BSN

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Corporate Digital Banking
Enhancement Of Expired Password Flow, Email Content And Eye Icon To Password Field

for

IBAM, BSNeBiz and BSNeBiz Mobile

Business Requirement and Functional Document

(PENRIL/BSN/BRFD_BSNEBIZ(P2)037)
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00	18/12/2023	Initial Release	Aziana Jaafar Quality Engineer	Nurul Athirah Quality Engineer	Norhaidah Dasuki Senior Manager

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Business Requirement & Functional Acceptance

I/We hereby verify that this Business Requirement & Functional consist of all the requirements requested by BANK SIMPANAN NASIONAL. The implemented system will fulfill ONLY this requirement.

I/We also hereby AGREE that this satisfies our entire requirement for **Enhancement Of Expired Password Flow, Email Content And Eye Icon To Password Field.** Any future changes to this agreed scope would be treated as an enhancement to the system. Any future changes to the project timeline will be subjected to the final approval of the project steering committee.

BANK SIMPANAN NASIONAL:

Approved by	Role	Signature	Date

Penril Datability (M) Sdn. Bhd.:

Approved by	Role	Signature	Date
Norhaidah Bt Md Dasuki	Senior Manager, Profesional Service		
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Section A: Introduction

1 Introduction

This document served as the business requirement and system specification of implementing **Enhancement Of Expired Password Flow, Email Content And Eye Icon To Password Field** in BSNeBiz and IBAM system, which is customer able to make monetary transaction to Own Account, Intrabank and Interbank Account via online.

This document shall explain all the features and functionalities, which is elaborating with screen captures, process flow, descriptions, input fields specifications and error messages. **All screen designs provided in this document are samples and only illustration purpose for easy understanding. The screen designs are not final.**

1.1 Objective

The objective of this document is to capture user requirements of transactional and administration modules of implementing **Enhancement Of Expired Password Flow, Email Content And Eye Icon To Password Field**. This document will facilitate development and implementation of the mentioned modules of Internet Banking System for BSNeBiz.

The base line features description and screen designs will become a reference blueprint for the development team to develop the transactional and administration module. Hence, it is crucial that all stakeholders need to ensure the correctness and adequacy of the requirements captured in this document.

All stakeholders involved are expected to review and sign off this document before the development start. By signing off the document, the stakeholder has endorsed the correctness and accuracy and adequacy of the requirements documented in this document.

1.2 Assumptions

Enhancement Of Expired Password Flow, Email Content And Eye Icon To Password Field.

This module will enhance the expired password, email content and add eye icon for BSNeBIZ, BSNeBiz Mobile Application and IBAM.

1. **Expired Password Flow**

   Assuming that users will quickly grasp any changes made to the password management process and willingly follow the new steps for updating expired passwords.

2. **Email Content**

   Email notifications will be delivered promptly and will be easily readable by users.

3. **Eye Icon Password Field**

   Users will understand the purpose and functionality of the eye icon next to the password field. Design and implementation of the eye icon feature take into account accessibility standards, ensuring that all users, including those with disabilities, can benefit from the feature.

1.3 Impact Modules

To update impact module section

System	Modules	Features	Description
BSNeBiz	Password Flow	Module	• To change the user's BSNeBiz password updating flow after it has expired.
	Email Content	Table	• To update the current email content for a temporary password
	Eye Icon	Table	• To update current Login screen by adding "Eye" icon with one time click to allow user to view entered password and OTP in IBAM and BSNeBiz.
BSNeBiz - Mobile	Password Flow	New Screen	• To change the user's BSNeBiz password updating flow after it has expired.
	Eye Icon	Table	• To update current Login screen by adding "Eye" icon with one time click to allow user to view entered password and OTP in IBAM and BSNeBiz.
IBAM	Password Flow	Navigation	• To change the user's BSNeBiz password updating flow after it has expired.
	Eye Icon	Field	• To update current Login screen by adding "Eye" icon with one time click to allow user to view entered password and OTP in IBAM and BSNeBiz.

Table 1: Enhancement – Impact Module

2 Secure Verification for Monetary Transaction at BSNeBiz

PIN is required as the second level security authentication for BSNeBiz Role's Single User and Approver when perform any monetary transactions via online. PIN is a six random digits temporary security code, which is generated and verified by the authentication server.

There are two types of Secure Verification assign to the user by Corporate Admin:

A. Hardware Token (Vasco)
B. Mobile Token

2.1 Hardware Token (Vasco)

Hardware token from VASCO is physical device that will be used by Single User and Approver to authorize a monetary transaction using the "Transaction Singing" function; also known as Challenge Response (CR).
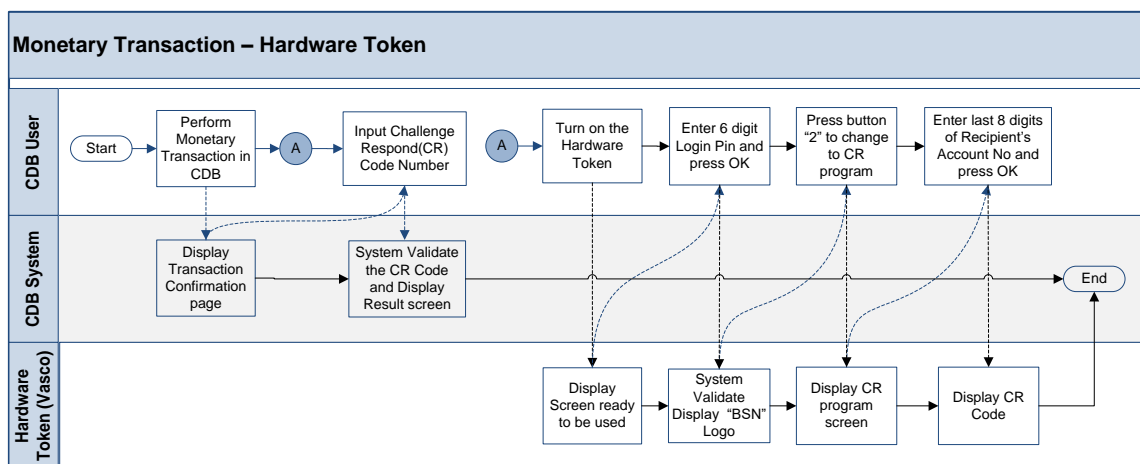
2.1.1 Process Flow

Diagram 1: Hardware Token Flow Diagram

2.1.2 Screen Flow

Step 1:

1. When user in Transaction Confirmation page, BSNeBiz system will required Challenge Response code to proceed the transaction
2. User needs to use Hardware Token to generate the Challenge Response code.

Figure 1: Hardware Token

Step 2:

1. Users press OK button for 2 seconds to turn on the Token.
2. User key in the 6 digits login PIN (User Password) and press OK.
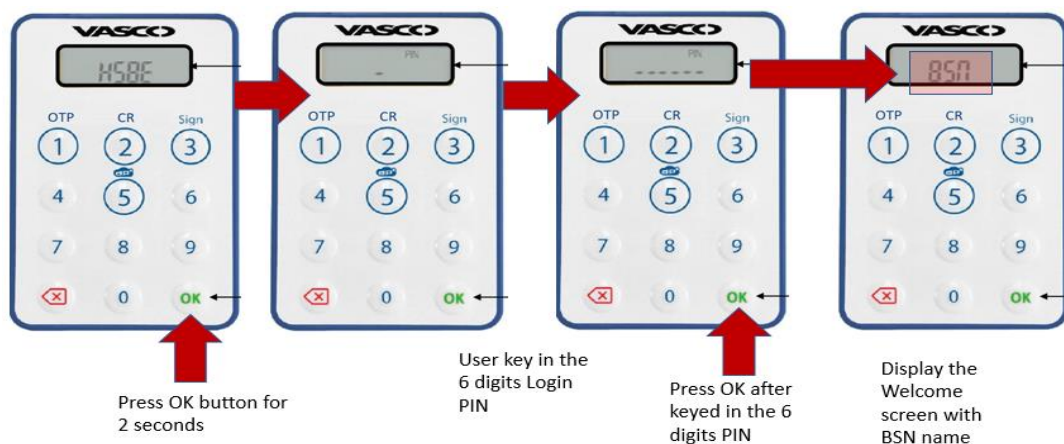3. BSN logo will be displayed on the token screen.

