

RPA PROJECT ON MORTGAGE PROCESSING USING AUTOMATION ANYWHERE

FORMS REQUIRED-

1. Customer ID form to input customer ID.

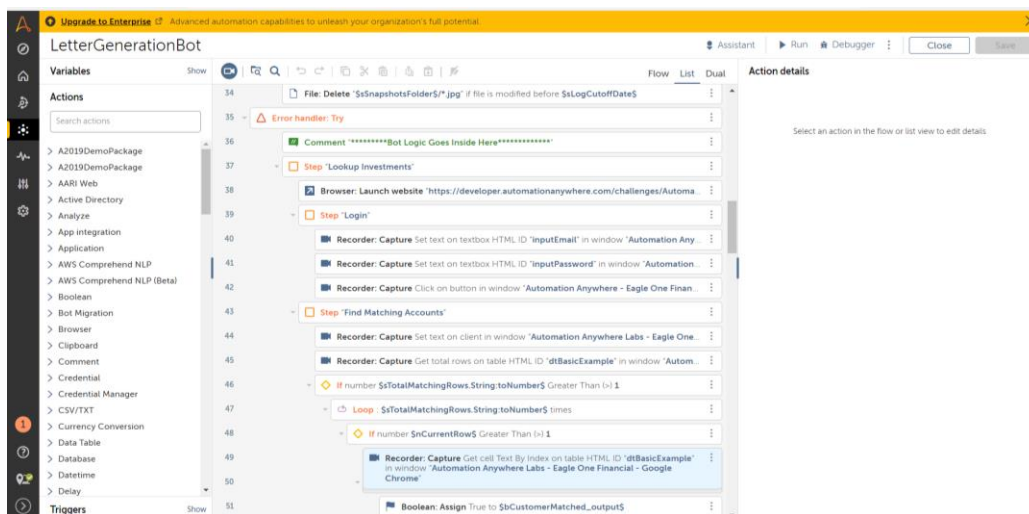
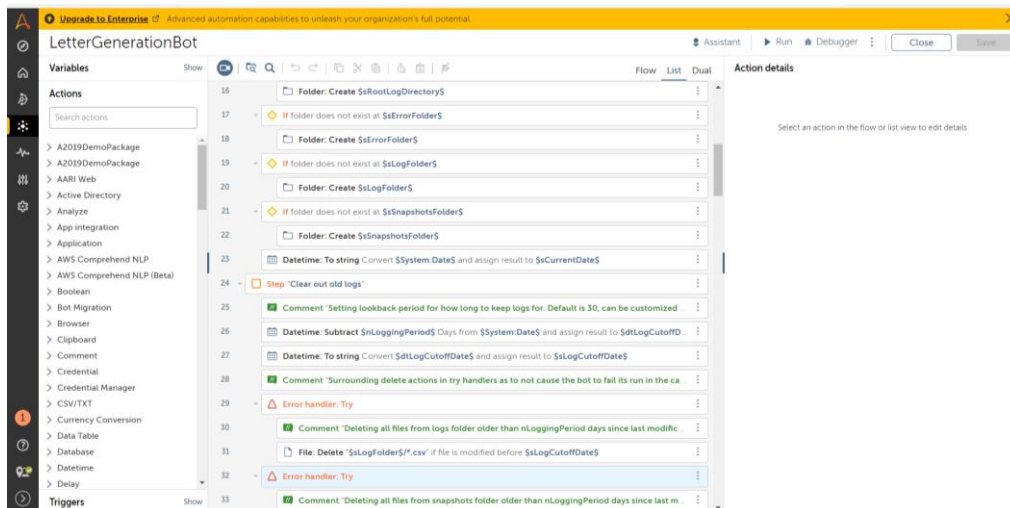
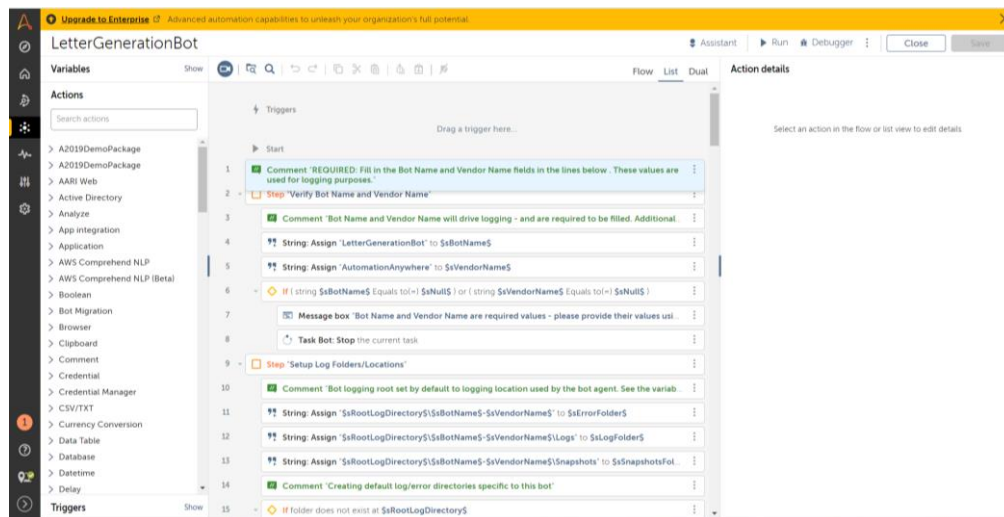
The screenshot shows the Automation Anywhere form editor interface. The form is titled 'CustomerID' and is currently in edit mode. The form layout includes a 'Form title' section, a 'Customer ID' input field, and a 'Enter 4 Digit Customer ID' label. The right sidebar displays the 'Properties - Form' panel, which includes settings for 'Form title', 'Formatting' (Font name, Font size), 'Dimensions' (Width, Height), 'Display behavior' (Enable close on end machine, Enable minimize on end machine), and 'Logos in footer' (No Logo, One Logo, Two Logos). The bottom of the form indicates it is 'Powered by Automation Anywhere'.

