Chatbots with IBM RPA

Hands-on Lab

Version 1.0

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1. Introduction

This hands-on lab you will use RPA Automation Studio to create and deploy your own chatbot. You will utilize the sales leads csv from previous labs and a windows service to help you with "activate' the chatbot

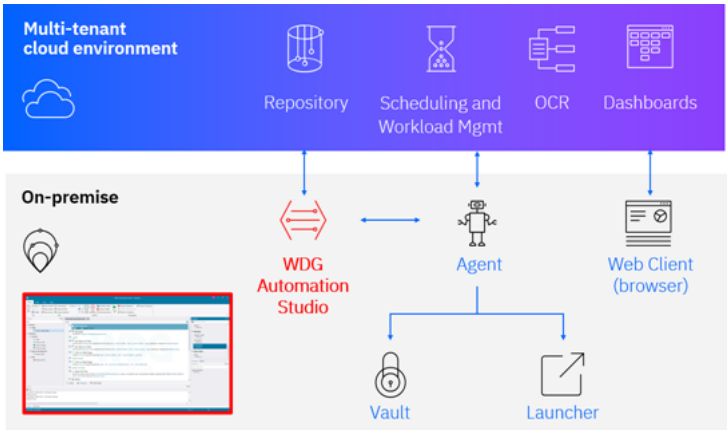


FIGURE 1. RPA AUTOMATION STUDIO

Use case

In Lab 1 you learned how to automate processing of sales leads that arrive in a CSV/Excel format. The bot you created in Lab 1 automatically entered the sales leads into the online opportunity system of record (JK Automation Sales Leads).

Our new bot will start an attended chatbot communication and based on the classified action will return relevant information from our **SalesLeads.csv** file.

Prerequisites

- RPA Automation Account activated
- RPA Studio installed and configured to your computer
- SalesLeads.csv from Lab 1
- StarterKB downloaded from this Lab folder

2. Work with a Completed Automation

If you just want to run the automation without authoring it or if you just want to look at a completed solution, follow these instructions below.

1. Download the provided final assets of the lab
2. SalesLeads.csv exists on your machine
3. Open up the SalesLeadsChatbot.wal bot and point it towards your SalesLeads.csv
4. Save the File

Save the changes.

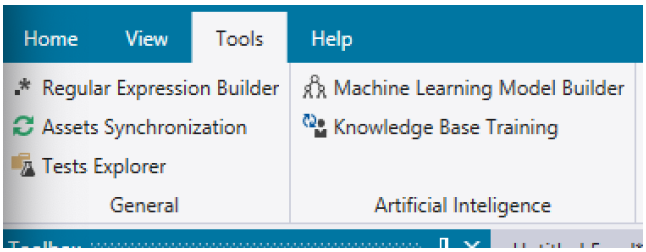
Refer to Test your automation session to start your bot.

3. Lab Instructions

Create your Chat Knowledge Basis

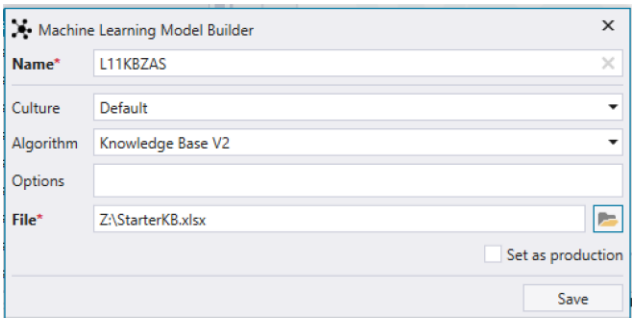
_1. Ensure you have downloaded the starterKB from the lab folder

_2. In RPA Studio, Select Tools at the top of your screen, then click Machine Learning Model Builder

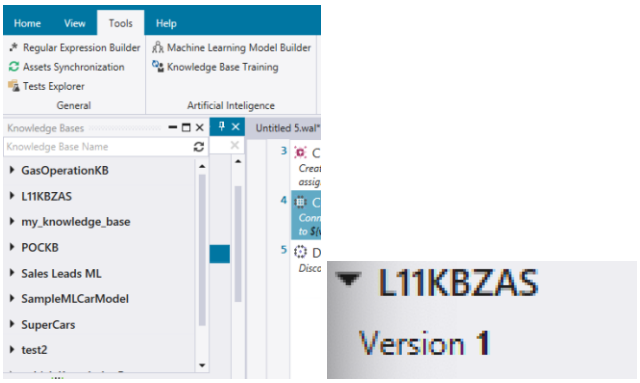


_3. Provide the Name “L12KB” and a unique Identifier or couple of characters to differentiate your knowledge base *Note this lab was previously lab 11, please use L12 instead of L11 in the naming convention.

