FAST PAYMENT SYSTEM (FPS)
OPERATION MANUAL

1. INTRODUCTION

FAST PAYMENT SYSTEM (FPS) is an intelligent, innovative electronic bill payment kiosk which operates 24x7x365 for the ease of customer to perform Bill payment transaction via the automated FPS machine at the LOCAL COUNCIL premises in a simple, secure and quick way.

To ease the customer during transaction, simple instructions supported by animated guide displayed on the screen. A receipt containing the information of the transaction is printed for the customer. Transaction and payment information are stored locally in the FPS and immediately transmitted to the central FPS servers.

The currently available bill payment services at the FPS machine is ASSESSMENT TAX. Future services are Compound, ASSESSMENT TAX Bill Printing & etc.

The FPS machine at LOCAL COUNCIL is connected to the back-end server via LOCAL COUNCIL network.

2. SYSTEM MODULES

Component Layout of FPS – External View

NO.	DESCRIPTION
1	VIDEO CAMERA
2	TOUCH SCREEN
3	BARCODE SCANNER
4	THERMAL PRINTER
5	CREDIT & DEBIT CARD READER
6	ENCRYPTED PIN PAD
7	MYKAD BIOMETRIC READER
8	BULK CASH ACCEPTOR
9	BULK CHANGE GIVER
10	DOCUMENT SCANNER
11	UPPER DOOR LOCK
12	LOWER DOOR LOCK

No.	Item	Description
1	Enclosure	• Durable steel frame, powder coated steel back covers. • Moisture proof, Antirust, Anti-acid, Anti-dust, Static free. • Comes with 4 height adjustable steel feet and 2 bolting holes to securely anchor the kiosk to the floor. • 2 separate doors with one door sensor each.
2	Industrial PC	• Intel Quad Core 2.0Ghz Embedded PC • 4Gbyte RAM and 500GB HDD Storage • 6 Serial Port, 8 USB Port, 2 LAN Port, 1 VGA, 1 HDMI, Build in GPIO 8 Bit • Microsoft Windows 7 Embedded 32 Bit OS License • McAfee Anti-Virus • Acronis One Key Backup and Recovery
3	Touch Screen Monitor	• 17"TFT LCD; Brightness: 260cd/m2 Contrast: 1000:1. • Response Time:5ms. • Dot pitch: 0.297. • Max. resolution: 1280*1024. • High Transparency, high precision and durability. • Surface Hardness: MoHs' hardness rating of 7. • Antirust, Anti-acid, Anti-dust & Anti-vandal. • Thickness: 6mm, Max: 4096×4096. • Force < 100G. • Response Time: 20ms.
4	Barcode Scanner	• Specially designed for Kiosk application. • DECODING CAPABILITY: 1D Barcode UPC/EAN/JAN, UPC-A & UPC-E, EAN-8 & EAN-13, JAN-8 & JAN-13, ISBN/ISSN, Code 39, Code 128 & EAN 128, Code 93, ITF 2 of 5, IATA Code, Postal Code, Code 32, Industrial 2 of 5, Standard 2 of 5, JAP, Code 11, GS1 DataBar, GS1 DataBar Limited, GS1 DataBar Expanded 2D Barcode PDF 417, MicroPDF 417, 2D Code, MaxiCode, DataMatrix, DataMatrix Inverse, QR Code, QR Inverse, MicroQR Code, Aztec Code, Aztec Inverse, Postal Code. • Able to read codes from mobile phone or tablet screens

No.	Item	Description
5	Barcode Scanner	• Specially designed for Kiosk application. • DECODING CAPABILITY: 1D Barcode UPC/EAN/JAN, UPC-A & UPC-E, EAN-8 & EAN-13, JAN-8 & JAN-13, ISBN/ISSN, Code 39, Code 128 & EAN 128, Code 93, ITF 2 of 5, IATA Code, Postal Code, Code 32, Industrial 2 of 5, Standard 2 of 5, JAP, Code 11, GS1 DataBar, GS1 DataBar Limited, GS1 DataBar Expanded 2D Barcode PDF 417, MicroPDF 417, 2D Code, MaxiCode, DataMatrix, DataMatrix Inverse, QR Code, QR Inverse, MicroQR Code, Aztec Code, Aztec Inverse, Postal Code. • Able to read codes from mobile phone or tablet screens
6	UPS	• Capacity VA/W: 230 / 500. • Typical Recharge Time: 6-8 hours to 90%. • Battery Run Time: - Full Load 5 minutes; Half Load 10 minutes. • Optimized for SST environment
7	Thermal Printer	• High printing quality (200 and 300 DPI) • Up to 210mm paper width. • Able to print receipts and statements. • Auto paper cutting based on printout length. • Paper thickness: from 63 to 85 µm • Printing > 180 mm/sec • Highly reliable cutter: over 300,000 cuts • Sensors: Head temperature, paper presence, notch sensor, outfeed paper presence, near paper end (optional)
8	Document Scanner	• Module for enabling automatic document scanning at point of deposit. • Automatic shutter: prevents vandalism act. • Single document feeder with counting ability. • Paper skew detection. • High transport speed. • Front and rear document image scanning: up to 600 dpi, Colour JPEG format. • Removable collection box capacity up to 500 documents. • Document insertion platform for easy depositing.

No.	Item	Description
9	Cash Acceptor	• Bulk Note Feeder Insertion: Insertion of up to 25 banknotes in a bundle acceptance. • 4 ways bill insertion. • Up to 20 pieces banknote escrow. • 3 x 100 - 120 bill capacity recycler intelligent cassettes. • Bundles and dispenses up to 20 bills • Stacker Capacity: 1,000 banknotes • Accepts all MYR bank note denominations including polymer notes. • Banknotes acceptance based on latest banknote specification provided by Bank Negara. • Able to reject soiled and forged banknotes. • Acceptance Rate: 96% or higher.
10	Credit & Debit Card Reader with Encrypted Pin Pad	• Accept all payment means i.e. VISA, MASTER, AMEX & MCCS. • PCI-PTS 3.x. certified, meets the highest and latest hardware and software security requirements. • Highly Ruggedized - stands up to the most demanding outdoor environments and a wide variety of adverse environmental conditions. • Keypad and card-reader components are proofed against vandalism (IK10) and extreme weather. •
11	MyKad Biometric Reader	• Accepts MyKad & MyPR cards issued by JPN • Thin Optical Sensor (SAGEM-MorphoSmart™ CBM) • 1:1 and 1:N search • Verification time < 0.8s • Identification time < 1s

3. FPS APPLICATION

FPS machine consists of FPS application and the FPS Supervisor application. The FPS application is the main program which interfaces with the customer and capturing the transaction details and generate the transaction information from back-end processes.

The FPS Supervisor module consists of the Collection function and Load cash, Unload cash functionality with audit trial printing. This module allows officer to configure the FPS machine profile, maintenance modules etc. Following will describes in more details about the FPS application and its Supervisor module.

4. SYSTEM SCREEN FLOW

This section describes the FPS transaction screen flow for all products and services available in the FPS machine. These include the Supervisor module flow and procedure of the collections and cash handling.

The FPS system screen flow is divided into:

a. Cash Payment Method

   i. ASSESSMENT TAX
   ii. Compound

b. Card Payment Method

   i. ASSESSMENT TAX
   ii. Compound

c. Cheque Payment Method

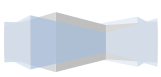
   i. ASSESSMENT TAX
   ii. Compound

d. Printing

   i. ASSESSMENT TAX Bill Printing

e. Supervisor

   i. Collection
   ii. Setting
   iii. Security

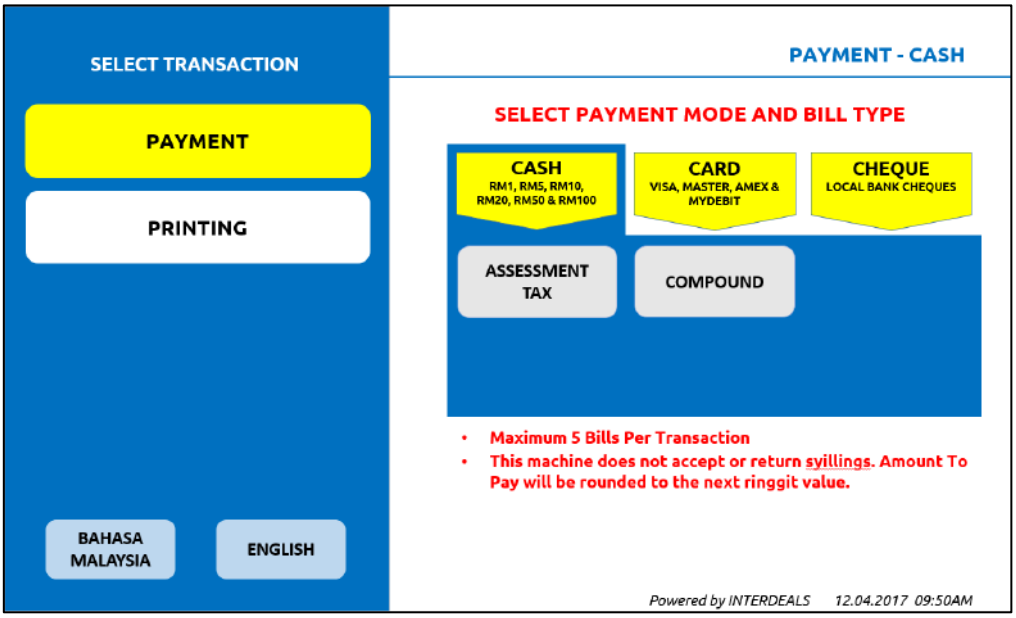


4.1 ADVERTISEMENT & MAIN MENU SCREEN

This screen describes the FPS 8000 Advertisement and Main Menu Page.

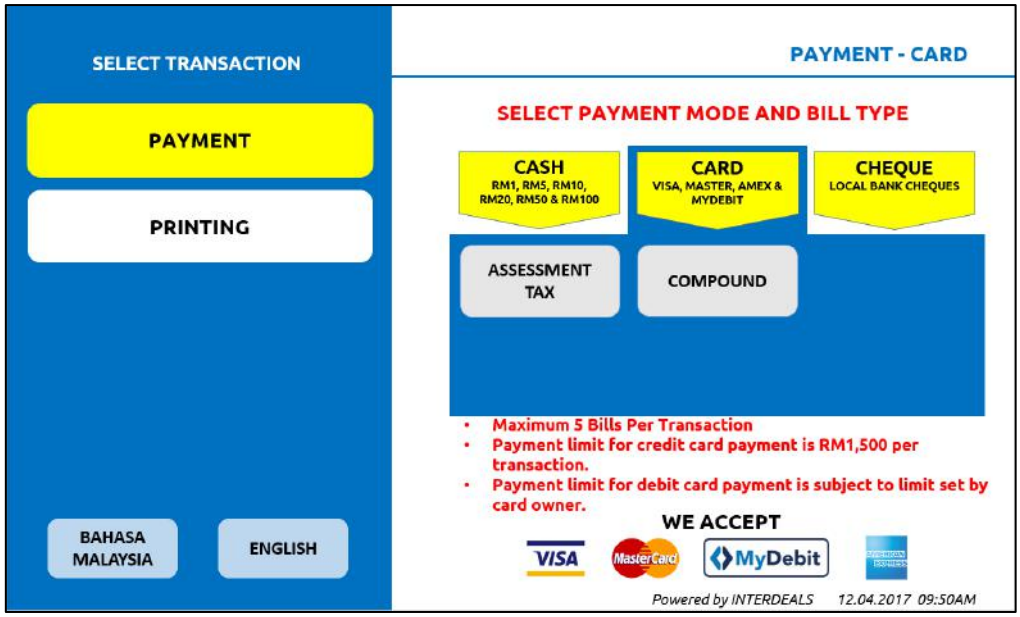
Screen Description:

- Advertisement Screen for the FPS 8000 system.
- User touch screen to begin the transaction.
- Advertisement screen will be loaded in sequence and display on the screen.



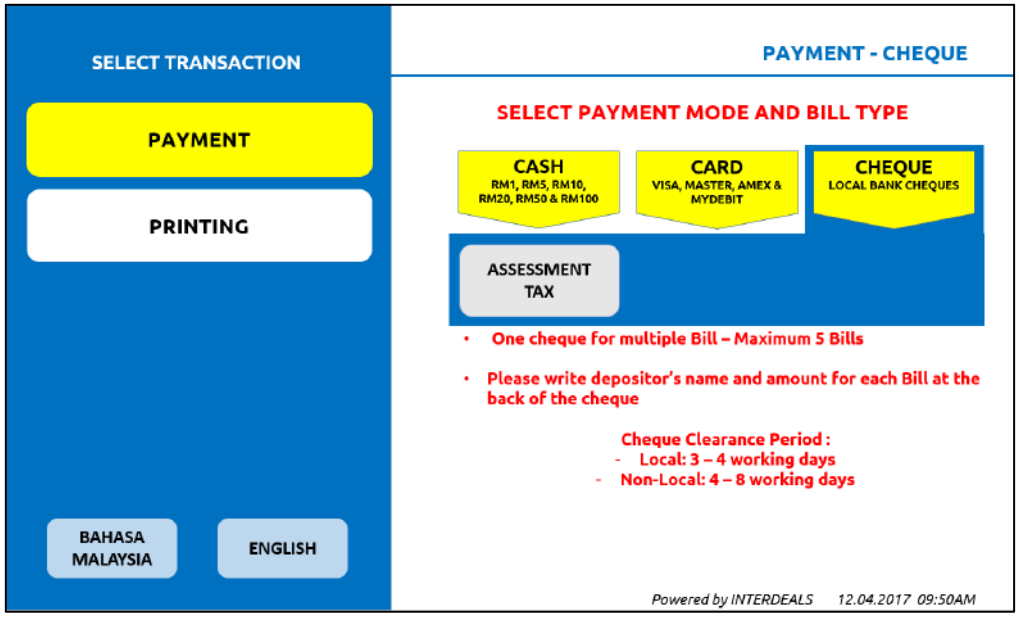
Screen Description:

- SELECT TRANSACTION screen.
- DEFAULT OPTION: PAYMENT - CASH
- OPTION: CASH PAYMENT – ASSESSMENT TAX & COMPOUND.
- LANGUAGES: toggle between different languages provided. (i.e. MALAY & ENGLISH). Default language will be MALAY.