Figure 2: Turn on Token Flow

Step 3:

1. User press button 2 to change to Challenge Response program.

2. User key in the last 8 digits of recipient account number for Challenge Response.
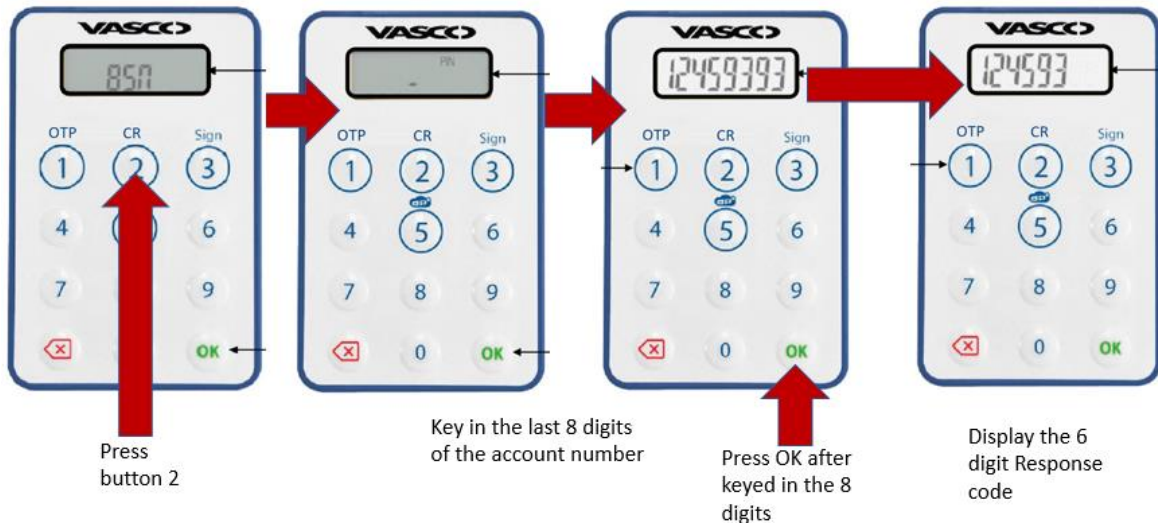3. Press OK and Challenge Response code will be displayed.

Figure 3: Get Challenge Response Code Flow

Step 4:

1. User use generated Challenge Response from the Token and input to the Challenge Response field in BSNeBiz – Transaction Confirmation pages.
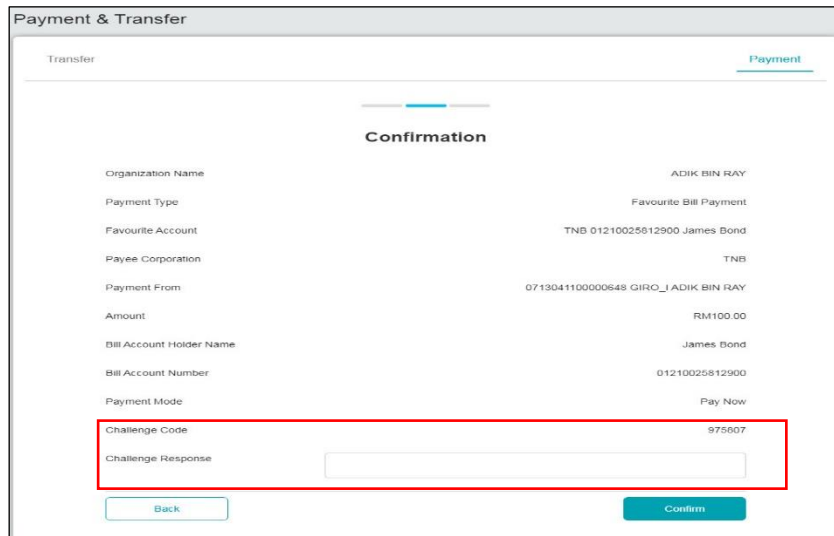

Figure 4: Confirmation page for Hardware Token verification

2.2   Mobile Token

Mobile Token is a mobile application that has the same functionalities as the VASCO Hardware Token using mobile phone features and serves the same usage purpose.

2.2.1 Process Flow

Monetary Transaction – UPASS Mobile Token

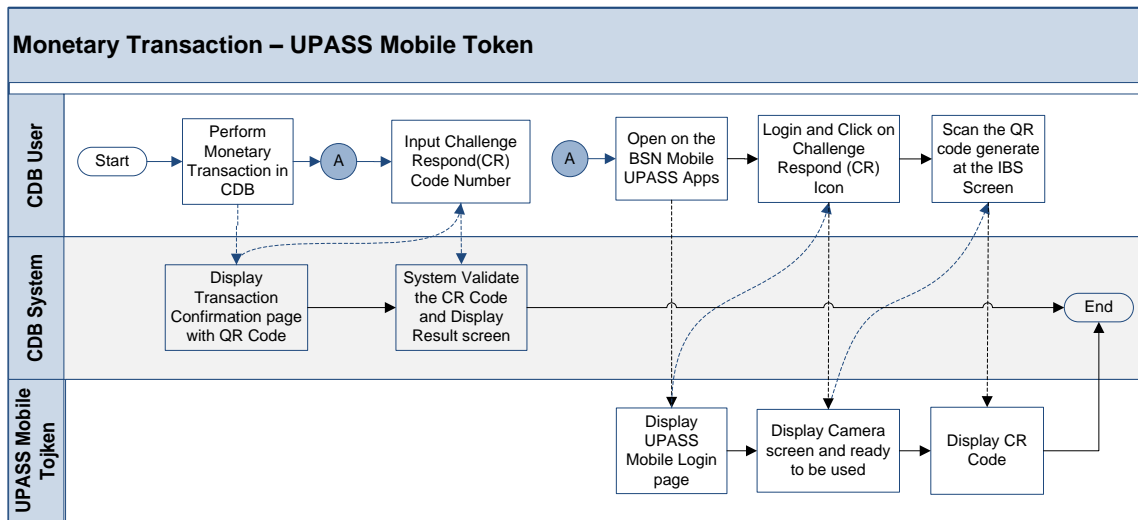Diagram 2:: Mobile Token Flow Diagram

2.2.2 Screen Flow

Step 1:

1. When user in Transaction Confirmation page with QR code.
2. User needs to use Mobile Apps to scan the QR code to generate the Challenge Response code.
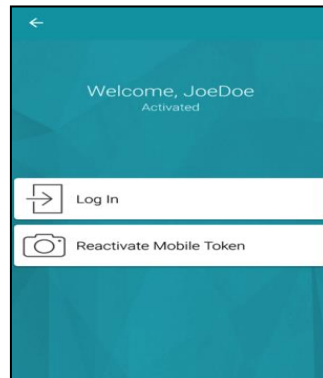
Figure 5: Mobile Apps screen

Step 2:

1. User Login to the Mobile apps and Click on Challenge Respond icon.
2. User scans the QR code generated at IBS confirmation screen.
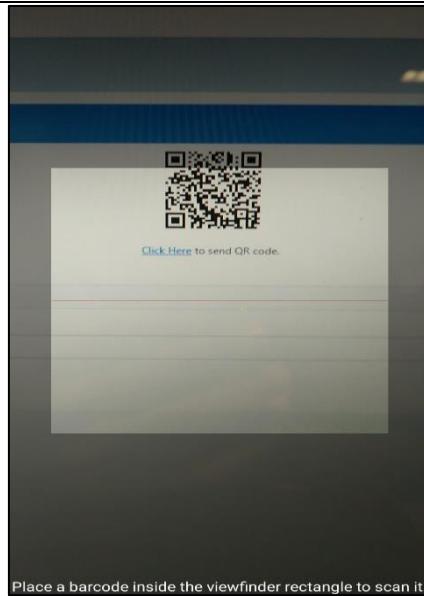
Figure 6: Mobile Apps QR Scan screen

Step 3:

1. BSN Application generate and display the Challenge Response code to be used.
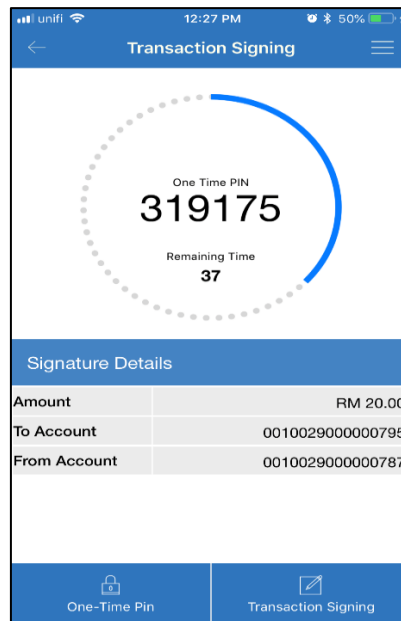
Figure 7: Challenge Response Code display Screen

Step 4:

1. User use generated Challenge Response from the Mobile Token App and input to the Challenge Response field in BSNeBiz – Transaction Confirmation pages.