2. Form to store all the details of Customer.

The screenshot shows the Automation Anywhere form editor interface for a form titled 'POF_RESEARCH_Results'. The form layout includes several input fields: 'Customer ID', 'Customer Name', 'Customer Email', 'Customer Account Types', 'Customer Account Number', 'Path to Letter', 'Customer Total Account Value', and 'CC Email Address'. The right sidebar displays the 'Properties - Form' panel, which includes settings for 'Form title', 'Formatting' (Font name, Font size), 'Dimensions' (Width, Height), 'Display behavior' (Enable close on end machine, Enable minimize on end machine), and 'Logos in footer' (No Logo, One Logo, Two Logos). The bottom of the form indicates it is 'Powered by Automation Anywhere'.

BOTS REQUIRED-

1. Letter Generation Bot-



Upgrade to Enterprise Advanced automation capabilities to unleash your organization's full potential.

LetterGenerationBot

Assistant Run Debugger Close Save

Variables Show

Actions

Search actions

- A2019DemoPackage
- A2019DemoPackage
- AARI Web
- Active Directory
- Analyze
- App integration
- Application
- AWS Comprehend NLP
- AWS Comprehend NLP (Beta)
- Boolean
- Bot Migration
- Browser
- Clipboard
- Comment
- Credential
- Credential Manager
- CSV/TXT
- Currency Conversion
- Data Table
- Database
- Datetime
- Delay

Triggers Show

Flow List Dual

Action details

Select an action in the flow or list view to edit details

52 If string \$sCustomerFirstName\$ Equals to(=)

53 Recorder: Capture Get cell Text By Index on table HTML ID 'dtBasicE...

54 Recorder: Capture Get cell Text By Index on table HTML ID 'dtBasicE...

55 Recorder: Capture Get cell Text By Index on table HTML ID 'dtBasicE...

56 Step 'AccountType'

57 Recorder: Capture Get cell Text By Index on table HTML ID 'dtBasicE...

58 List: Add item \$sCurrentRowAccountType\$ to \$!AccountTypes\$

59 Step 'AccountNumber'

60 Recorder: Capture Get cell Text By Index on table HTML ID 'dtBasicE...

61 List: Add item \$sCurrentRowAccountNumber\$ to \$!AccountNumbe...

62 Step 'read/format balance'

63 Recorder: Capture Get cell Text By Index on table HTML ID 'dtBasicE...

64 String: Replace \$\$ with in \$sCurrentRowBalance\$ and assign the result to \$sCurrentRowBalance\$

65 Number: Assign '\$nRunningTotal\$+\$sCurrentRowBalance.String.to...

66 Number: To string convert \$nRunningTotal\$ to a string datatype and assign output t...

67 Step 'Lookup Savings'

68 Error handler: Try

69 REST Web Services: Get method request for URI 'https://raw.githubusercontent.co...

Upgrade to Enterprise Advanced automation capabilities to unleash your organization's full potential.