Screen Description:

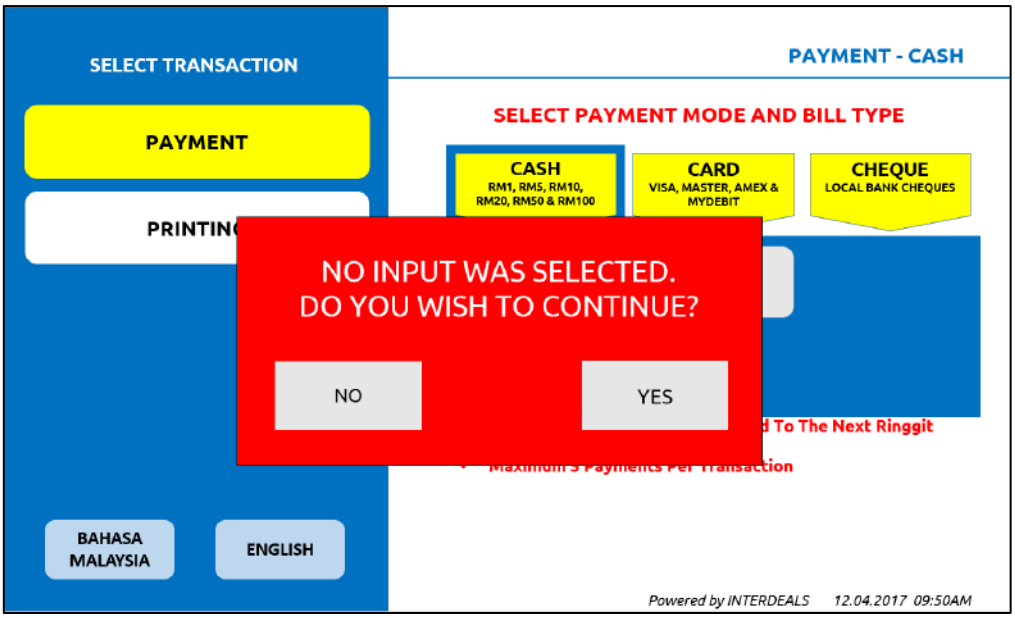
- SELECT TRANSACTION screen.
- OPTION: PAYMENT.
- DEFAULT OPTION: CARD PAYMENT for ASSESSMENT TAX & COMPOUND.
- LANGUAGES: toggle between different languages provided. (i.e. MALAY & ENGLISH). Default language will be MALAY.



Screen Description:

- SELECT TRANSACTION screen.
- OPTION: PAYMENT.
- DEFAULT OPTION: CHEQUE PAYMENT for ASSESSMENT TAX.
- LANGUAGES: toggle between different languages provided. (i.e. MALAY & ENGLISH). Default language will be MALAY.

4.2 MAIN MENU SCREEN ERROR / MESSAGE PROMPT

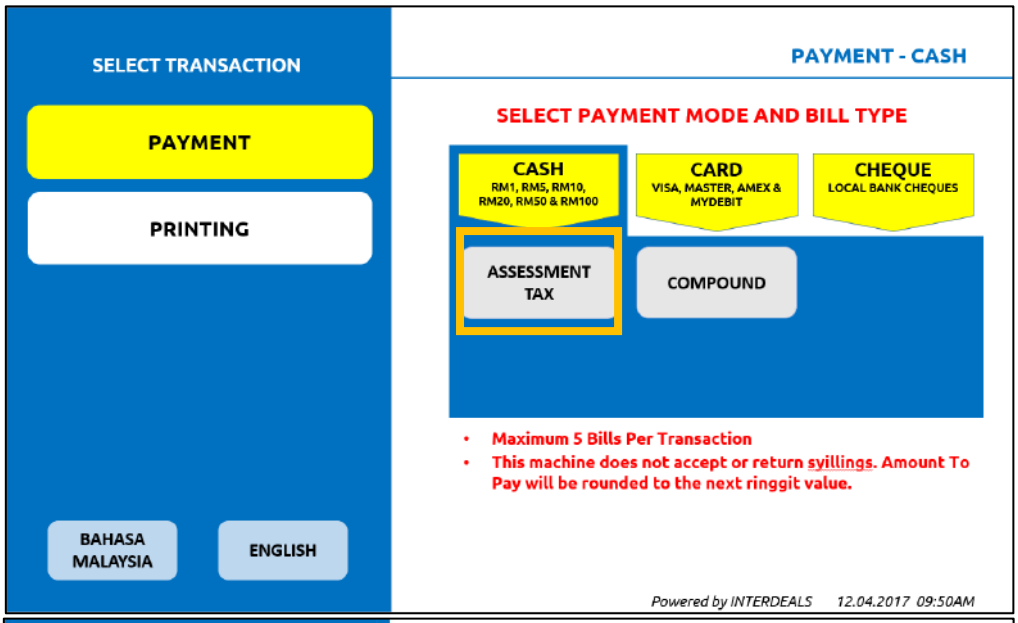


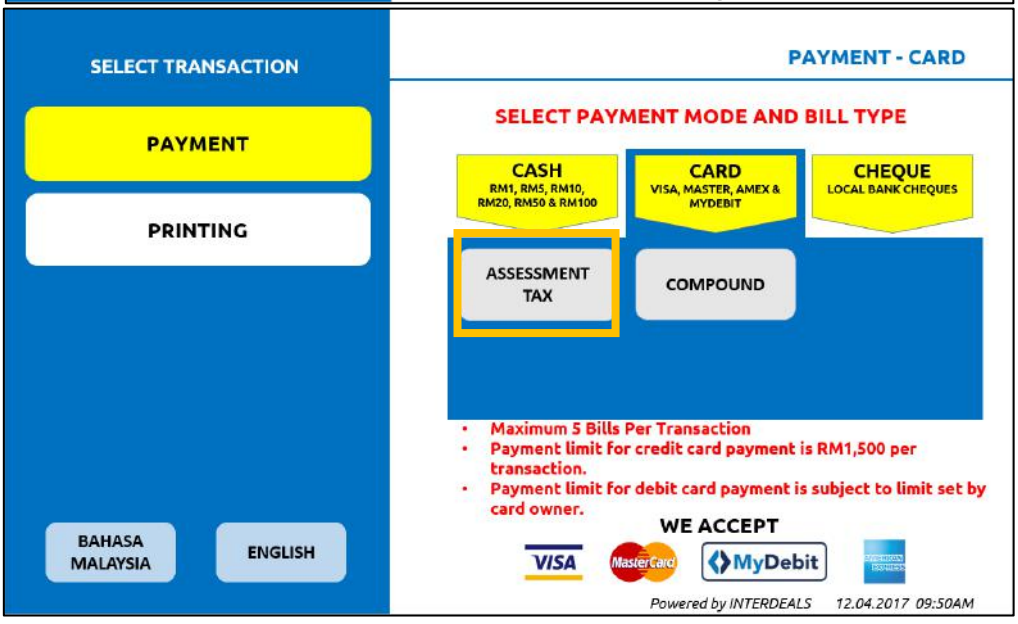
Screen Description:

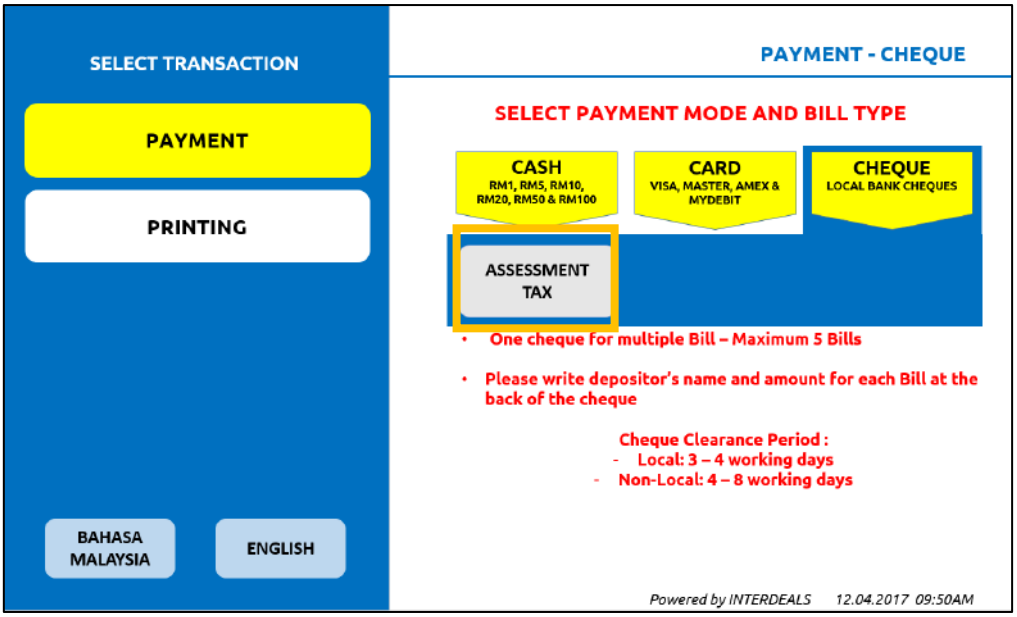
- Time out screen. Appear when there is no activity (idle) after 15 seconds. Another 15 seconds will be added when the above screen appear.
- YES: back to current screen.
- NO: back to ADVERTISEMENT Screen.

4.3 PAYMENT TRANSACTION SCREEN

This screen describes the FPS 8000 Payment Transaction screen flow.





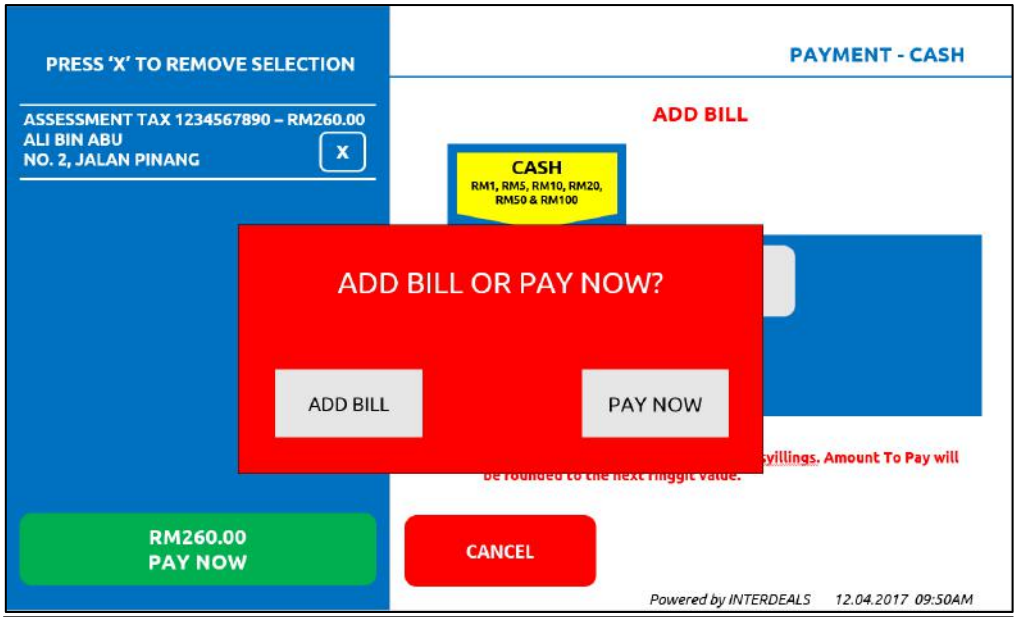


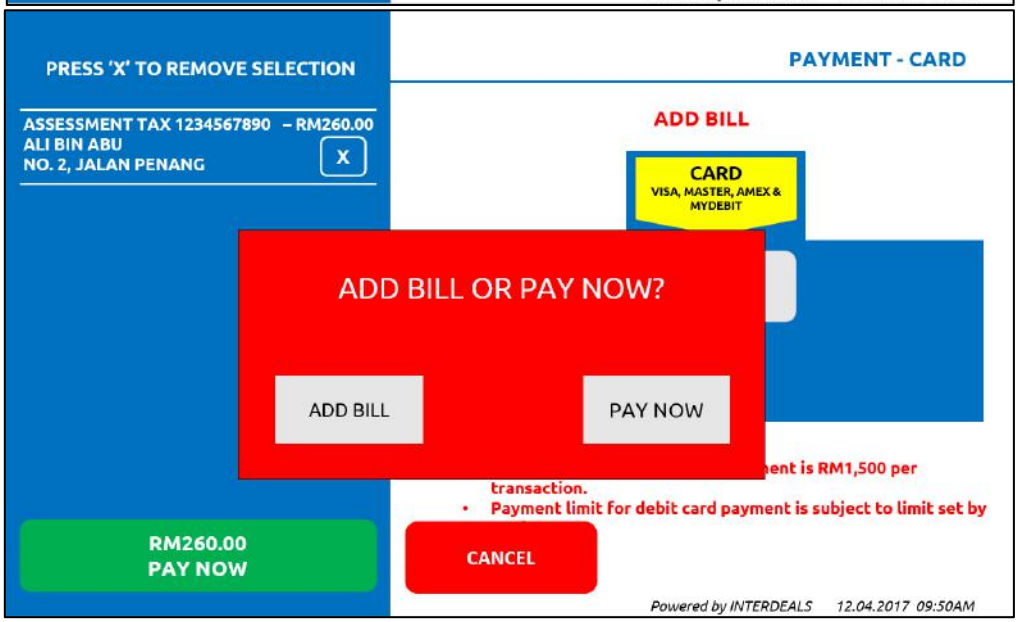
Screen Description:

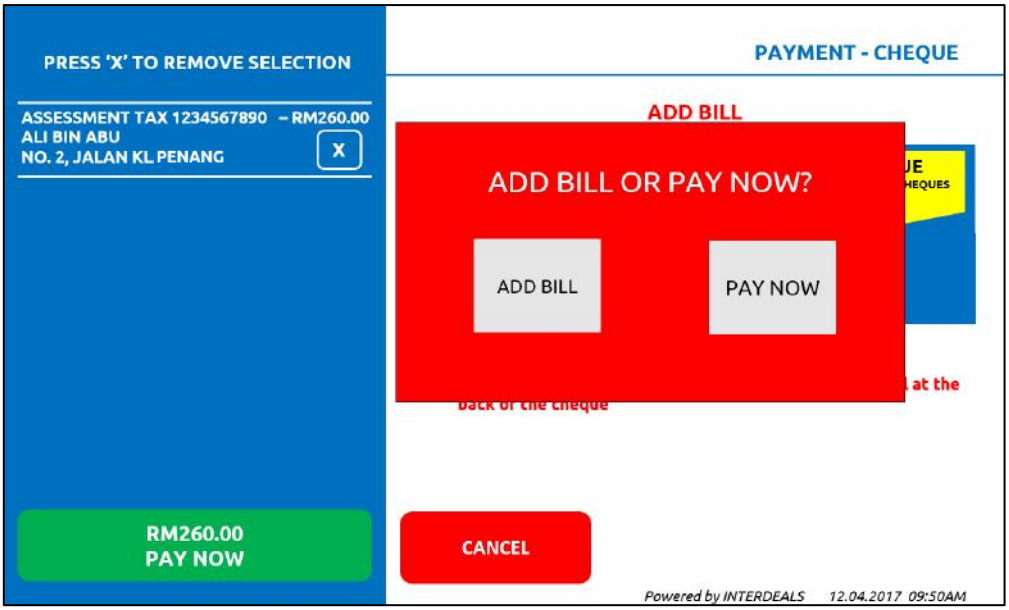
- SELECT TRANSACTION screen.
- SELECTED OPTION: CASH / CARD / CHEQUE PAYMENT for ASSESSMENT TAX.
- LANGUAGES: toggle between different languages provided. (i.e. MALAY & ENGLISH). Default language will be MALAY.

Screen Description:

- CASH / CARD / CHEQUE - ASSESSMENT TAX input screen.
- Scan Barcode or enter details as shown above.
- Selected field to be filled-in will be highlighted in green (as shown above).
- YES: will do inquiry based on Account Number that has been keyed-in & proceed to next screen.
- BACK: cancel payment and back to SELECT TRANSACTION screen.
- Telephone No. field is a mandatory field.

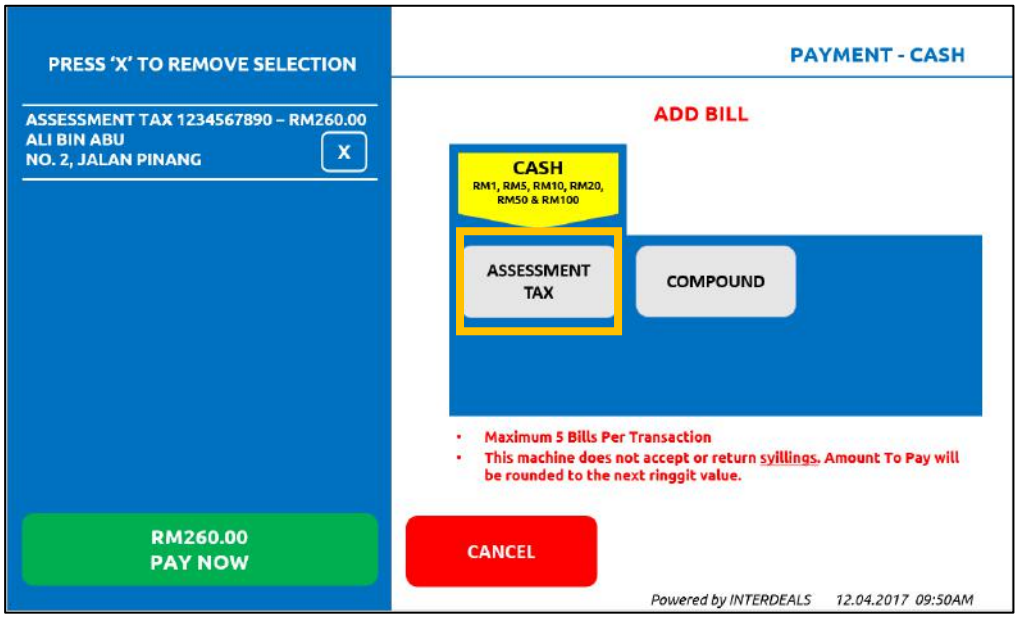

PRESS 'X' TO REMOVE SELECTION
ASSESSMENT TAX 1234567890 – RM260.00
ALI BIN ABU
NO. 2, JALAN PINANG
X
PAYMENT - CASH
ADD BILL
CASH
RM1, RM5, RM10, RM20, RM50 & RM100
ADD BILL OR PAY NOW?
ADD BILL
PAY NOW
RM260.00
PAY NOW
CANCEL
Powered by INTERDEALS 12.04.2017 09:50AM

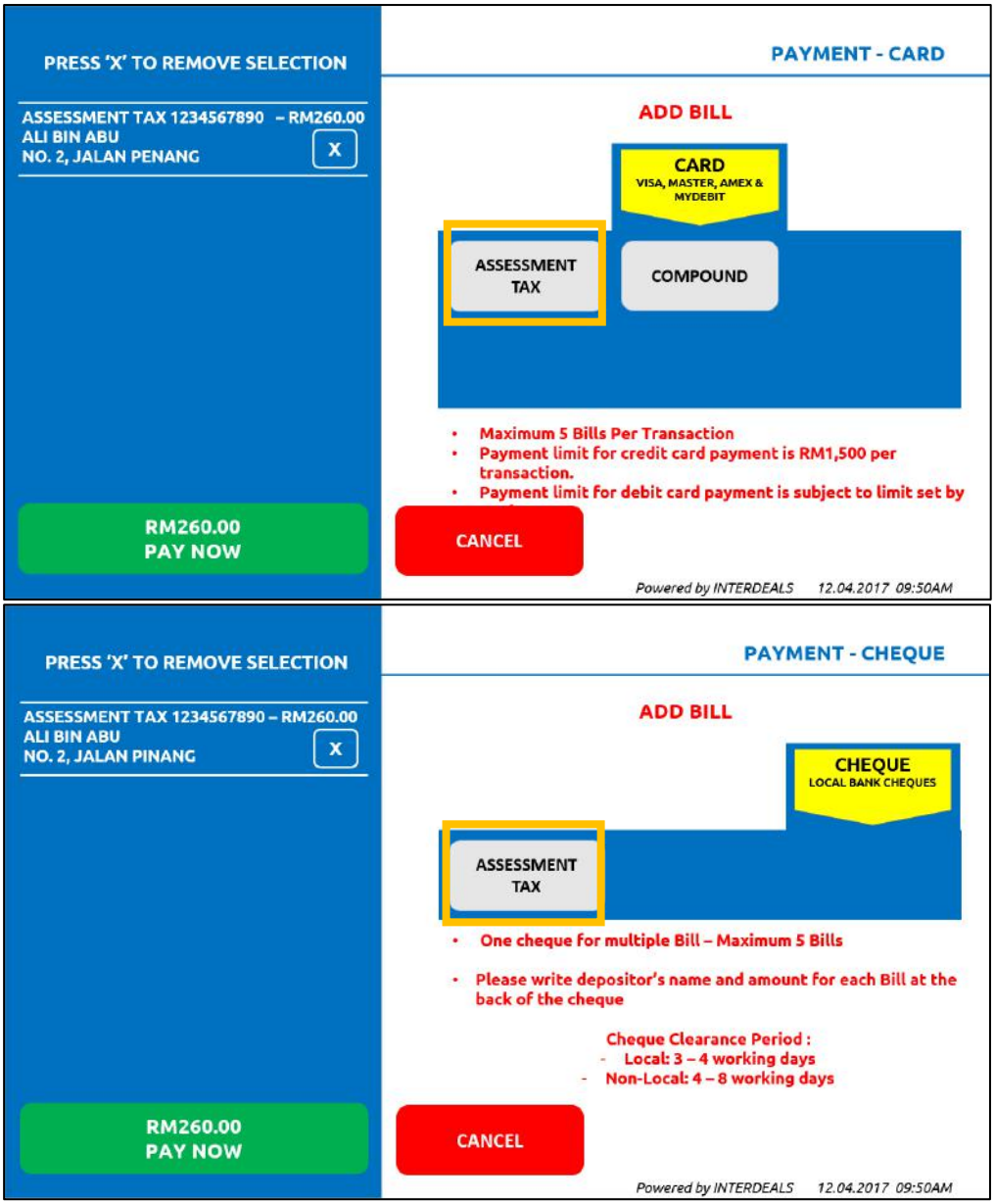

PRESS 'X' TO REMOVE SELECTION
ASSESSMENT TAX 1234567890 – RM260.00
ALI BIN ABU
NO. 2, JALAN PENANG
X
PAYMENT - CARD
ADD BILL
CARD
VISA, MASTER, AMEX & MYDEBIT
ADD BILL OR PAY NOW?
ADD BILL
PAY NOW
transaction.
Payment limit for debit card payment is subject to limit set by
RM260.00
PAY NOW
CANCEL
Powered by INTERDEALS 12.04.2017 09:50AM



Screen Description:

- ADD BILL OR PAY NOW – CASH / CARD / CHEQUE pop up screen.
- Successful inquiry to the database will display the Account Information on the left frame of the screen.
- OPTION: add more payment by selecting ADD BILL (e.g ASSESSMENT TAX or COMPOUND or etc.).
- PAY NOW: proceed to Insert Cash / Card / Cheque screen.



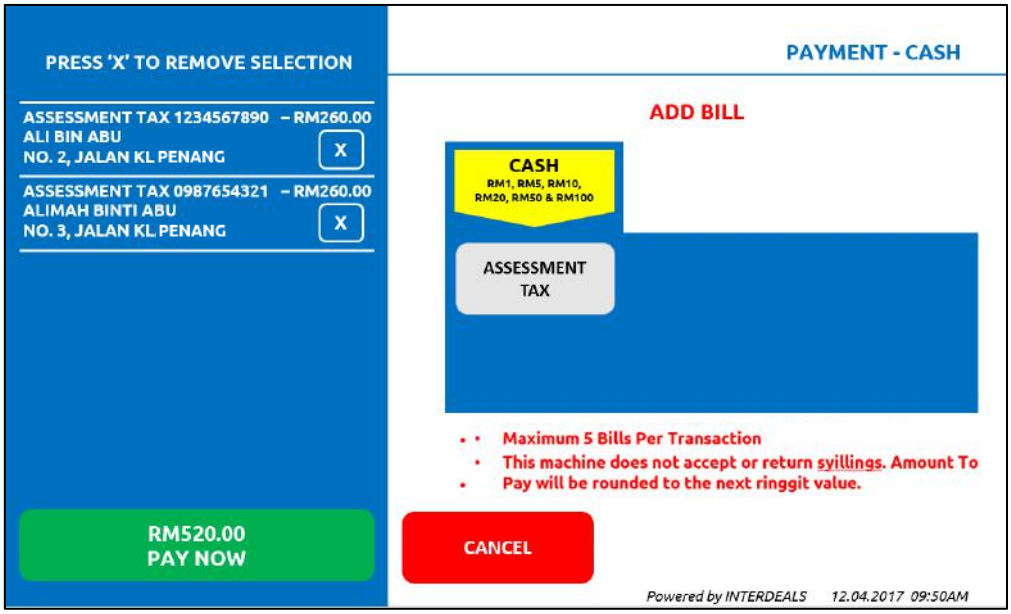


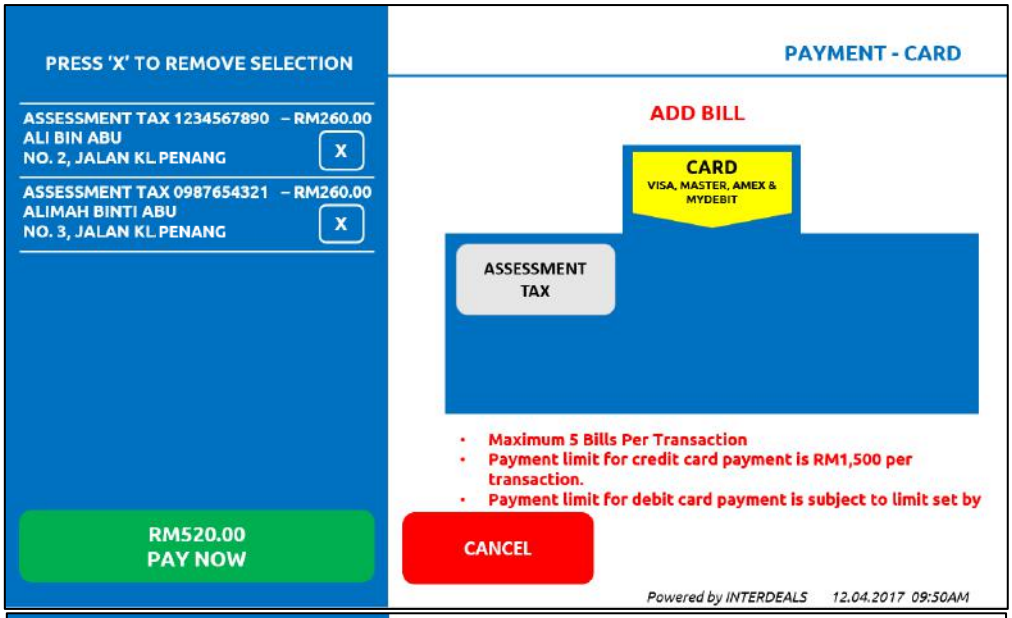
Screen Description:

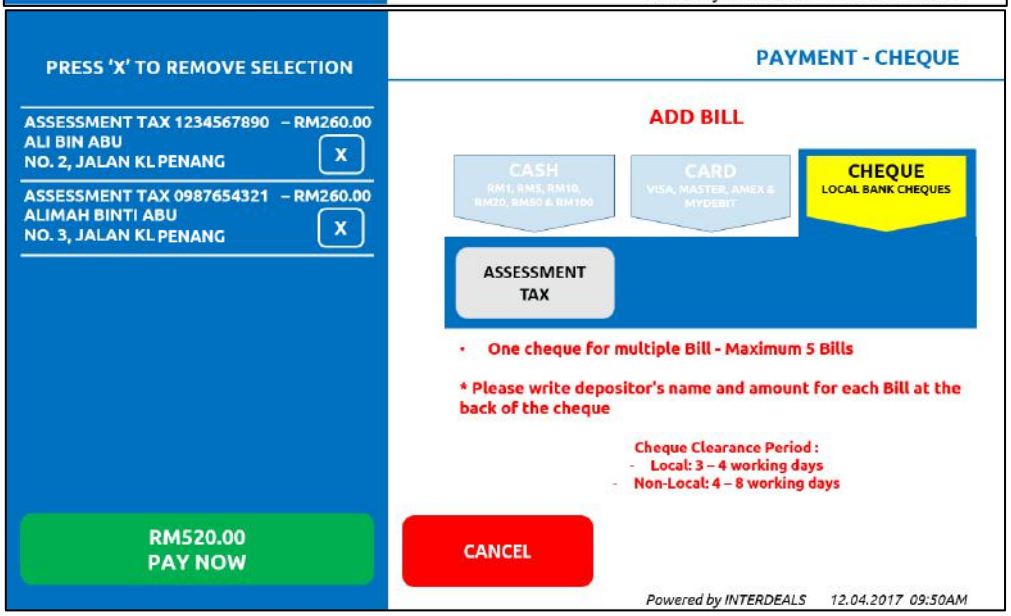
- PAYMENT – CASH / CARD / CHEQUE screen.
- Successful inquiry to the database will display the Account Information on the left frame of the screen.
- OPTION: add more payment by selecting a Bill (e.g ASSESSMENT TAX or COMPOUND or etc.).
- X : delete selected payment
- RM260.00 PAY NOW : proceed to Insert Cash / Card / Cheque screen.
- CANCEL: cancel all payment and back to Advertisement Screen.

Screen Description:

- ADD BILL – TAX ASSESSMENT input screen.
- Scan Barcode or enter details as shown above.
- Selected field to be fill in will be highlighted in green (as shown above).
- The cursor will automatically jump from Account Number field to Telephone No. field after filling in the correct account number has been filled in.
- YES: will do inquiry based on Account No. that has been keyed in & proceed to next screen.
- BACK: cancel payment and back to previous screen.
- Telephone No. field is a mandatory field.



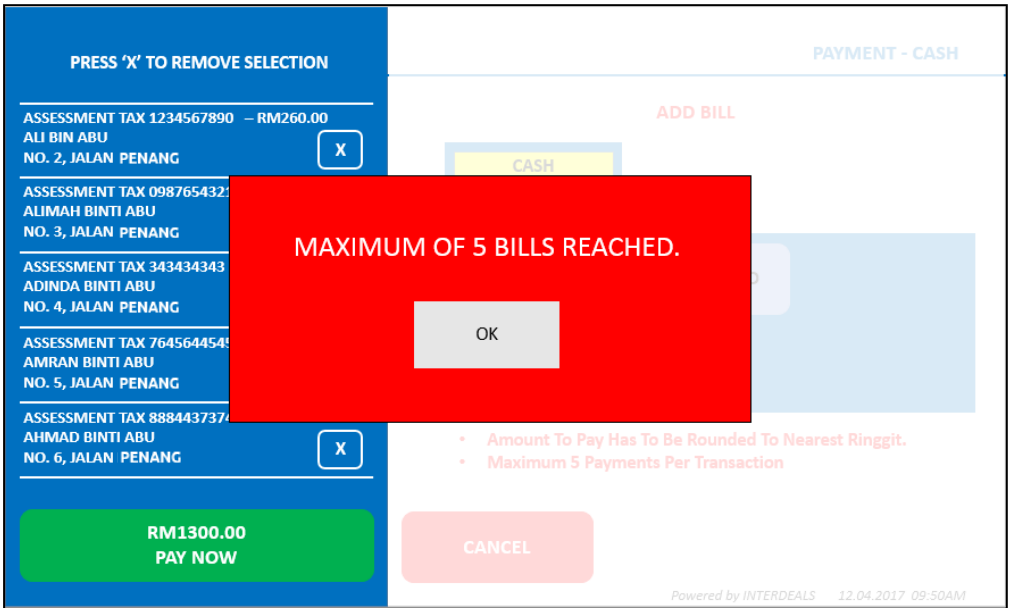




Screen Description:

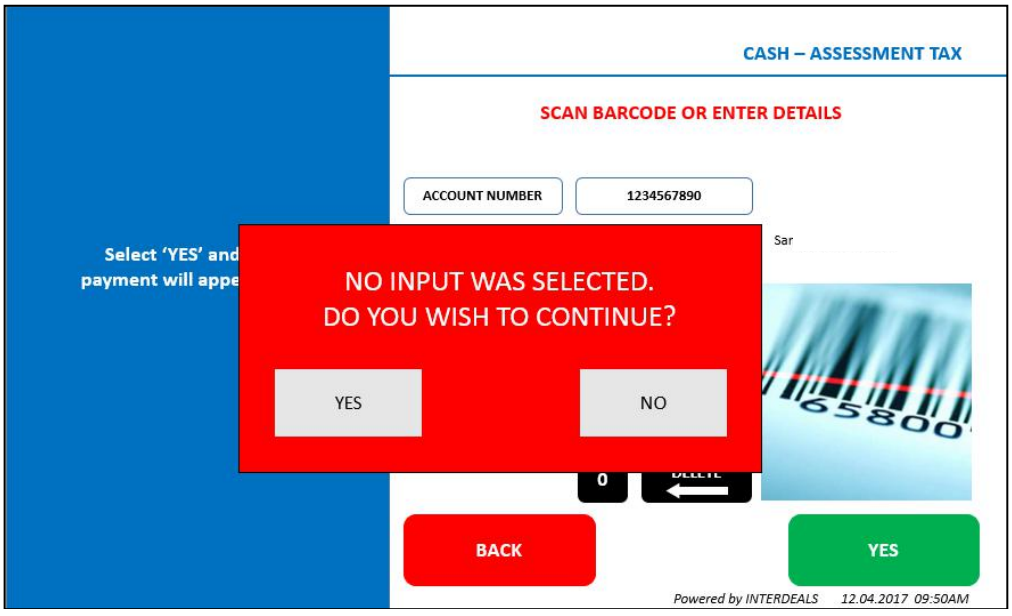
- MULTIPLE PAYMENT – CASH / CARD / CHEQUE screen.
- Successful inquiry to the database will display the ASSESSMENT TAX Information on the left frame of the screen.
- OPTION: add more payment by selecting a Bil (e.g ASSESSMENT TAX or COMPOUND or etc.).
- X : delete selected payment
- RM275.00 PAY NOW : proceed to Insert Cash / Card / Cheque screen.
- CANCEL: cancel all payment and back to ADVERTISEMENT Screen.

4.4 DATA ENTRY : ERROR / MESSAGE PROMPT



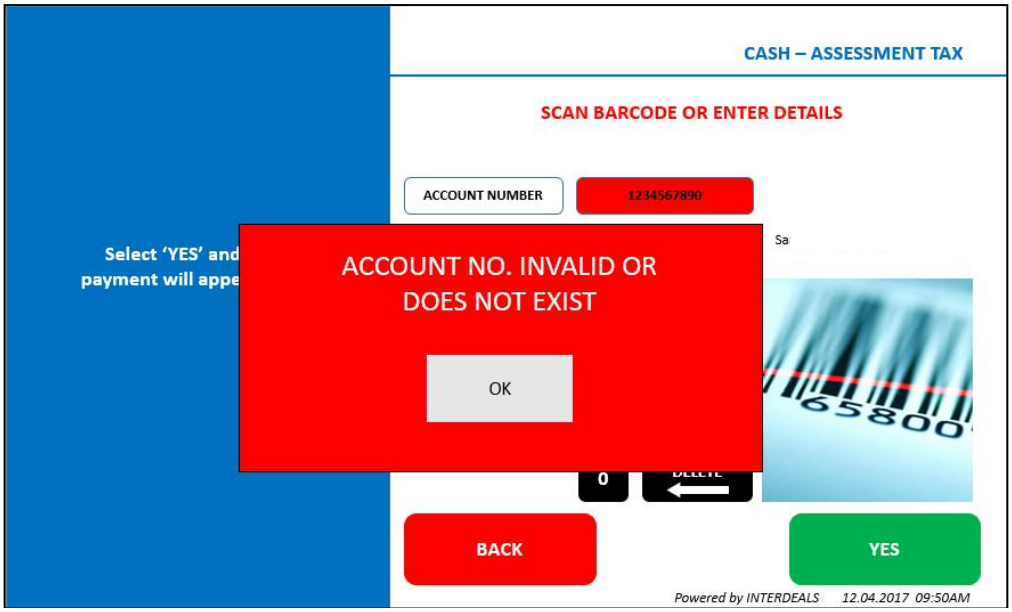
Screen Description:

- MAXIMUM OF 5 BILLS REACHED.
- Customer to either PAY NOW or delete one of the payment to add another new payment.
- OK: back to current screen.



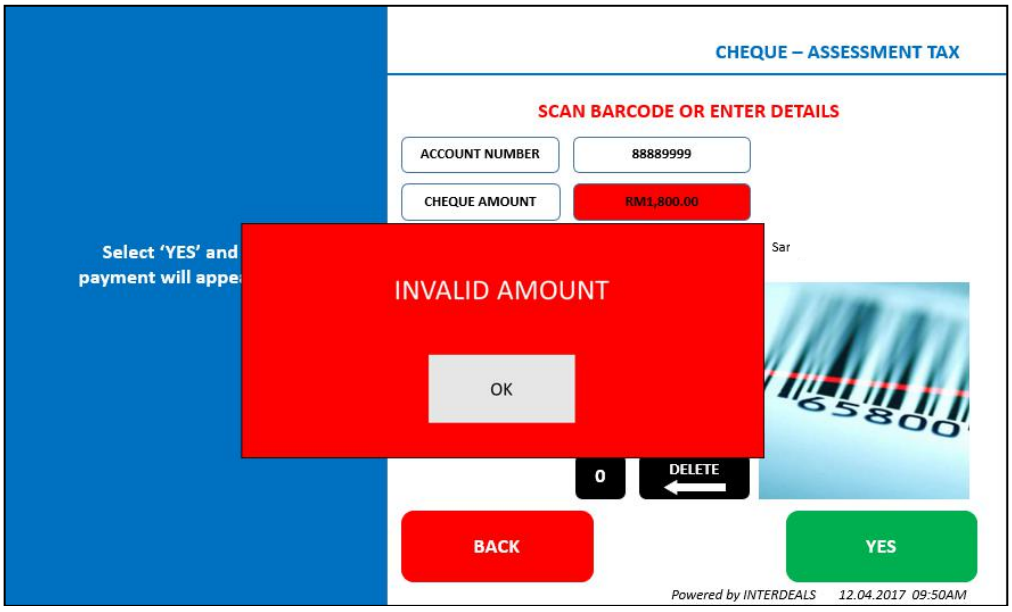
Screen Description:

- Time out screen. Appear when there is no activity (idle) after the predefined time (15 seconds).
- YES: back to current screen.
- NO: back to ADVERTISEMENT Screen.