Figure 8: Confirmation page for Mobile Token verification

# Section B: BSNeBiz

3 SOW01: BSNeBiz – DuitNow Online Banking

3.1   SOW01.1 New Enhancement for Password

3.1.1 SOW01.1.1 Update flow for expired password

3.1.1.1   Process Flow
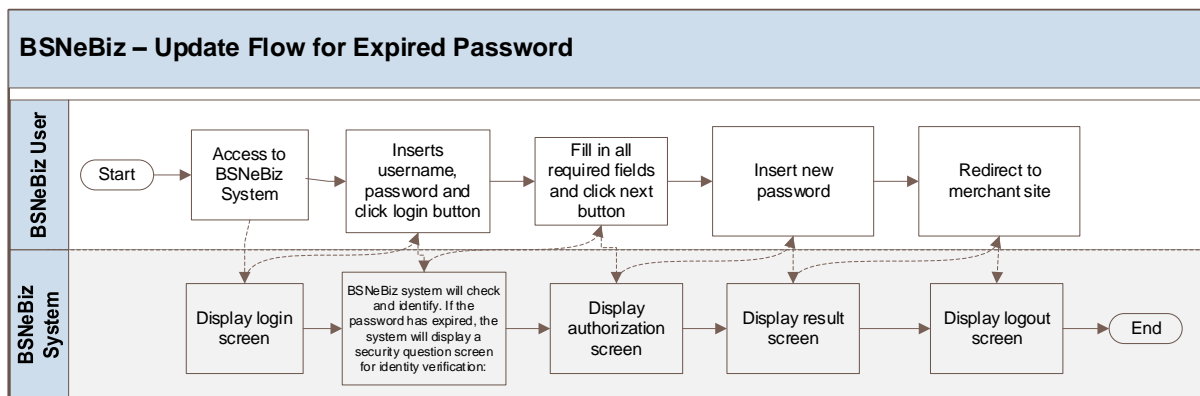
Diagram 3: DOB Update flow for Expired password

3.1.1.2   Screen Flow

Step 1: (login)

1. BSNeBiz user fills in their username and clicks next
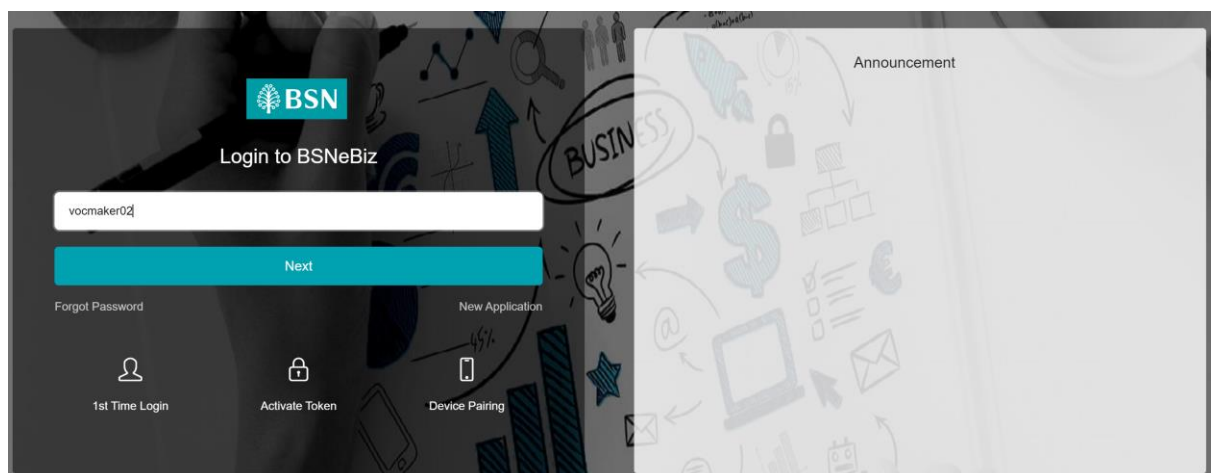
Figure 9: Customer insert username

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Username	Textbox	Alphanumeric	Allow user to insert username	Yes

Table 2: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Next	Button	This action will go next Page
2.	Login	Button	This action will go to Detail Screen Page

Table 3: BSNeBiz – Details Screen Fill Details Actions

Step 2: (insert password)

1. BSNeBiz user fills in their password.
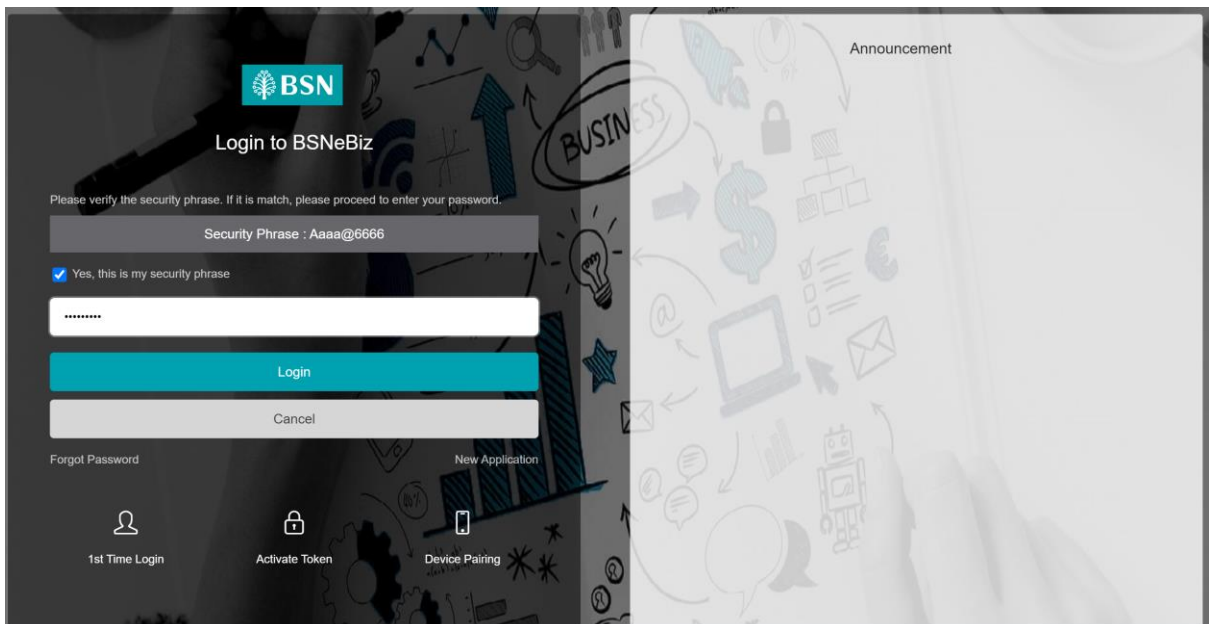
Figure 10: Customer insert Password.

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 4: BSNeBiz – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Next	Button	This action will go next Page
2.	Login	Button	This action will go to Detail Screen Page

Table 5: BSNeBiz – Details Screen Fill Details Actions

Step 3 (identify)

1. BSNeBiz system will check and identify the BSNeBiz user's status. If the user's password has expired, the system will display a security question screen for identity verification: BSNeBiz user fills in their password to login into BSneBiz
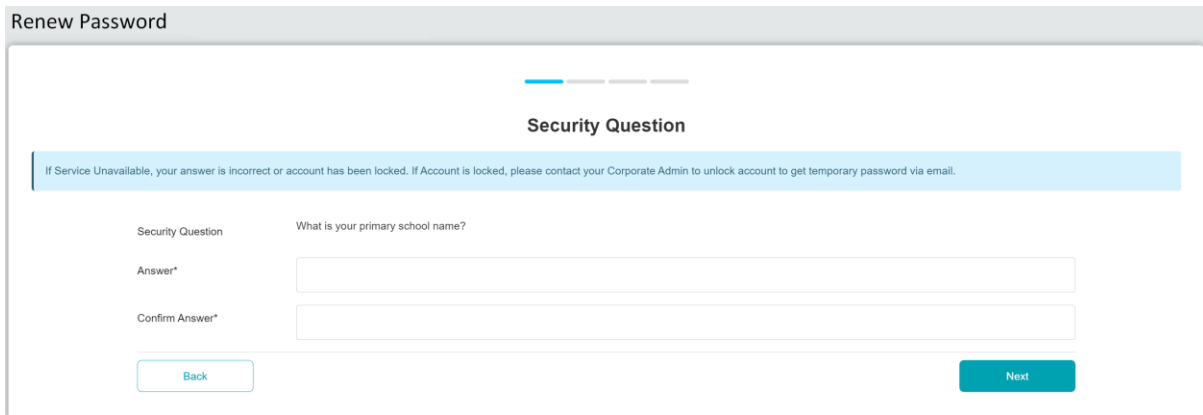
Figure 11: Identification