LetterGenerationBot

Assistant Run Debugger Close Save

Variables Show

Actions

Search actions

- A2019DemoPackage
- A2019DemoPackage
- AARI Web
- Active Directory
- Analyze
- App integration
- Application
- AWS Comprehend NLP
- AWS Comprehend NLP (Beta)
- Boolean
- Bot Migration
- Browser
- Clipboard
- Comment
- Credential
- Credential Manager
- CSV/TXT
- Currency Conversion
- Data Table
- Database
- Datetime
- Delay

Triggers Show

Flow List Dual

Action details

Select an action in the flow or list view to edit details

70 Boolean: Assign True to \$bCustomerMatched_output\$

71 JSON Object Manager: Initialize

72 JSON Object Manager: Query

73 If number \$sNumReturnedAccounts.String.ToNumber\$ Greater Than (>) 0

74 Loop: \$sNumReturnedAccounts.String.ToNumber\$ times

75 Number: Assign '\$nCurrentJSONAccount\$-1' to \$nCurrentSavingsAccount\$

76 JSON Object Manager: Query

77 Step 'account number'

78 JSON Object Manager: Query

79 List: Add item \$sCurrentRowAccountNumber\$ to \$!AccountNumbers\$

80 Step 'account type'

81 JSON Object Manager: Query

82 List: Add item \$sCurrentRowAccountType\$ to \$!AccountTypes\$

83 String: Replace \$\$ with in \$sCurrentAccountBalance\$ and assign the result t...

84 Number: Assign '\$nRunningTotal\$+\$sCurrentAccountBalance.String.toNu...

85 Number: To string convert \$nRunningTotal\$ to a string datatype and assign output to \$sRunningTotal\$

86 Error handler: Catch AllErrors

Drag an action here...

Upgrade to Enterprise Advanced automation capabilities to unleash your organization's full potential.

LetterGenerationBot

Assistant Run Debugger Close Save

Variables Show

Actions

Search actions

- A2019DemoPackage
- A2019DemoPackage
- AARI Web
- Active Directory
- Analyze
- App integration
- Application
- AWS Comprehend NLP
- AWS Comprehend NLP (Beta)
- Boolean
- Bot Migration
- Browser
- Clipboard
- Comment
- Credential
- Credential Manager
- CSV/TXT
- Currency Conversion
- Data Table
- Database
- Datetime
- Delay

Triggers Show

Flow List Dual

Action details

Select an action in the flow or list view to edit details

87 Step 'Generate Letter'

88 If boolean \$bCustomerMatched_output\$ Equals to(=) True

89 Number: To string convert \$nRunningTotal\$ to a string datatype and assign output to \$s...

90 String: To number Convert string \$sRunningTotal\$ to a number and assign it to number v...

91 If file does not exist at 'C:\templPOFLetterGen\POF_template.docx'

92 Browser: Download file from 'https://github.com/AutomationAnywhere/A2019-AA...

93 String: Assign 'C:\templPOFLetterGen\POFLetter_.\$sCustomerFirstName\$sCustomerL...

94 File: Copy 'C:\templPOFLetterGen\POF_template.docx' to \$sGeneratedLetter_output\$

95 Step 'Set Customer Name'

96 String: Assign '\$sCustomerFirstName\$ \$sCustomerLastName\$' to \$sCustomerFullIN...

97 Step 'Set account types'

98 List: Size of \$!AccountTypes\$

99 If number \$nAccountTypesSize\$ Greater Than (>) 0

100 Loop: \$nAccountTypesSize\$ times

101 If number \$nCurrentAccountTypeListIterator\$ Equals to(=) 1

102 String: Assign \$!AccountTypes[0]\$ to \$sCustomerAccountTypes\$

103 If: Else

104 Number: Assign '\$nCurrentAccountTypeListIterator\$-1' to \$nCurre...

Upgrade to Enterprise Advanced automation capabilities to unleash your organization's full potential.