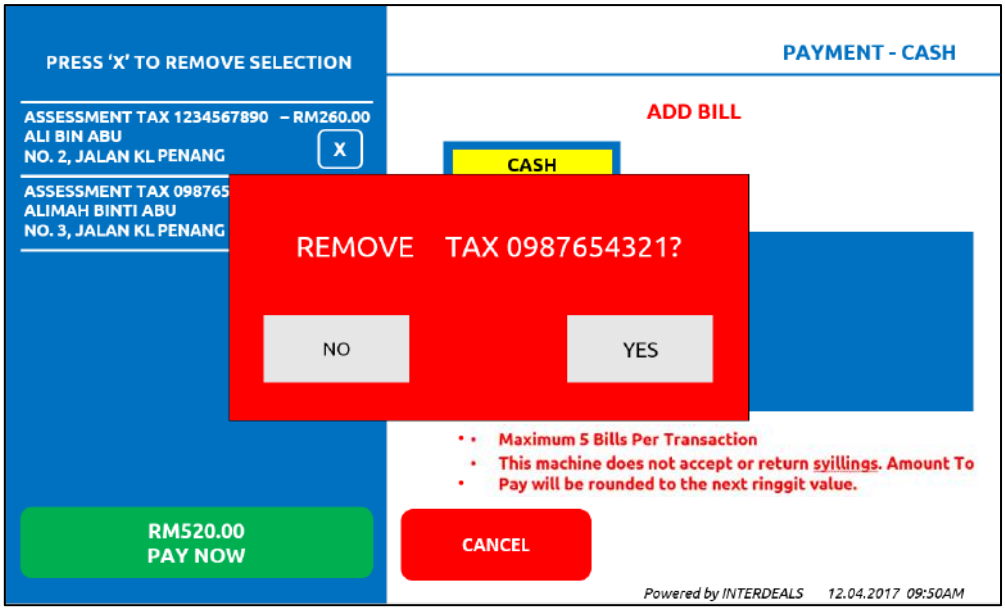
Screen Description:

- Checking on Account No field.
- Customer to change the account number at Account No. field (highlighted in red).
- OK: back to current screen.



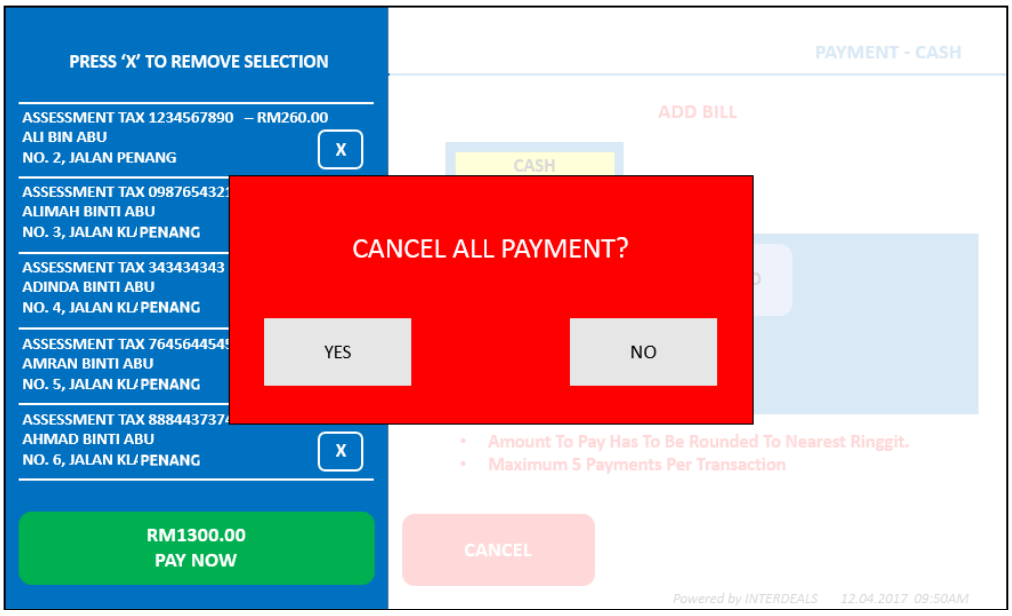
Screen Description:

- Checking on Amount field. (e.g. RM0.00)
- OK: back to current screen.



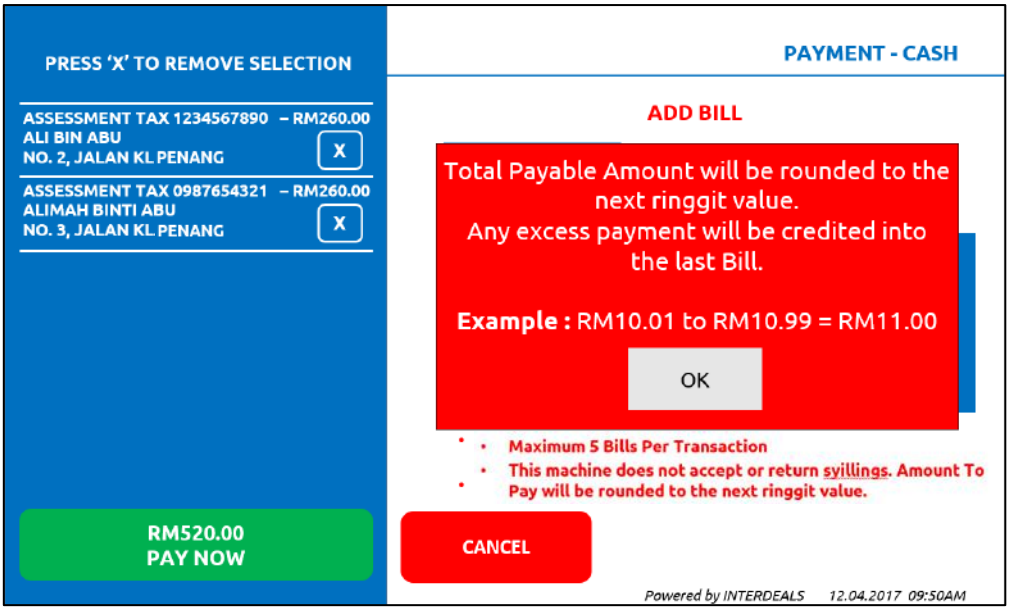
Screen Description:

- Cancel Single Payment screen. Appear when customer press the X button.
- YES: delete bill from Payment List and back to current screen.
- NO: no changes and back to current screen.

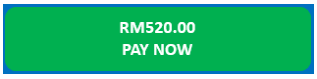


Screen Description:

- Cancel Transaction screen. Appear when customer press the CANCEL button.
- YES: clear all payment and back to Advertisement Screen.
- NO: back to current screen.



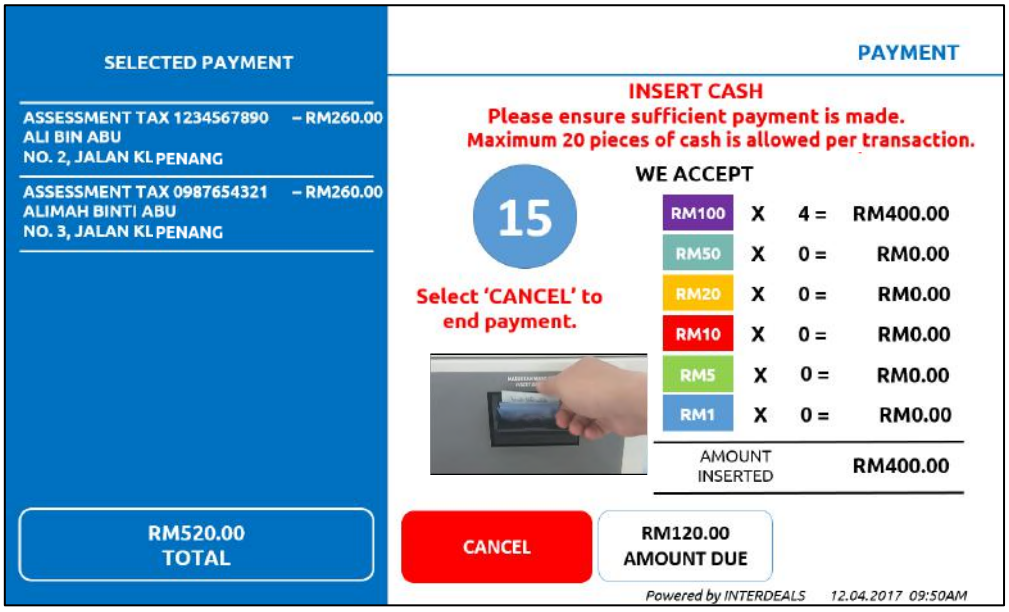
Screen Description:



- Pay Now disclaimer screen. This appear after Customer press the button in the PAYMENT – CASH screen.
- OK: press OK to proceed to insert cash screen.

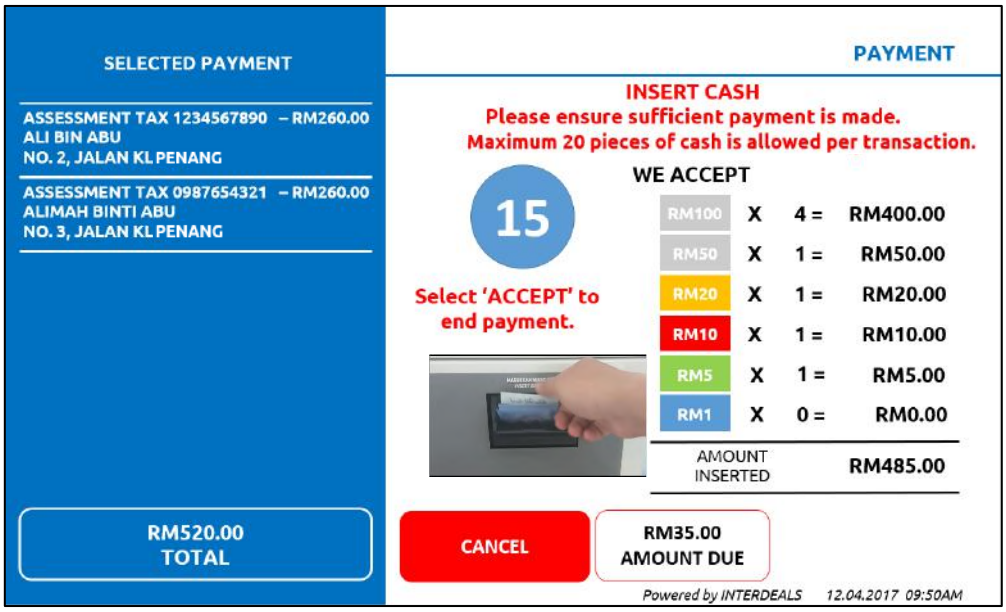
4.5 CASH PAYMENT SCREEN

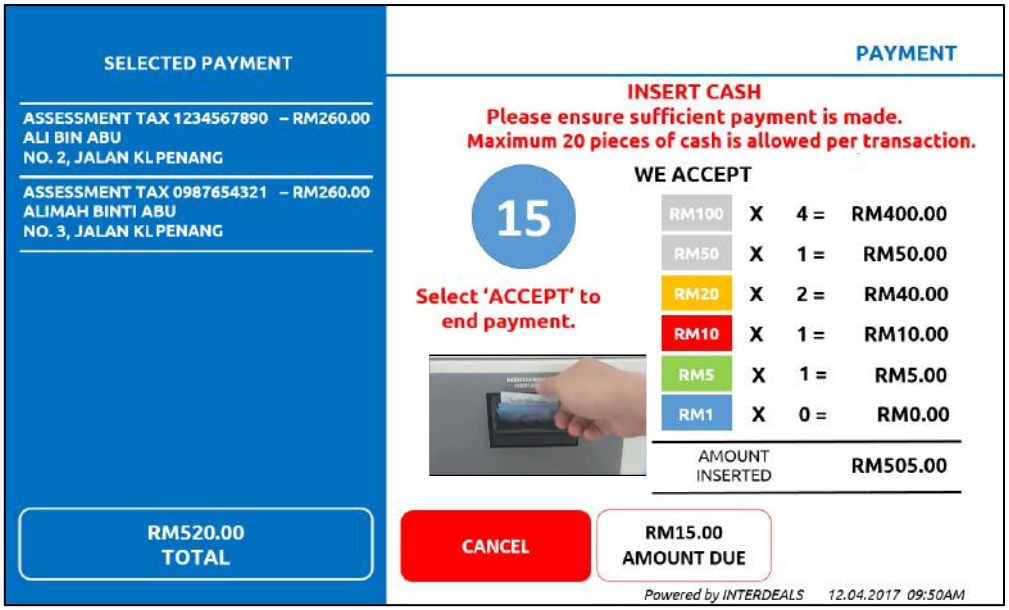
This screen describes the FPS 8000 cash payment screen flow.