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Security Question	Drop Down List	Must Select One	Specify security question	Yes
1.	Answer	Textbox	Alphanumeric	Allow user to insert the answer	Yes
2.	Confirm Answer	Textbox	Alphanumeric	Allow user to insert answer	Yes

Table 6: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Next	Button	This action will go next Page

No	Action	Type	Description
2.	Back	Button	This action will go to previous Page

Table 7: DOB – Details Screen Fill Details Actions

Step 4 (check and verify)

1. BSNeBiz system will check and verify the inserted answer. If the answer is correct, the system will display the renew password screen.
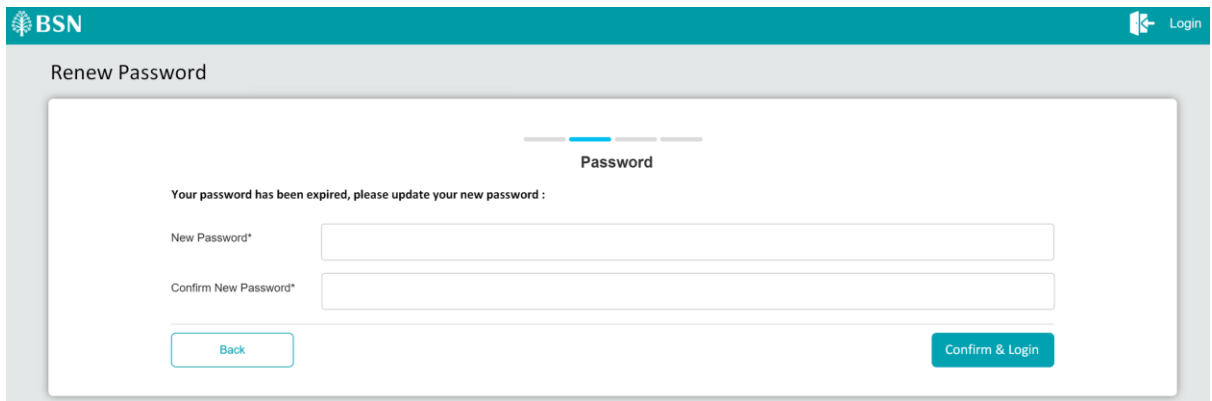
Figure 12: Customer insert Password and OTP

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	New Password	Textbox	Alphanumeric	Allow user to insert New Password	Yes
2.	Confirm New Password	Textbox	Alphanumeric	Allow user to insert Confirm New Password	Yes

Table 8: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Next	Button	This action will go next Page
2.	Back	Button	This action will go to Previous Page

Table 9: DOB – Details Screen Fill Details Actions

Step 5 (insert new password)

1. BSNeBiz user will insert the new password.
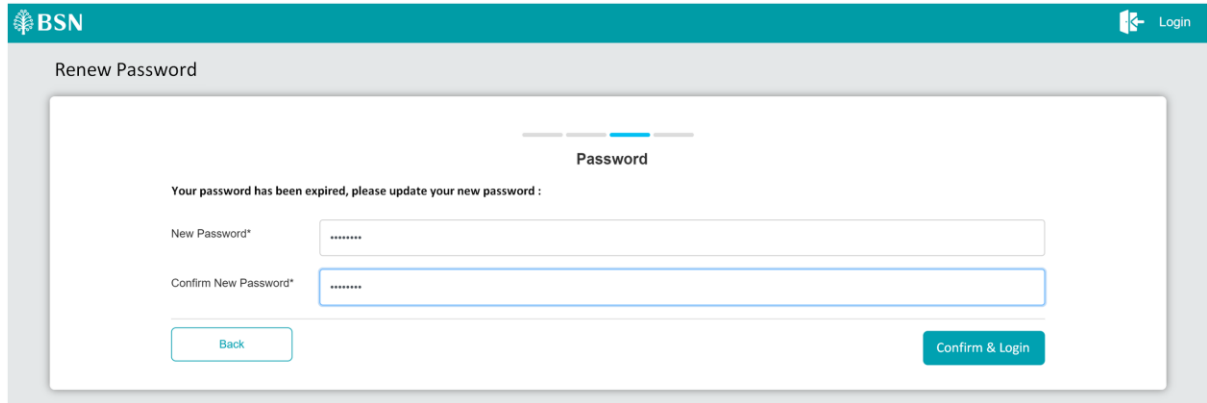
Figure 13: Customer insert the new password

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	New Password	Textbox	Alphanumeric	Allow user to insert New Password	Yes
2.	Confirm New Password	Textbox	Alphanumeric	Allow user to insert Confirm New Password	Yes

Table 10: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Confirm Login	Button	This action will go Detail Screen Page
2.	Back	Button	This action will go to Previous Page

Table 11: DOB – Details Screen Fill Details Actions

Step 5A (insert new password)

1. The BSNeBiz system will verify the new password. If the password is the same as before, the system will display the error message.

2. Other error message **Password must contain a combination of upper and lower case alphabet characters, at least 1 number, and allow special characters (@#$%^&+=) And must be at least 8 characters / digit
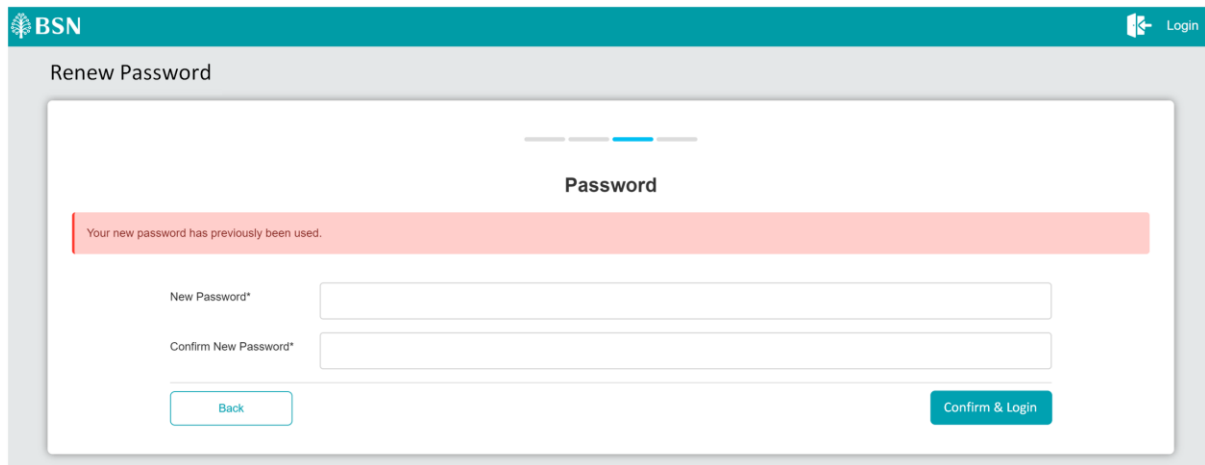
Figure 14: Alert New Password

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	New Password	Textbox	Alphanumeric	Allow user to insert New Password	Yes
2.	Confirm New Password	Textbox	Alphanumeric	Allow user to insert Confirm New Password	Yes

Table 12: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Confirm Login	Button	This action will go Detail Screen Page
2.	Back	Button	This action will go to Previous Page

Table 13: DOB – Details Screen Fill Details Actions

Step 5B (insert new password)