LetterGenerationBot

Assistant Run Debugger Close Save

Variables Show

Actions

Search actions

- > A2019DemoPackage
- > A2019DemoPackage
- > AARI Web
- > Active Directory
- > Analyze
- > App integration
- > Application
- > AWS Comprehend NLP
- > AWS Comprehend NLP (Beta)
- > Boolean
- > Bot Migration
- > Browser
- > Clipboard
- > Comment
- > Credential Manager
- > CSV/TXT
- > Currency Conversion
- > Data Table
- > Database
- > Datetime
- > Delay

Triggers Show

Flow List Dual

Action details

Select an action in the flow or list view to edit details

105 String: Assign '\$sCustomerAccountTypes\$, \$IAccountTypes\$' to '\$sCurrentAccountTypes\$'

106 Step: Set account numbers

107 List: Size of '\$IAccountNumbers\$'

108 If number '\$sAccountNumbersSize\$' Greater Than (>=) 0

109 Loop: '\$sAccountNumbersSize\$' times

110 If number '\$sCurrentAccountNumberListIterator\$' Equals to (=) 1

111 String: Assign '\$IAccountNumbers\$[0]' to '\$sCurrentAccountNumber\$'

112 If: Else

113 Number: Assign '\$sCurrentAccountNumberListIterator\$-1' to '\$sCurrentAccountNumberListIterator\$'

114 String: Assign '\$sCustomerAccountNumbers\$, \$IAccountNumbers\$' to '\$sCurrentAccountNumbers\$'

115 MS Word: Replace Text

116 MS Word: Replace Text

117 MS Word: Insert Text

118 MS Word: Insert Text

119 MS Word: Insert Text

120 MS Word: Insert Text

121 Error handler: Catch AllErrors

122 Comment: 'Logic Runs on Error'

Upgrade to Enterprise Advanced automation capabilities to unleash your organization's full potential.

LetterGenerationBot

Assistant Run Debugger Close Save

Variables Show

Actions

Search actions

- > A2019DemoPackage
- > A2019DemoPackage
- > AARI Web
- > Active Directory
- > Analyze
- > App integration
- > Application
- > AWS Comprehend NLP
- > AWS Comprehend NLP (Beta)
- > Boolean
- > Bot Migration
- > Browser
- > Clipboard
- > Comment
- > Credential Manager
- > CSV/TXT
- > Currency Conversion
- > Data Table
- > Database
- > Datetime
- > Delay

Triggers Show

Flow List Dual

Action details

Select an action in the flow or list view to edit details

122 Comment: 'Logic Runs on Error'

123 Step: Log Error

124 If file does not exist at '\$sLogFolder/\$sCurrentDate\$, \$sBotName\$.csv'

125 Comment: 'Creating file if it doesnt previously exist so that the header row can be creat...'

126 File: Create '\$sLogFolder/\$sCurrentDate\$, \$sBotName\$.csv'

127 Log to file: 'Date, System, TaskName, ErrorLine, ErrorDescription' to '\$sLogFolder/\$sCurr...'

128 Datetime: To string Convert '\$System.Date\$' and assign result to '\$sDateTime\$'

129 Number: To string convert '\$sErrorLineNumber\$' to a string datatype and assign output to '\$s...'

130 Comment: 'Logging error to file matching header row established format'

131 Log to file: '\$sDateTime\$, \$System.Machine\$, \$System.AATaskName\$, \$sErrorLineNum...' to '\$sLogFolder/\$sCurr...'

132 Step: Record Snapshot

133 Comment: 'Taking snapshot. Please disable/remove this action if your screen could potenti...'

134 Screen: Capture desktop screenshot and save the image to '\$sSnapshotsFolder/\$sCurrent...'

135 Error handler: Finally

136 Step: Logout

137 Recorder: Capture Click on link HTML InnerText 'Log out' in window 'Automation Anywhere...'

End

2. Send Proof of Fund Email bot.

This screenshot shows the first 15 steps of the 'SendPOF_Email' bot flow. The interface includes a left sidebar with a search bar and a list of actions categorized by type (e.g., A2019DemoPackage, AARI Web, Active Directory). The main workspace displays the flow steps:

- 1. Start
- 2. Comment: 'REQUIRED: Fill in the Bot Name and Vendor Name fields in the lines below. These values are ...'
- 3. Step: 'Verify Bot Name and Vendor Name'
- 4. Comment: 'Bot Name and Vendor Name will drive logging - and are required to be filled. Additionally, ...'
- 5. String: Assign 'SendPOFEmail' to \$sBotName\$
- 6. String: Assign 'AutomationAnywhere' to \$sVendorName\$
- 7. If (string \$sBotName\$ Equals to(=) \$sNull\$) or (string \$sVendorName\$ Equals to(=) \$sNull\$)
- 8. Message box: 'Bot Name and Vendor Name are required values - please provide their values using the value assignments on the preceding lines.'
- 9. Task Bot: Stop the current task
- 10. Step: 'Setup Log Folders/Locations'
- 11. Comment: 'Bot logging root set by default to logging location used by the bot agent. See the variable ...'
- 12. String: Assign '\$sRootLogDirectory/\$sBotName\$-\$sVendorName\$' to \$sErrorFolder\$
- 13. String: Assign '\$sRootLogDirectory/\$sBotName\$-\$sVendorName\$/Logs' to \$sLogFolder\$
- 14. String: Assign '\$sRootLogDirectory/\$sBotName\$-\$sVendorName\$/Snapshots' to \$sSnapshotsFold ...
- 15. Comment: 'Creating default log/error directories specific to this bot'