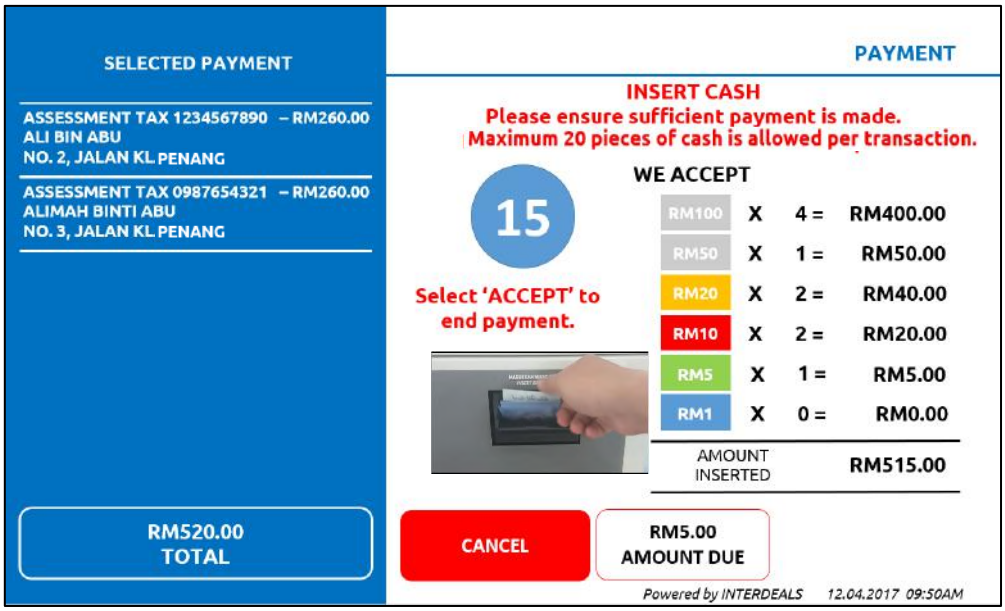


Screen Description:

- Payment screen. This appear during when Customer are inserting cash.
- Amount inserted will be reflected on the screen together with the Amount Due.
- Denomination that is allowed will be shown on the screen based on Amount Inserted ≤ Amount Due ≤ 20 pcs banknotes (Change allowed).
- The following 3 screens shows this.
- CANCEL: clear all payments and back to Advertisement Screen.



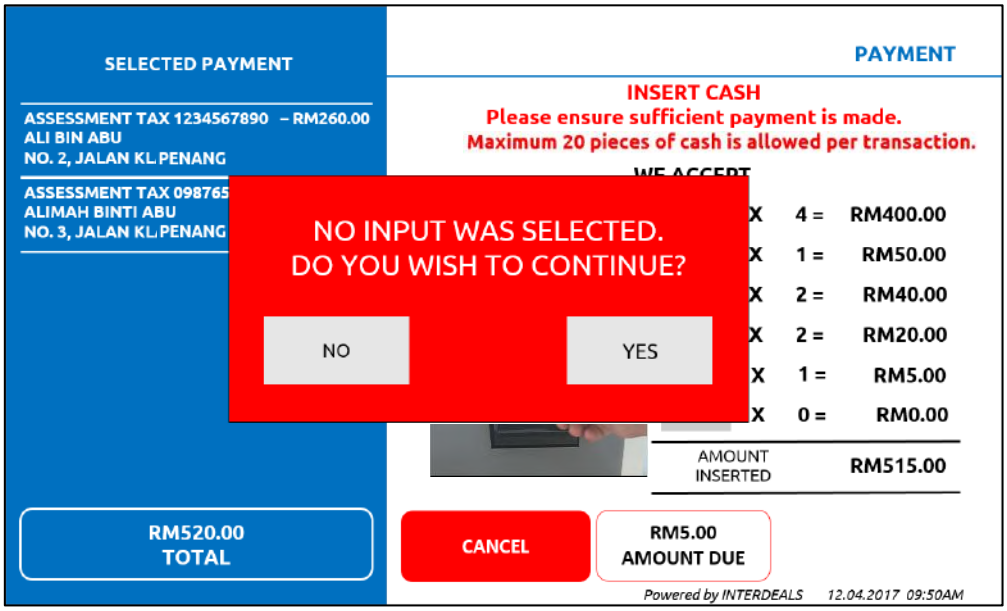




Screen Description:

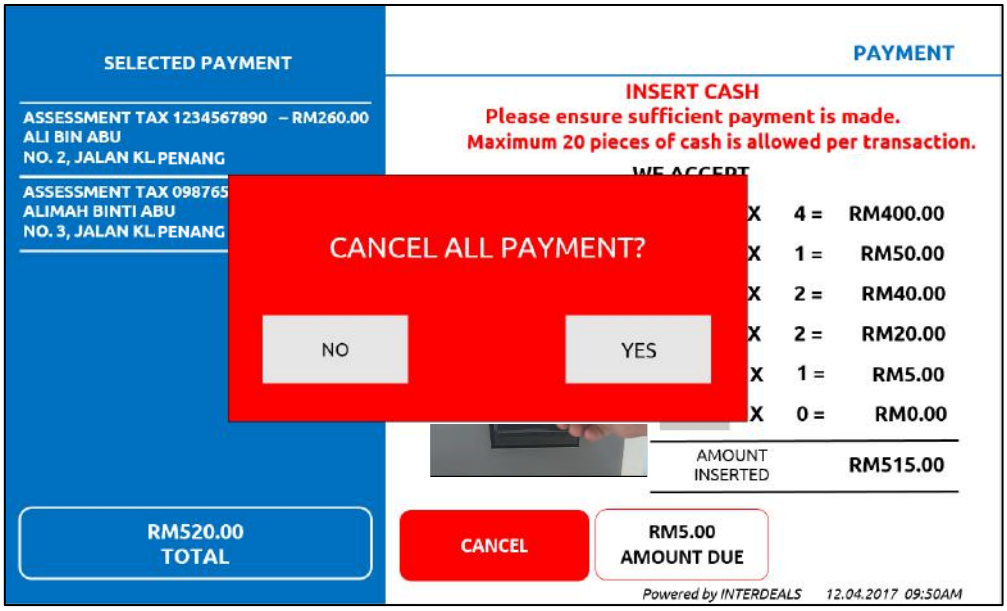
- Payment inserted screen.
- To proceed, user will need to insert sufficient payment, either equal or more than Amount Due.
- Upon receiving sufficient payment, the application will auto process the payment and go to Processing Screen.
- CANCEL: clear all payments and back to Advertisement Screen.

4.6 PAYMENT : ERROR / MESSAGE PROMPTS



Screen Description:

- Time out screen. Appear when there is no activity (idle) after the predefined time (30 seconds).
- YES: back to current screen.
- NO: back to ADVERTISEMENT Screen.



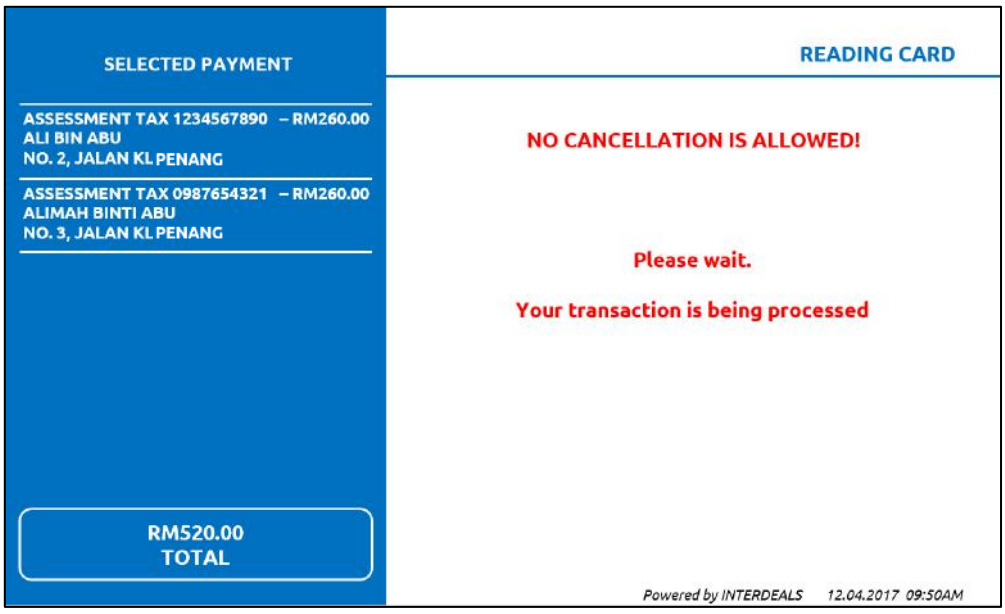
Screen Description:

- Cancel Transaction screen. Appear when customer press the CANCEL button.
- YES: clear all payment and back to Advertisement Screen.
- NO: back to current screen.

4.7 CARD PAYMENT SCREEN

Screen Description:

- PROCEED WITH PAYMENT screen. Appear when customer press the ACCEPT button.
- Insert credit / debit card to proceed.

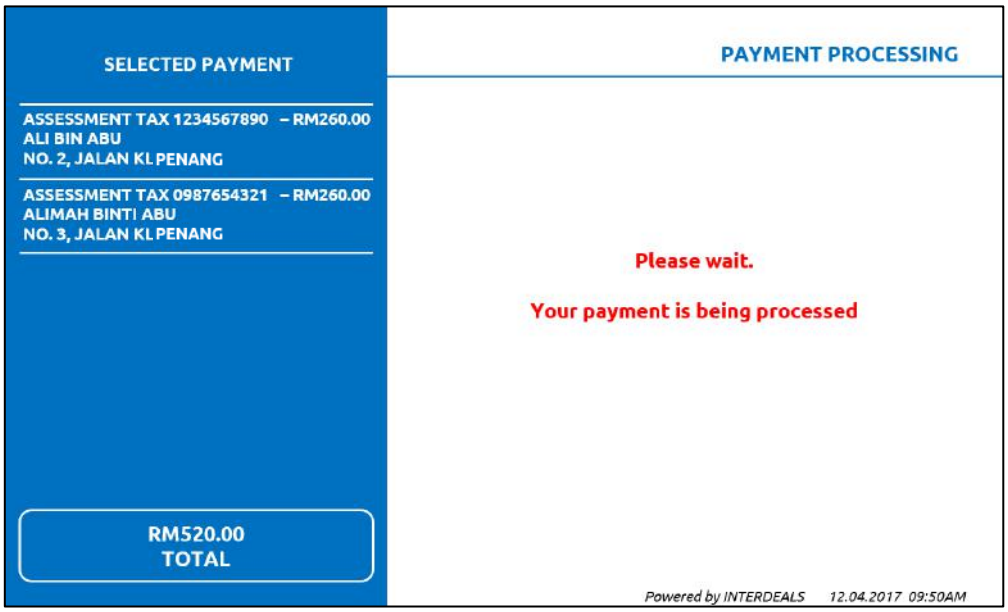


Screen Description:

- processing screen. Appear when customer has insert their credit / debit card.
- wait while credit / debit card is being read.

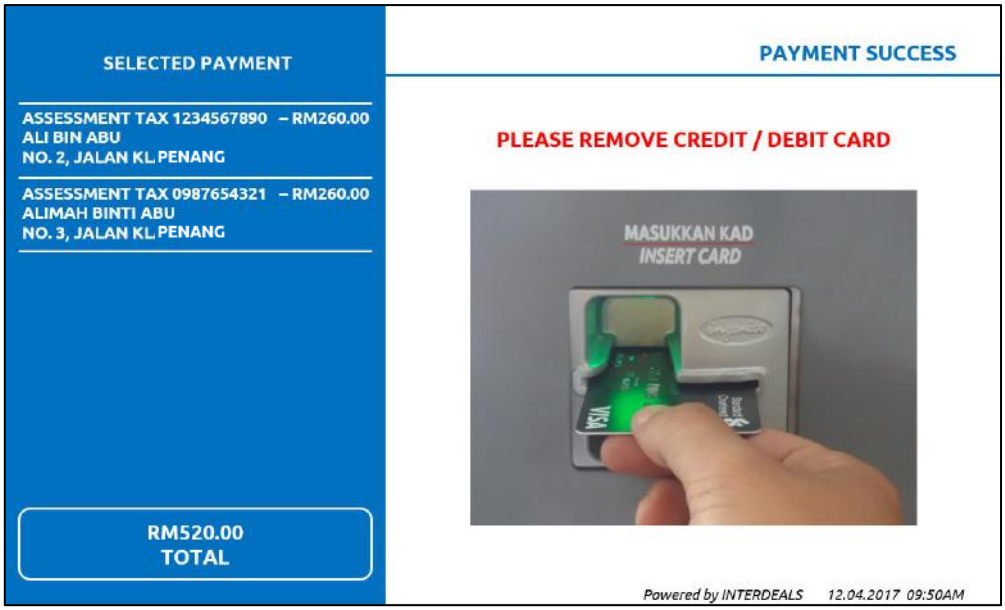
Screen Description:

- Enter 6-digit PIN screen. Appear after the credit / debit card has been successfully read.
- Enter credit / debit card 6-digit PIN and press Enter on credit / debit card device pin pad.



Screen Description:

- Processing payment screen. Appear after customer enter their credit / debit card 6-digit PIN successfully.
- Please wait.



Screen Description:

- Payment success screen. Appear after payment is a success.
- Please remove credit / debit card.