1. The system will redirect the user to the BSNeBiz landing page if the inserted password meets all the requirements.
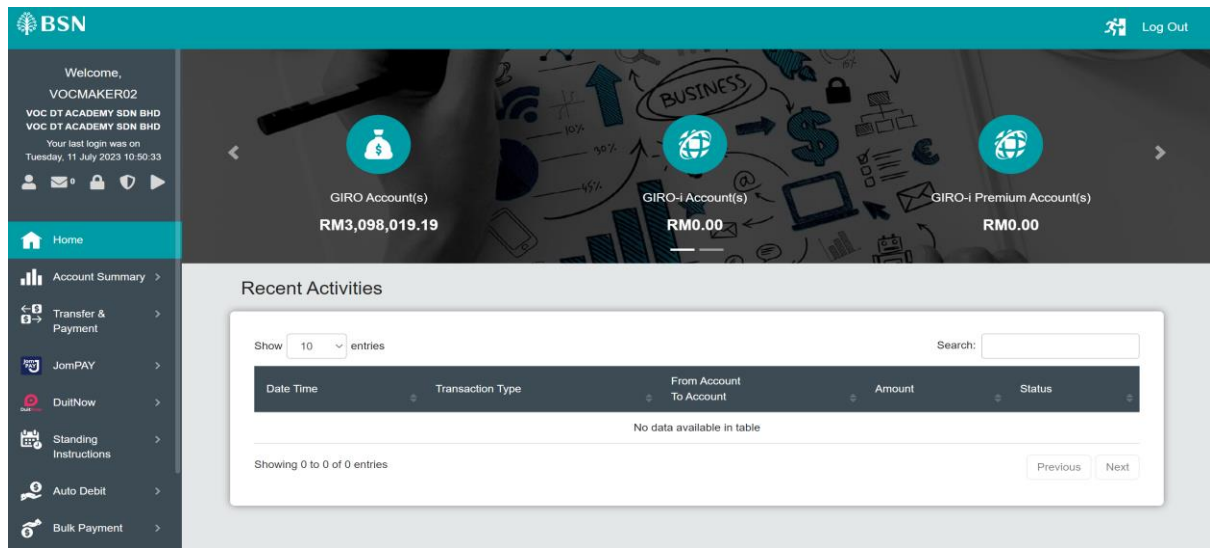
Figure 15: BSNeBiz landing page

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Entries	Drop Down List	Must Select • 10 • 25 • 50 • 100	Specify whether the latest transaction	Optional
1.	Search	Textbox	Alphanumeric	User able to search account number	Optional

Table 14: DOB – Details Screen Input Specification

Display Field:

No	Field	Format	Description
1.	From account	Alphanumeric	Shows the Account number
2.	Merchant Name	Text	Shows the Merchant Name
3.	Payment Reference	Numeric	Shows the reference set by the BSNeBiz user to perform a transaction

3.1.2 SOW01.1.2 Receive Temporary password Email

3.1.2.1

a. Upon request, you will receive a temporary password via email.

Dear Sir/Madam,

Please find your temporary password for your user ID that was sent separately in another email:

Temporary Password: 522974
Organization Name : DECOREALM SDN. BHD.
Account Number : 0713941100029396,
Organization ID : H6971,
Organization Code : H6971700,H6971200,H6971580,
Important Notes:

To reset your password, kindly follow following steps:-

Step 1 : Perform a login with the provided temporary password
Step 2 : Create a new password to reset your current one.
Step 3 : Your password reset was successful. Please sign in to BSNeBiz.

This is a computer generated email. Please do not reply to this email.
Disclaimer: This is a computer generated email. No signature is required.

This message is brought to you by Bank Simpanan Nasional.
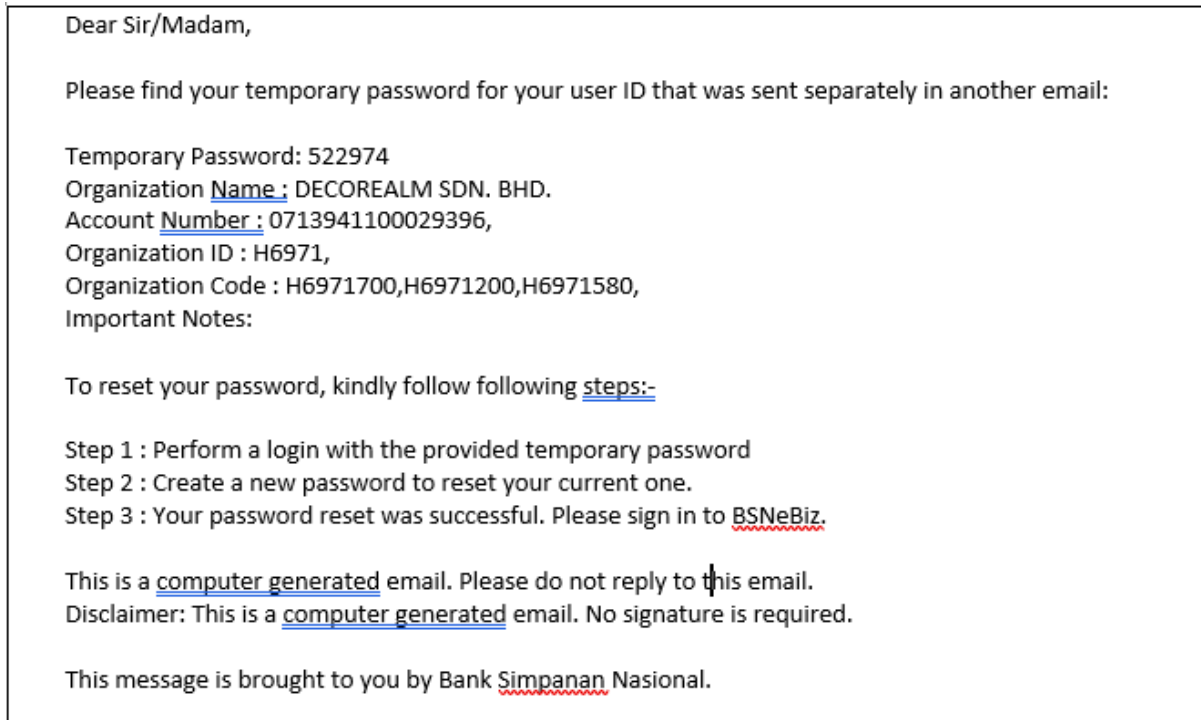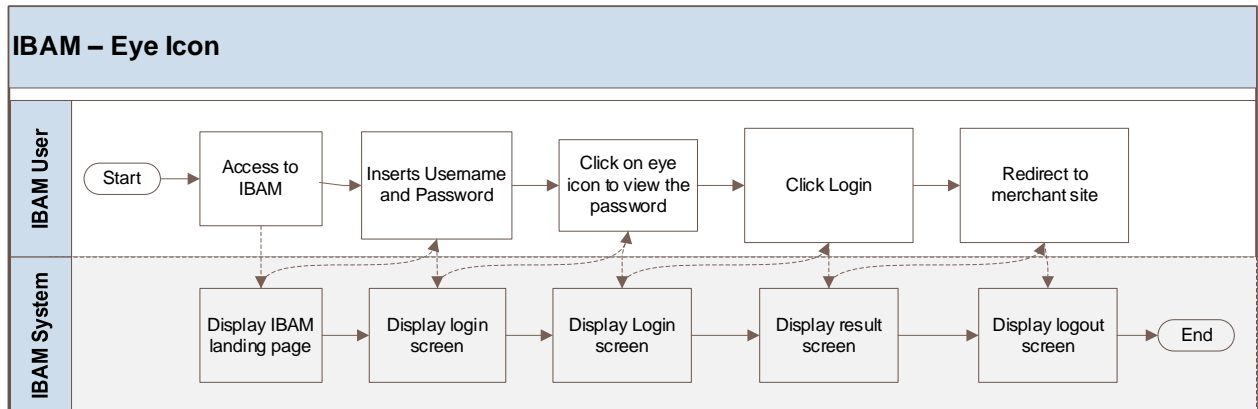
Figure 16: New temporary password email

3 SOW02: New Enhancement Password Eye Icon

This feature allows BSneBiz user to learn the flow of passwords.

