, the application will notify the user of the timeout and reset.

Invalid OTP Attempts: The application will allow up to 10 attempts to enter a valid OTP. After 10 failed attempts, it will reset.

## Testing Instructions

Since this is a standalone application, there are minimal assumptions required. Testing is straightforward: you can enter various values or scenarios to see how the application responds.

Testing Steps:

1. Launch the Application: Start the application and log in using the provided credentials.
2. Send OTP: Enter a valid email address (ending with @dso.org.sg) and click "Send OTP". Check your email for the OTP code.
3. Verify OTP: Enter the received OTP in the "Verify Code" textbox and click "Verify OTP". Observe the application's response to correct and incorrect OTP entries.
4. Reset Process: Use the "Reset" button to clear inputs and test the process from the beginning.

Timeout and Attempts:

Allow the timer to expire without entering an OTP to test timeout handling.

Enter incorrect OTPs to test the handling of failed attempts and the reset functionality after 10 tries.

By following these steps, you can ensure the application behaves as expected under various scenarios.