4.8 CARD PAYMENT ERROR SCREEN

Screen Description:

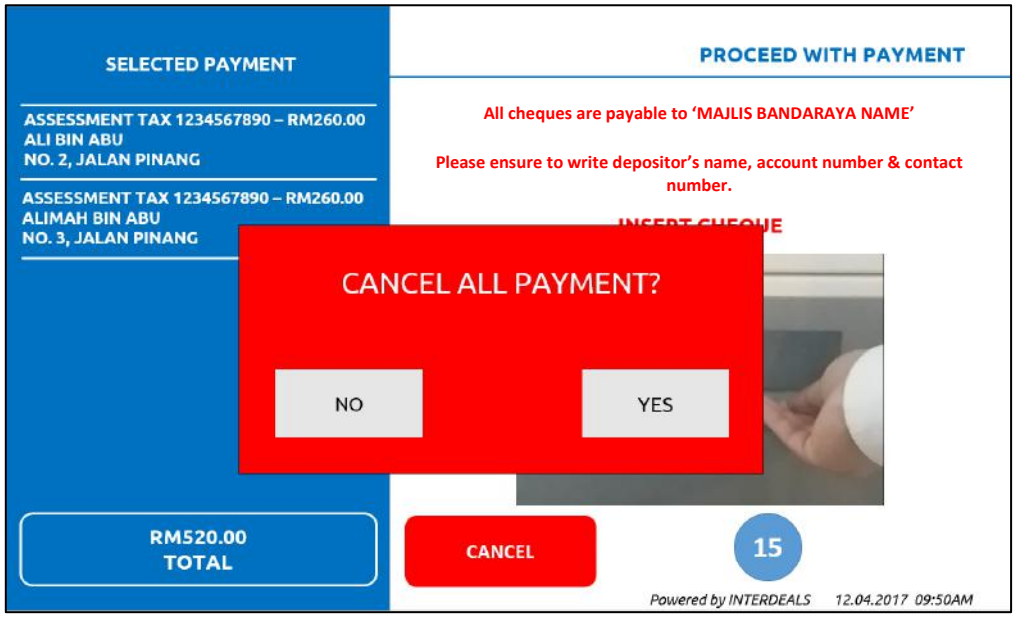
- Payment Fail screen. Appear when there is a problem reading the credit / debit card OR authenticating the credit / debit card OR etc.
- Remove credit / debit card and either re-insert same card properly or insert another card.

4.9 CHEQUE PAYMENT SCREEN

Screen Description:

- PROCEED WITH PAYMENT screen. Appear when customer press the ACCEPT button.
- Insert cheque to proceed.
- CANCEL: back to previous screen.

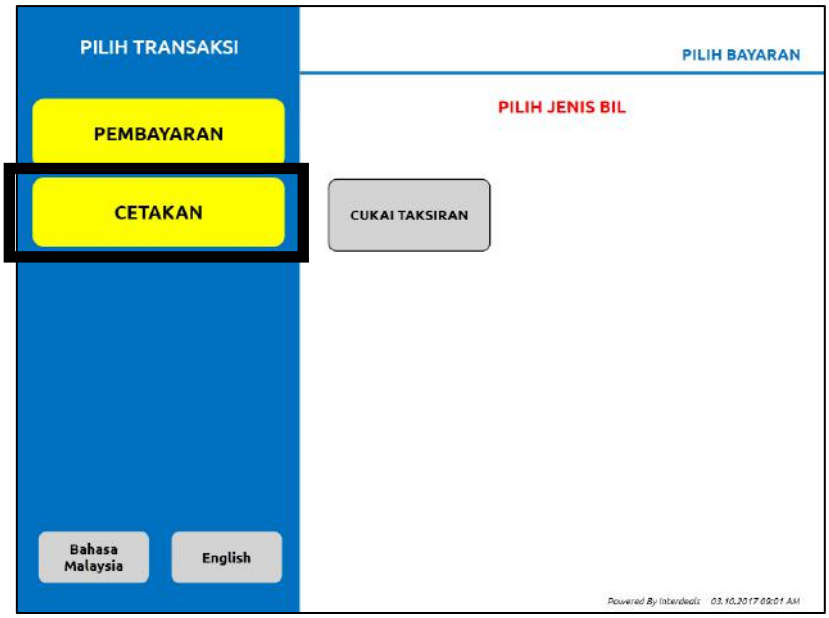
4.10 CHEQUE PAYMENT ERROR / MESSAGE SCREEN



Screen Description:

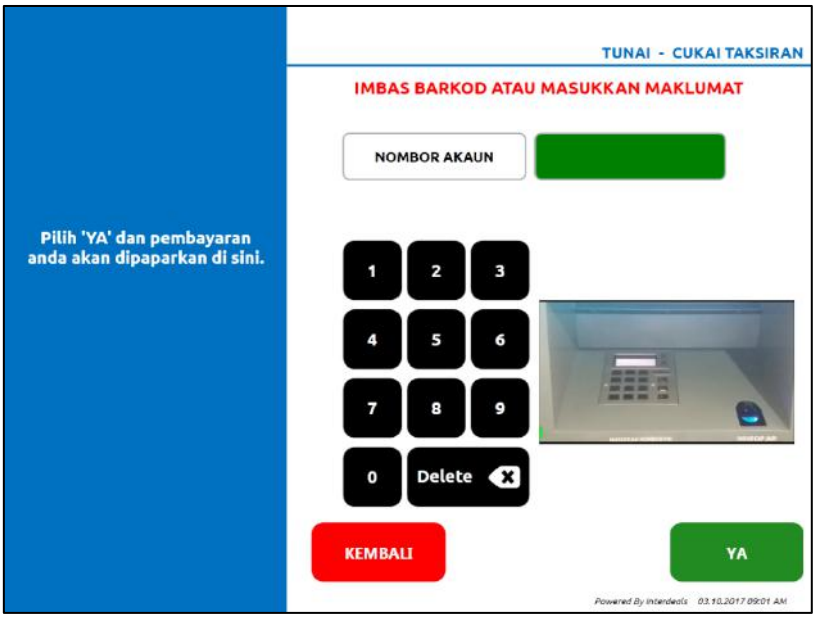
- Cancel Transaction screen. Appear when customer press the CANCEL button.
- YES: clear all payment and back to Advertisement Screen.
- NO: back to current screen.

4.11 ASSESSMENT TAX PRINTING SCREEN



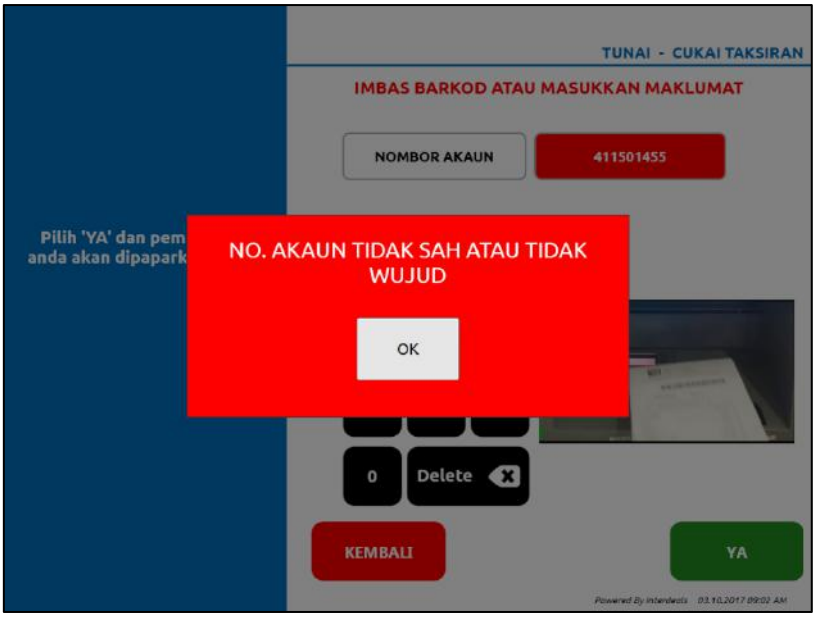
Screen Description:

- Printing screen. Appear when customer press the PRINTING button.
- To continue, press ASSESSMENT TAX.
- You may change the language by selecting Bahasa Malaysia or English.



Screen Description:

- ASSESSMENT TAX PRINTING input screen.
- Scan Barcode or enter details as shown above.
- YES: will do inquiry based on Account No. that has been keyed in & proceed to next screen.
- BACK: cancel printing and back to advertisement screen.

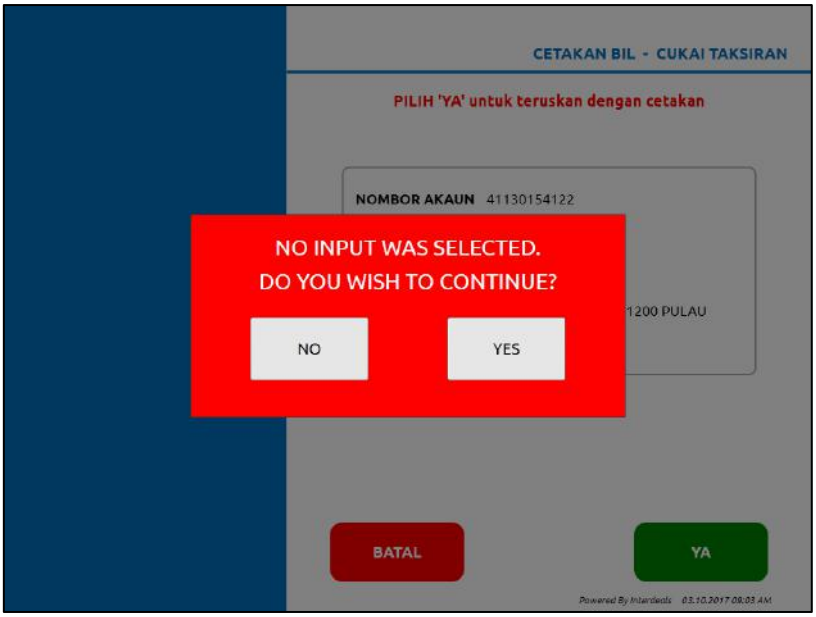


Screen Description:

- WRONG ACCOUNT NUMBER screen.
- OK: to continue and return to previous screen

Screen Description:

- ASSESSMENT TAX CONFIRMATION screen.
- User to confirm information displayed.
- YES: to proceed to print ASSESSMENT TAX.
- BACK: cancel printing and back to advertisement screen.



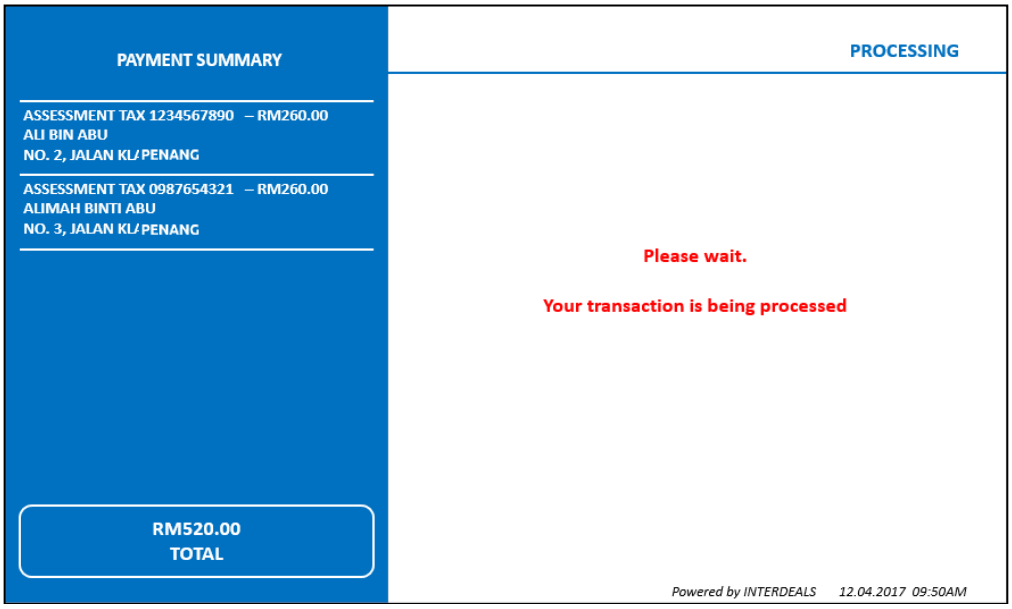
Screen Description:

- TIME OUT screen.
- YES: go back to previous screen
- BACK: cancel printing and back to advertisement screen.

Screen Description:

- Collection of ASSESSMENT TAX printing screen.
- Customer to collect the bill printed by FPS 8000.
- End of transaction.

4.11 PROCESSING SCREEN



Screen Description:

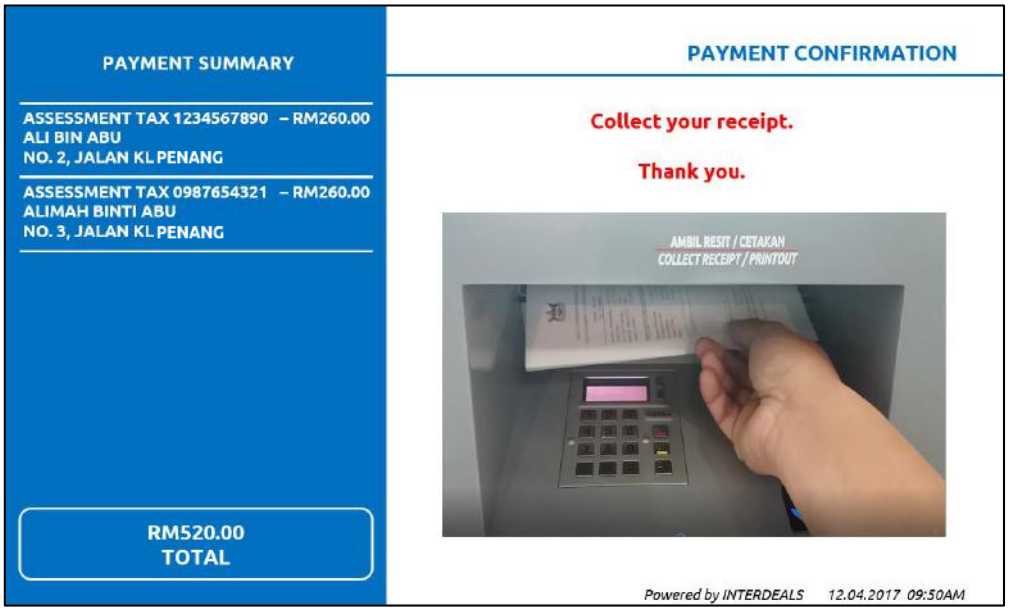
- Processing screen.
- Update account details to server.
- The following 2 screen shows 2 different type of scenarios for payment confirmation.