3.2 SOW02.1 IBAM

3.2.1 Process Flow

3.2.2 Screen Flow

Step 1: (login)
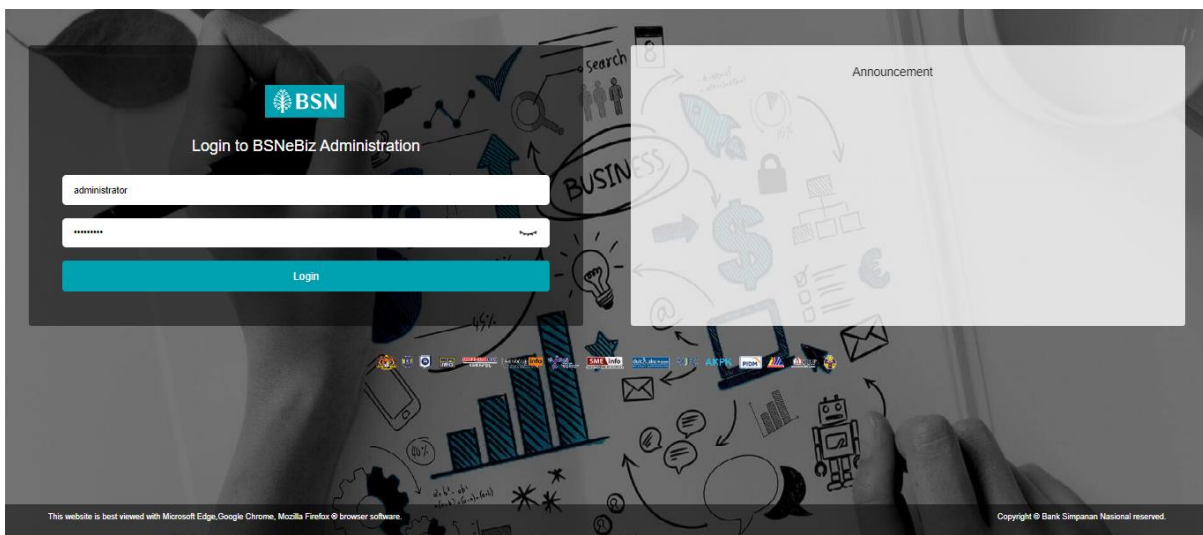
2. IBAM user fills in their username and password.

Figure 17:BSNeBiz Login Page Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Username	Textbox	Alphanumeric	Allow user to insert username	Yes
2.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 15: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Next	Button	This action will go next Page
2.	Login	Button	This action will go to Detail Screen Page
3.	Eye Icon	Button	This action will view the password

Table 16: DOB – Details Screen Fill Details Actions

Step 2: (View Eye Icon)

1. Click on the eye icon (located on the right side of the password field).

2. Upon clicking, the eye icon may change its appearance, indicating that the password is now visible.

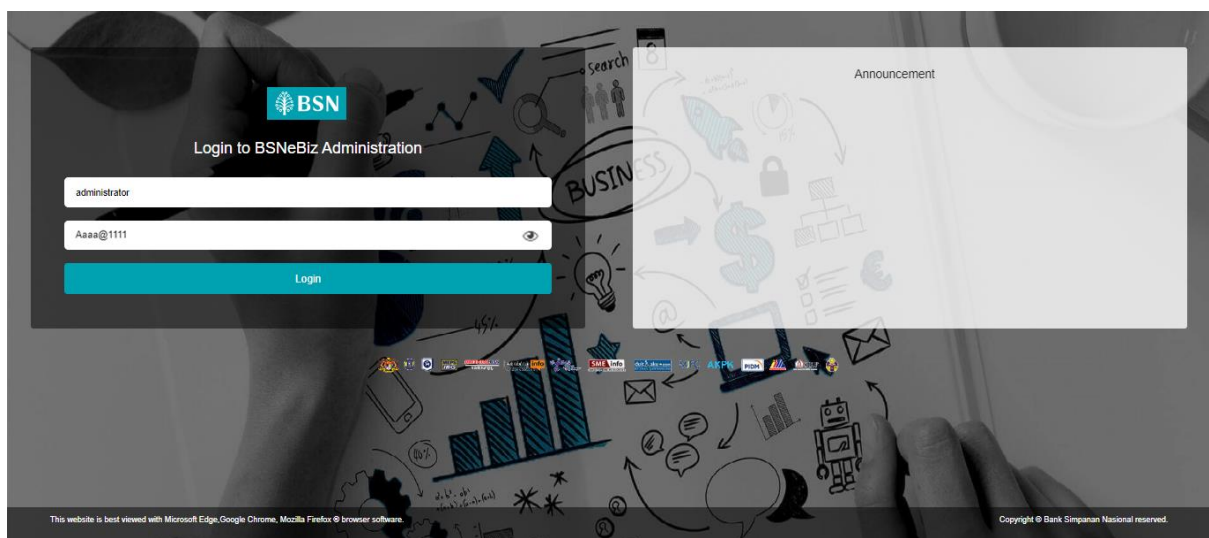3. The password will be momentarily displayed in plain text.

Figure 18: BSNeBiz Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Username	Textbox	Alphanumeric	Allow user to insert username	Yes
2.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

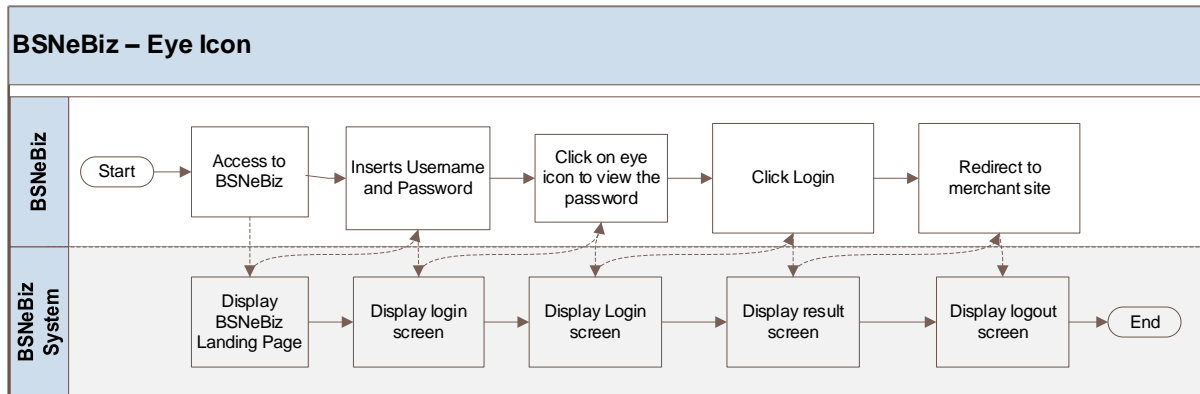<div align="center">Table 17: DOB – Details Screen Input Specification</div>

Action:

No	Action	Type	Description
1.	Next	Button	This action will go next Page
2.	Login	Button	This action will go to Detail Screen Page
3.	Eye Icon	Button	This action will view the password

<div align="center">Table 18: DOB – Details Screen Fill Details Actions</div>

3.3 SOW02.2 BSNeBiz Web

3.3.1 Process Flow

3.3.2 Screen Flow
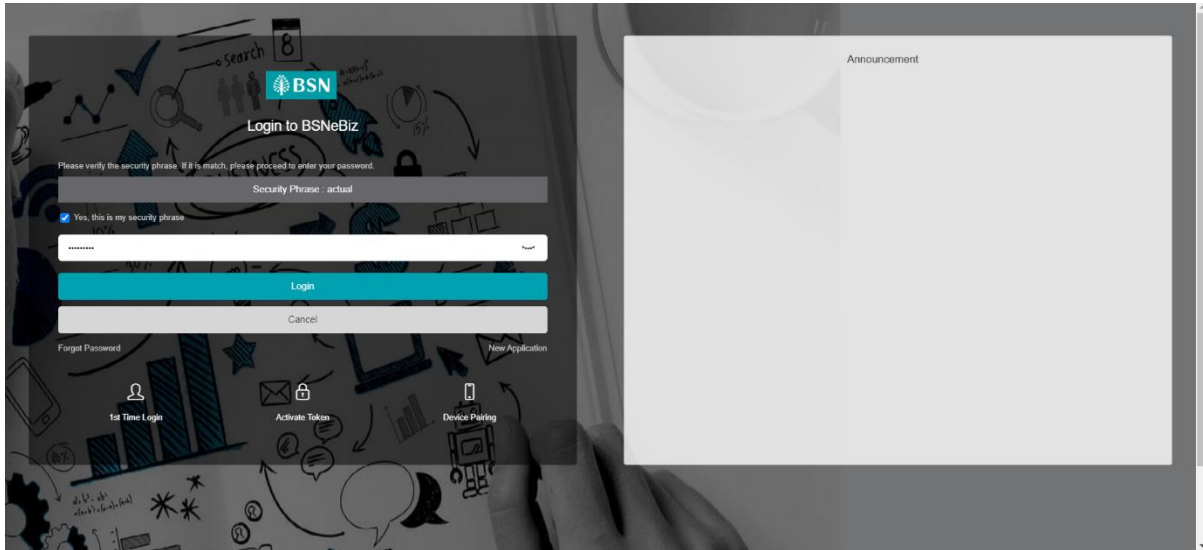
Step 1:

1. BSNeBiz User fill in their username and password.

Figure 19: BSNeBiz Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 19: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Cancel	Button	This action will go to Previous page
2.	Login	Button	This action will go to Detail Screen Page
3.	Eye Icon	Button	This action will view the password