This screenshot shows steps 16 through 33 of the 'SendPOF_Email' bot flow. The steps continue the logic for setting up logging and handling errors:

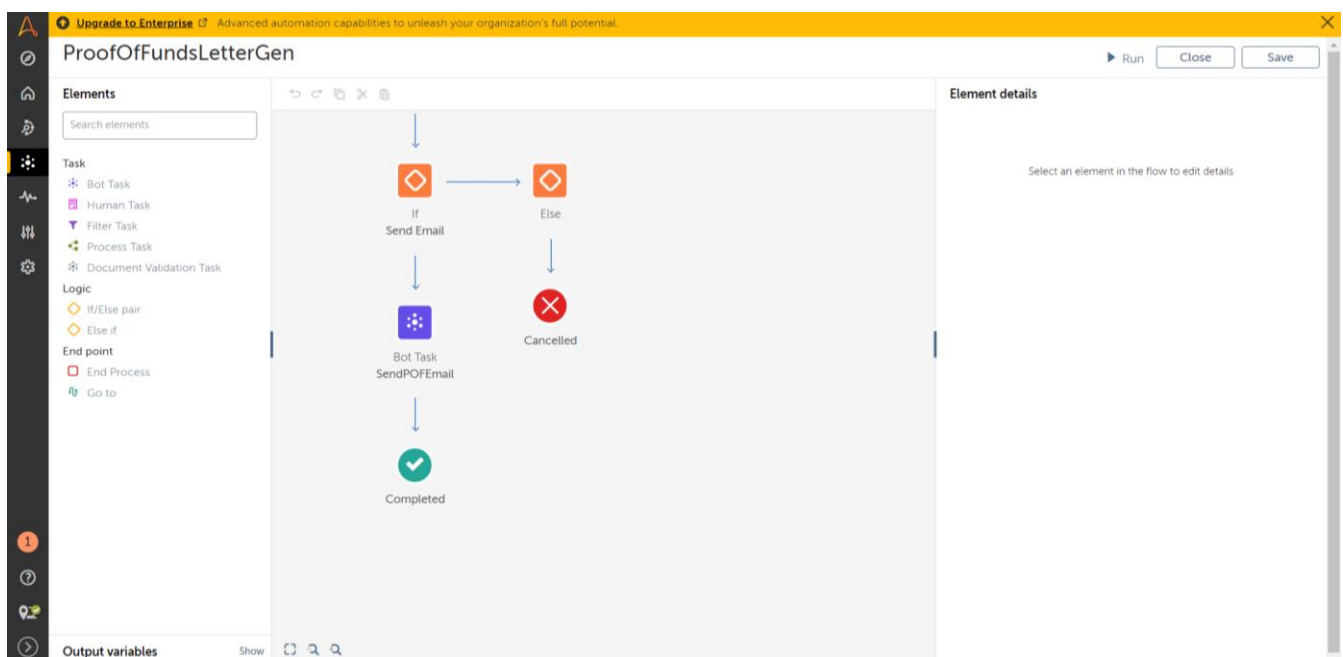
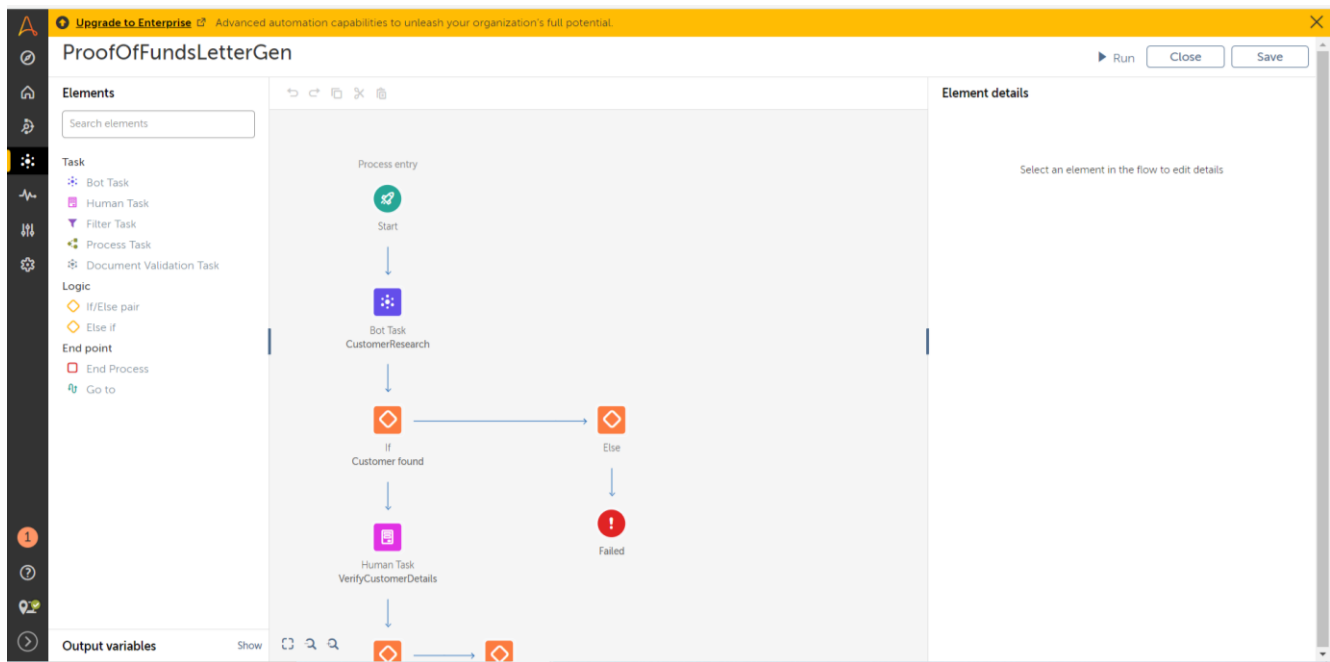
- 16. Folder: Create \$sRootLogDirectory\$
- 17. If folder does not exist at \$sErrorFolder\$
- 18. Folder: Create \$sErrorFolder\$
- 19. If folder does not exist at \$sLogFolder\$
- 20. Folder: Create \$sLogFolder\$
- 21. If folder does not exist at \$sSnapshotsFolder\$
- 22. Folder: Create \$sSnapshotsFolder\$
- 23. Datetime: To string Convert \$System.Date\$ and assign result to \$sCurrentDate\$
- 24. Step: 'Clear out old logs'
- 25. Comment: 'Setting lookback period for how long to keep logs for. Default is 30, can be customized a ...'
- 26. Datetime: Subtract \$nLoggingPeriod\$ Days from \$System.Date\$ and assign result to \$dtLogCutoffDa ...
- 27. Datetime: To string Convert \$dtLogCutoffDate\$ and assign result to \$sLogCutoffDate\$
- 28. Comment: 'Surrounding delete actions in try handlers as to not cause the bot to fail its run in the cas ...'
- 29. Error handler: Try
- 30. Comment: 'Deleting all files from logs folder older than nLoggingPeriod days since last modifcat ...'
- 31. File: Delete '\$sLogFolder\$/*.csv' if file is modified before \$sLogCutoffDate\$
- 32. Error handler: Try
- 33. Comment: 'Deleting all files from snapshots folder older than nLoggingPeriod days since last mo ...'