4.12 COLLECT YOUR MONEY SCREEN

Screen Description:

- Collection of change or rejected money screen (Cash only). Maximum of 20 pcs banknotes refund is allowed.
- The above example (Cash Payment Screen) will give the customer a balance of RM5.00.
- Customer to collect the change dispensed by FPS 8000.

4.13RECEIPT SCREEN



Screen Description:

- Collection of Receipt screen.
- Customer to collect the receipt printed by FPS 8000.
- End of transaction.

4.14 ERROR SCREEN

This screen describes FPS 8000 Error screen.

Screen Description:

- SYSTEM OFFLINE screen. Network down.

Screen Description:

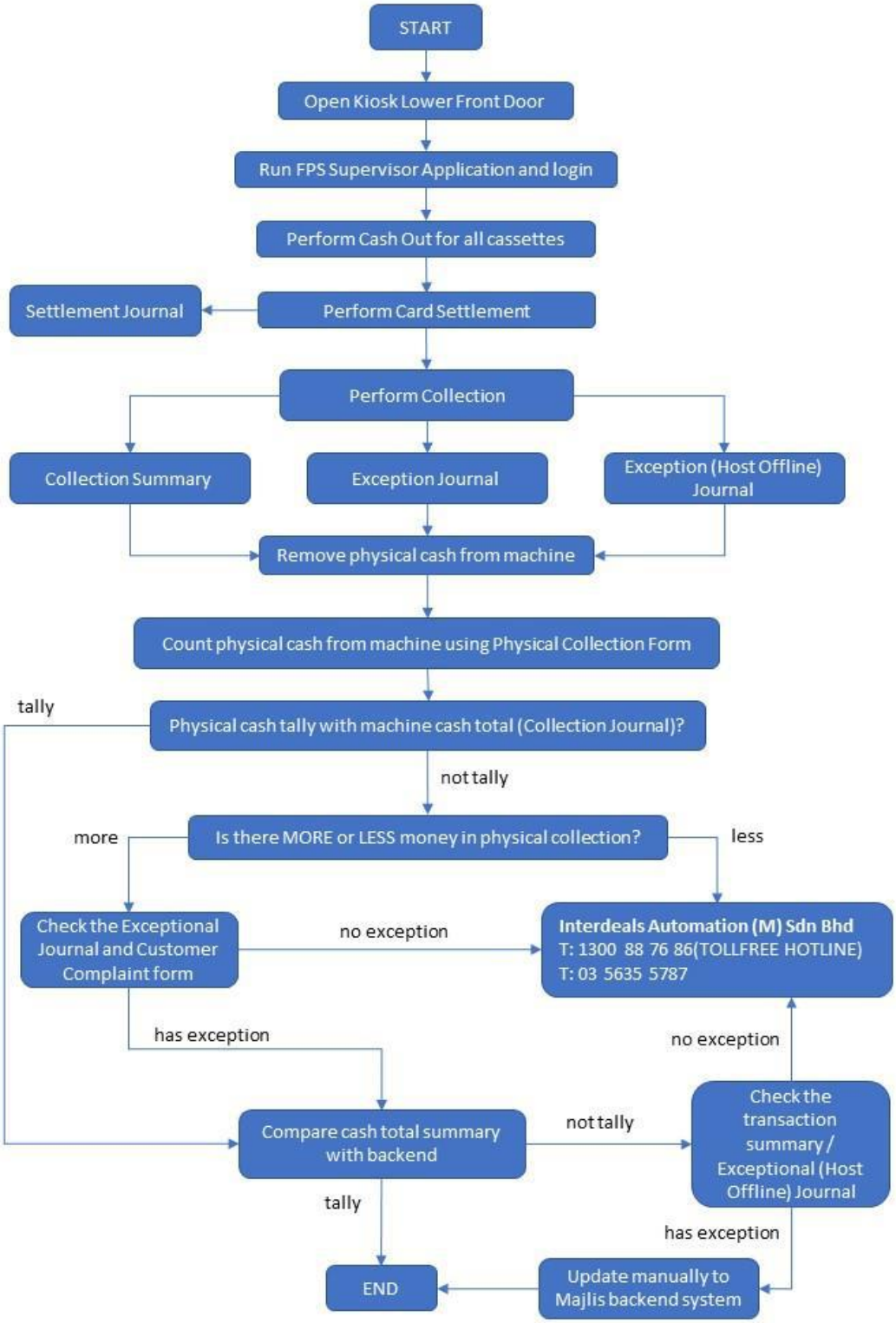
- SYSTEM OFFLINE screen. System error.

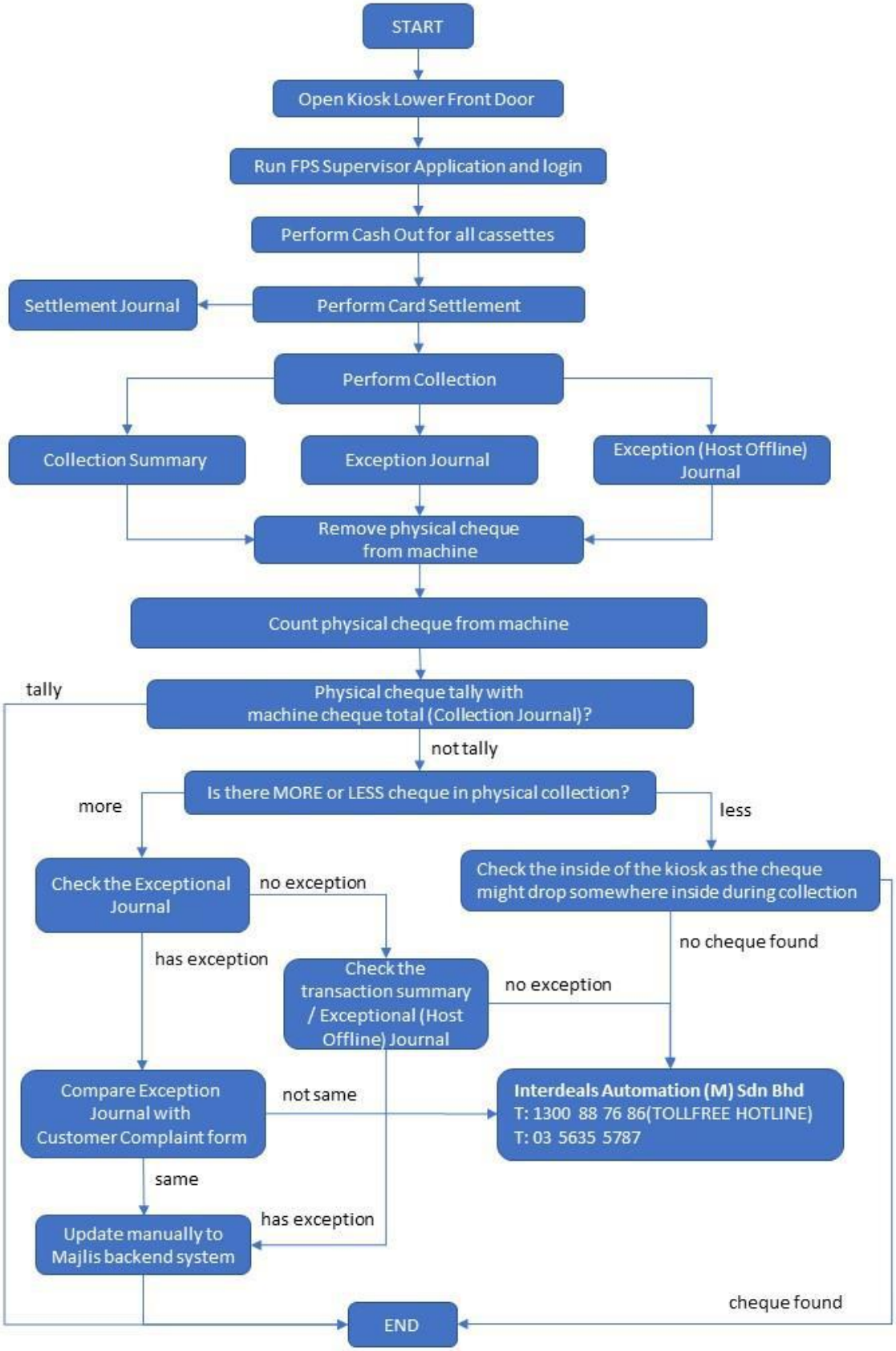
5. STANDARD OF PROCEDURE - RECONCILIATION

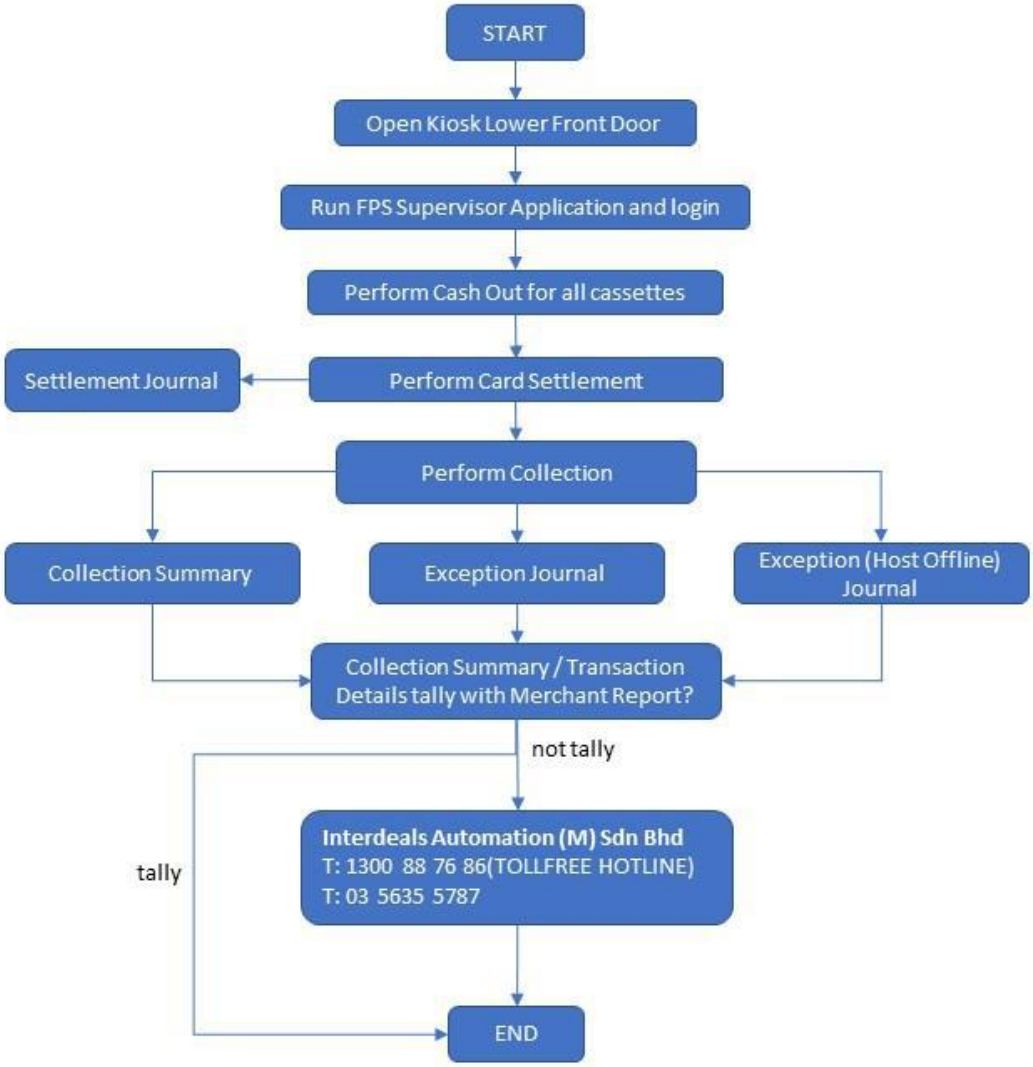
Introduction

This will act as a Standard Operating Procedure on what to do during reconciliation process.

Process Flow




START
Open Kiosk Lower Front Door
Run FPS Supervisor Application and login
Perform Cash Out for all cassettes
Settlement Journal
Perform Card Settlement
Perform Collection
Collection Summary
Exception Journal
Exception (Host Offline) Journal
Remove physical cheque from machine
Count physical cheque from machine
tally
Physical cheque tally with machine cheque total (Collection Journal)?
not tally
Is there MORE or LESS cheque in physical collection?
more
less
Check the Exceptional Journal
no exception
has exception
Check the transaction summary / Exceptional (Host Offline) Journal
Check the inside of the kiosk as the cheque might drop somewhere inside during collection
no cheque found
no exception
Compare Exception Journal with Customer Complaint form
not same
Interdeals Automation (M) Sdn Bhd
T: 1300 88 76 86(TOLLFREE HOTLINE)
T: 03 5635 5787
same
Update manually to Majlis backend system
has exception
cheque found
END


START
Open Kiosk Lower Front Door
Run FPS Supervisor Application and login
Perform Cash Out for all cassettes
Settlement Journal
Perform Card Settlement
Perform Collection
Collection Summary
Exception Journal
Exception (Host Offline) Journal
Collection Summary / Transaction Details tally with Merchant Report?
not tally
tally
Interdeals Automation (M) Sdn Bhd
T: 1300 88 76 86(TOLLFREE HOTLINE)
T: 03 5635 5787
END