Table 20: DOB – Details Screen Fill Details Actions

Step 2: (View Eye Icon)

1. Click on the eye icon (located on the right side of the password field).

2. Upon clicking, the eye icon may change its appearance, indicating that the password is now visible.
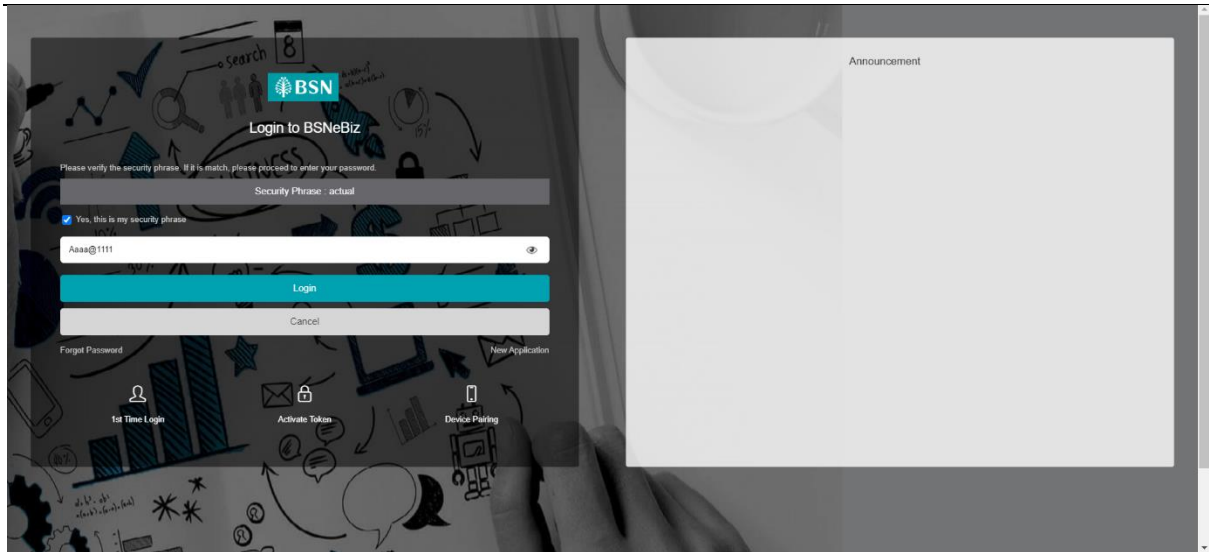
Figure 20: BSNeBiz Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 21: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Cancel	Button	This action will go to Previous page
2.	Login	Button	This action will go to Detail Screen Page
3.	Eye Icon	Button	This action will view the password

Table 22: DOB – Details Screen Fill Details Actions

Step 3:

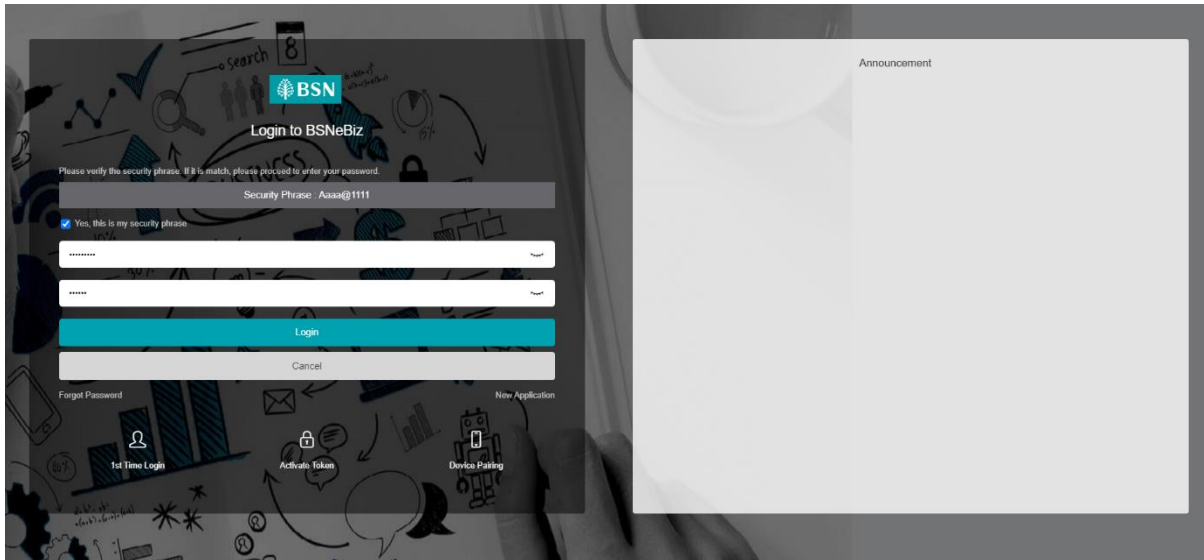1. Insert the same password entered in the previous step into the "Reconfirm Password" field.

Figure 21: BSNeBiz Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 23: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Cancel	Button	This action will go to Previous page
2.	Login	Button	This action will go to Detail Screen Page
3.	Eye Icon	Button	This action will view the password

Table 24: DOB – Details Screen Fill Details Actions

Step 4:

1. User click on this eye icon to temporarily view the entered password and click login to the next page.
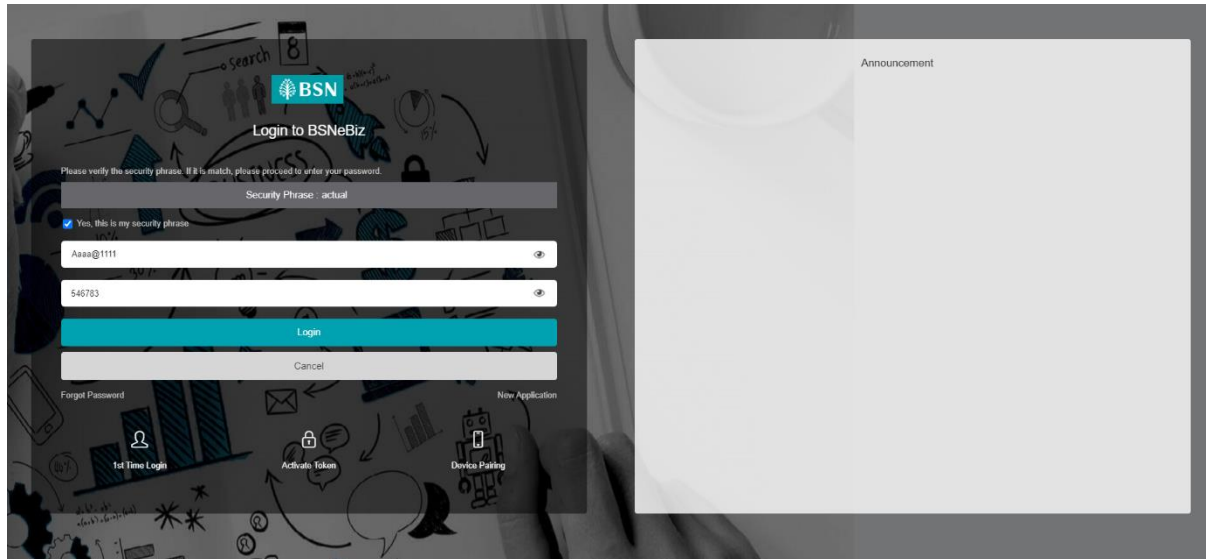

Figure 22: BSNeBiz Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 25: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Cancel	Button	This action will go to Previous page
2.	Login	Button	This action will go to Detail Screen Page
3.	Eye Icon	Button	This action will view the password