This screenshot shows steps 34 through 55 of the 'SendPOF_Email' bot flow. The final steps focus on sending the email and logging the process:

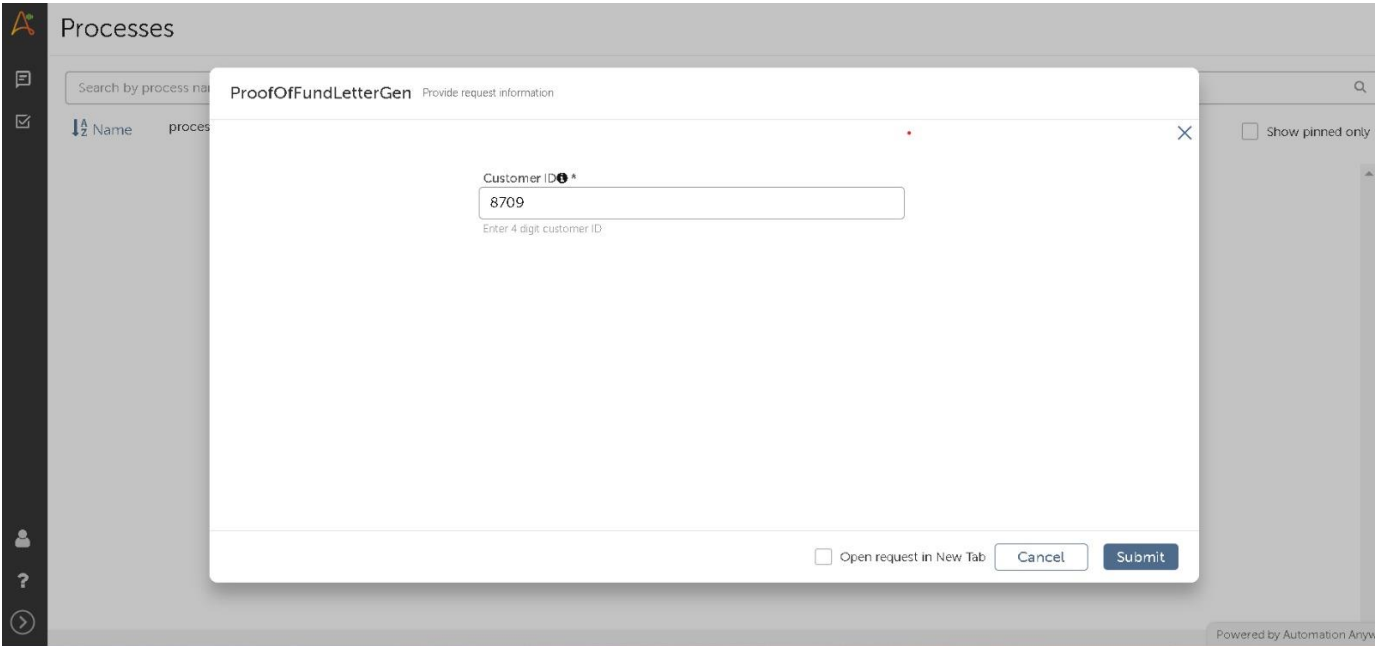
- 34. File: Delete '\$sSnapshotsFolder\$/*.jpg' if file is modified before \$sLogCutoffDate\$
- 35. Error handler: Try
- 36. Comment: '*****Bot Logic Goes Inside Here*****'
- 37. Step: 'Check for file'
- 38. If file does not exist at '\$sLetterLocation_input\$'
- 39. Error handler: Throw AllErrors
- 40. Step: 'Send Email'
- 41. Email: Send an email to \$sEmailAddress_input\$ with subject: 'Requested Proof of Funds Lett ...'
- 42. Error handler: Catch AllErrors
- 43. Comment: 'Logic Runs on Error'
- 44. Step: 'Log Error'
- 45. If file does not exist at '\$sLogFolder\$/\${sCurrentDate}_\${sBotName\$.csv'
- 46. Comment: 'Creating file if it doesnt previously exist so that the header row can be created'
- 47. File: Create '\$sLogFolder\$/\${sCurrentDate}_\${sBotName\$.csv'
- 48. Log to file 'Date, System, TaskName, ErrorLine, ErrorDescription' to '\$sLogFolder\$/\${sCurre ...
- 49. Datetime: To string Convert \$System.Date\$ and assign result to \$sDateTime\$
- 50. Number: To string convert \$nErrorLineNumber\$ to a string datatype and assign output to \$sEr ...
- 51. Comment: 'Loading error to file matching header row established format'
- 52. Log to file '\$sDateTime\$, \$System.Machine\$, \$System.AATaskName\$, \$ErrorLineNum...' to '\$...
- 53. Step: 'Record Snapshot'
- 54. Comment: 'Taking snapshot. Please disable/remove this action if your screen could potential ...'
- 55. Screen: Capture desktop screenshot and save the image to '\$sSnapshotsFolder\$/\${sCurrentDate}_\${sBotName\$.jpg'

PROCESS REQUIRED-

Proof of fund letter generation Process.