Table 26: DOB – Details Screen Fill Details Actions

3.4.1 Process Flow

Mobile Application – Eye Icon
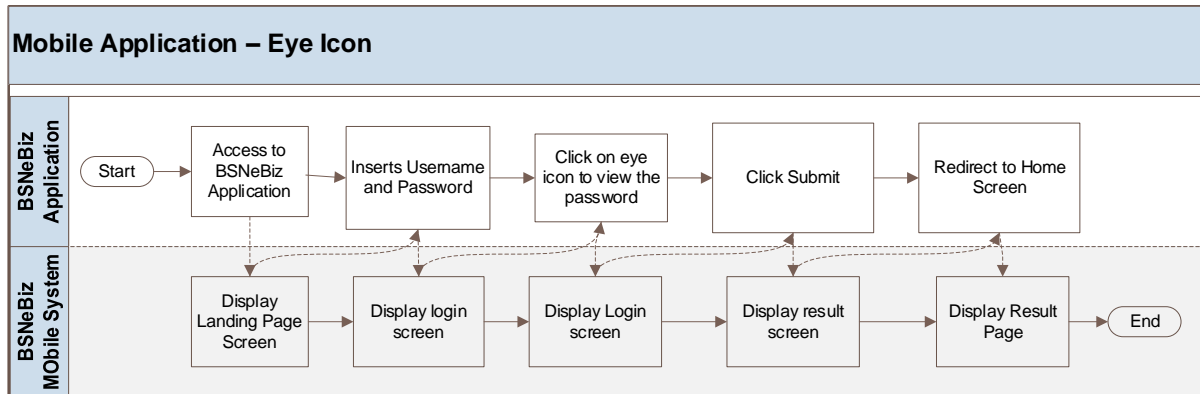
3.4.2 Screen Flow

Step 1:

1. User insert username and password.
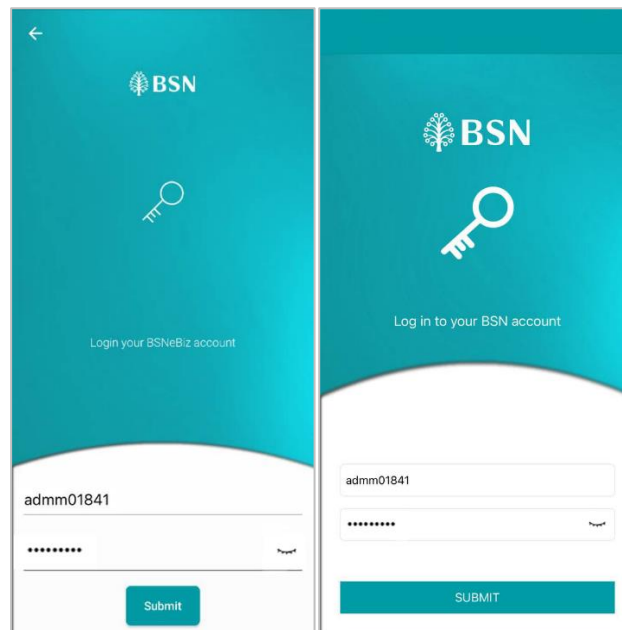
Figure 23: BSNeBiz Mobile Application Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Username	Textbox	Alphanumeric	Allow user to insert username.	Yes

No	Field	Field Type	Rule	Description	Required
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 27: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Submit	Button	This action will go to Homescreen

Table 28: DOB – Details Screen Fill Details Actions

Step 2:

1. User click on the eye icon (located on the right side of the password field).

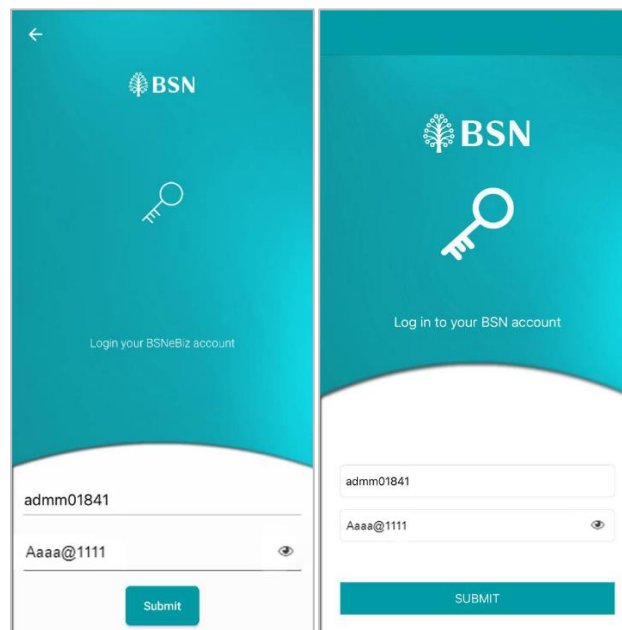2. Upon clicking, the eye icon may change its appearance, indicating that the password is now visible.

Figure 24: BSNeBiz Mobile Application Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Username	Textbox	Alphanumeric	Allow user to insert username.	Yes
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Action:

No	Action	Type	Description
1.	Submit	Button	This action will go to Homescreen

Table 30: DOB – Details Screen Fill Details Actions

Step 3:

1. To conceal the password again, click on the eye icon once more.

2. Clicking the eye icon toggles the visibility of the password, providing an extra layer of security.
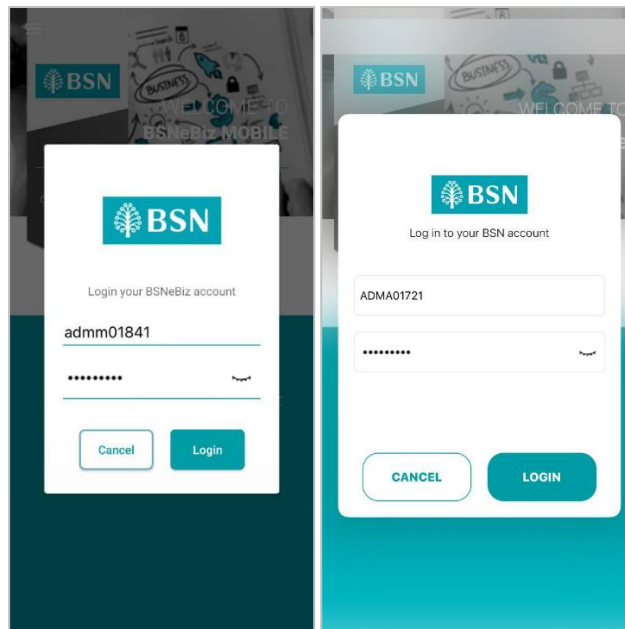

Figure 25: BSNeBiz Mobile Application Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Username	Textbox	Alphanumeric	Allow user to insert username.	Yes
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 31: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Submit	Button	This action will go to Homescreen
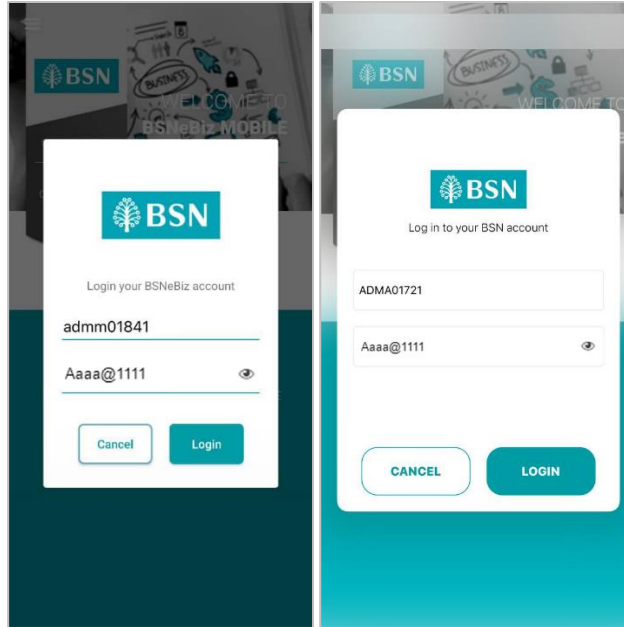
Figure 26: BSNeBiz Mobile Application Login Screen

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Username	Textbox	Alphanumeric	Allow user to insert username.	Yes
1.	Password	Textbox	Alphanumeric	Allow user to insert password	Yes

Table 33: DOB – Details Screen Input Specification

Action:

No	Action	Type	Description
1.	Submit	Button	This action will go to Homescreen

Table 34: DOB – Details Screen Fill Details Actions