RESULTS-



Investment Account Management Portal

Investment Accounts

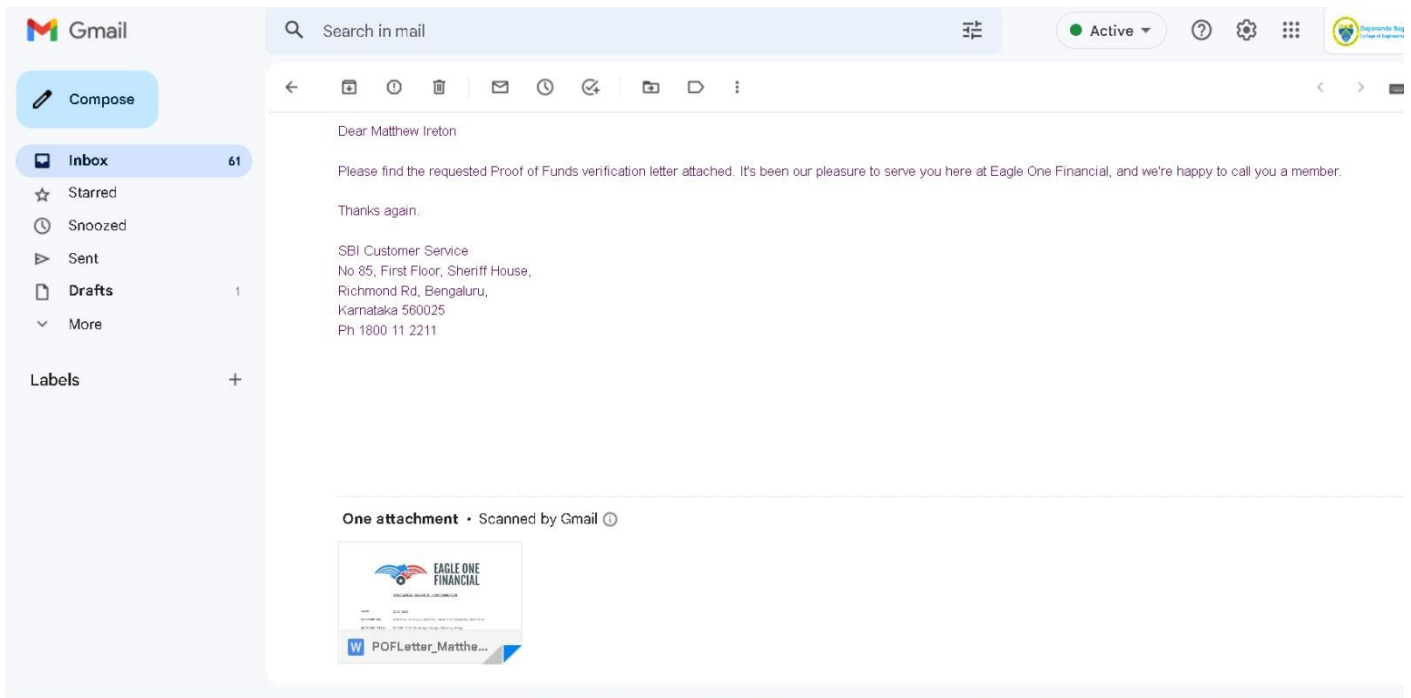
The table and search capabilities below provide for the high level account details for each customer of Eagle One Financial Investment Management. This application does not display the details for Eagle One Savings customers, which are stored in a separate repository.

Showing 1 to 3 of 3 entries (filtered from 1,006 total entries)

Search: 8709

Customer ID	First Name	Last Name	Email	Account Type	Account Number	Balance
8709	Matthew	Ireton	bbalirish23@aol.com	RothIRA	54321548	\$6946.31
8709	Matthew	Ireton	bbalirish23@aol.com	401K	5432154	
8709	Matthew	Ireton	bbalirish23@aol.com	Brokerage	5432154	

Bot running... LetterGenerationBot 31% Active: Line 44 of 137 Action: capture



**EAGLE ONE
FINANCIAL**

AVAILABLE BALANCE CONFIRMATION

DATE: 02-24-2023

ACCOUNT NO: 54321548, 54321547, 54321549, 546843132, 354561305, 848531231

ACCOUNT TYPE: RothIRA, 401K, Brokerage, Savings, Checking, Savings

BALANCE: \$136799.38

DESCRIPTION: **VERIFICATION OF FUNDS**

We, Eagle One Financial, confirm that our client, Matthew Ireton, currently has available on deposit \$136799.38. The funds are available for immediate use. This letter puts no financial obligation on said funds. These funds are clear of any holds, liens, or encumbrances.

Eagle One Customer Service
1111 Tuscan Leather Drive Ste.400E
Addison, TX 75000-4633
Ph (972) 419-8888
Fx (972) 499-8888