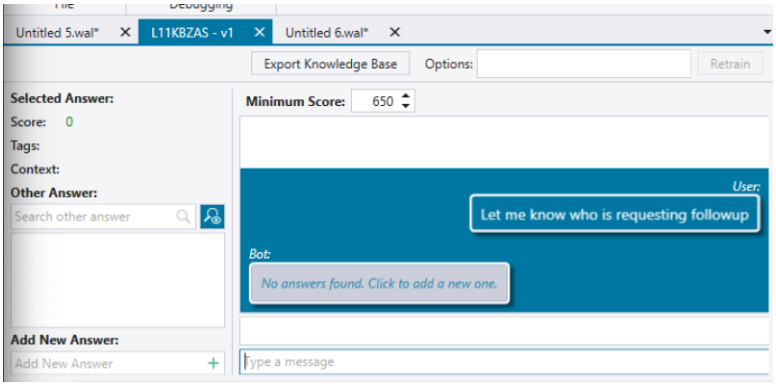
_4. Select Knowledge Base V2 as the Algorithm and the StarterKB as your file, then click Save



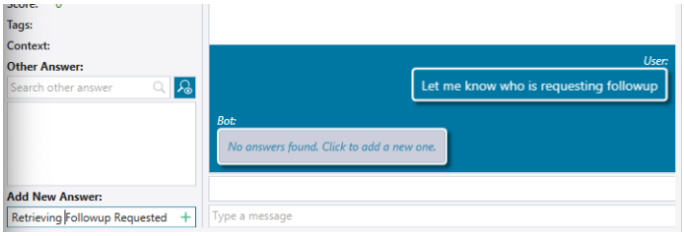
_5. Click Knowledge Base Training at the top of the Tools Screen, then find your Knowledge Base and Select the Available Version



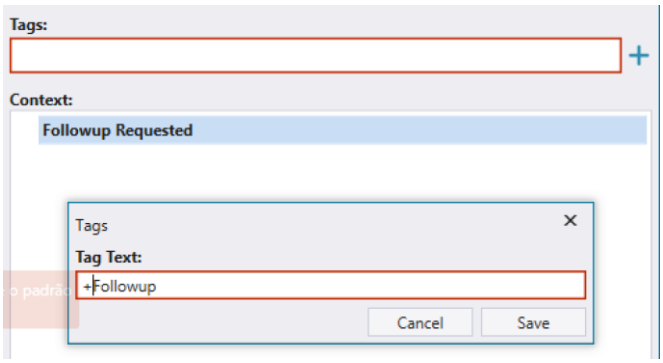
_6. We want to train our knowledge base on when followup is requested, in the chat box type a question indicative of followup being requested. For instance “Let me know who is requesting followup”. Then hit enter



_7. Type “Retrieving Followup Requested Clients” in the Add New Answer Box, then click the Plus sign



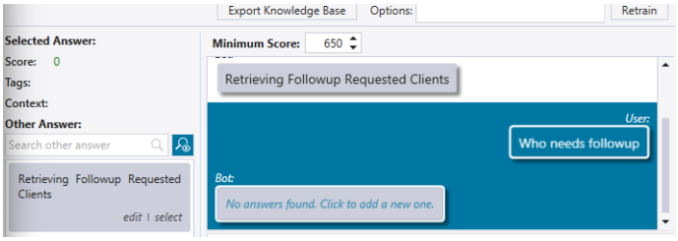
_8. Add a Tag of +Followup with the First Plus sign

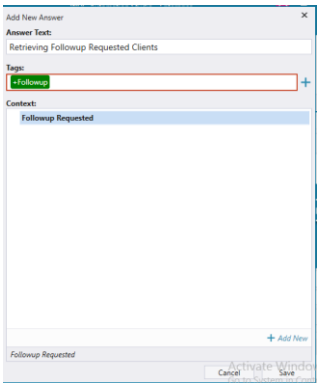


_9. Add a new context of Followup Requested for the item by the Add New Button at the bottom of the pop up

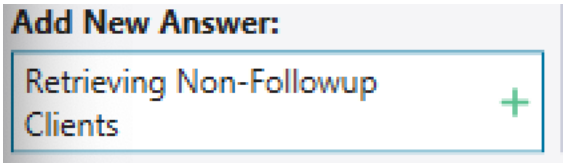
_10. Provide a handful of similar chat items into the chatbox with similar intents of requesting followup. Such as “Who Needs followup?” “What customers want followup” “Who should we reach out to”.

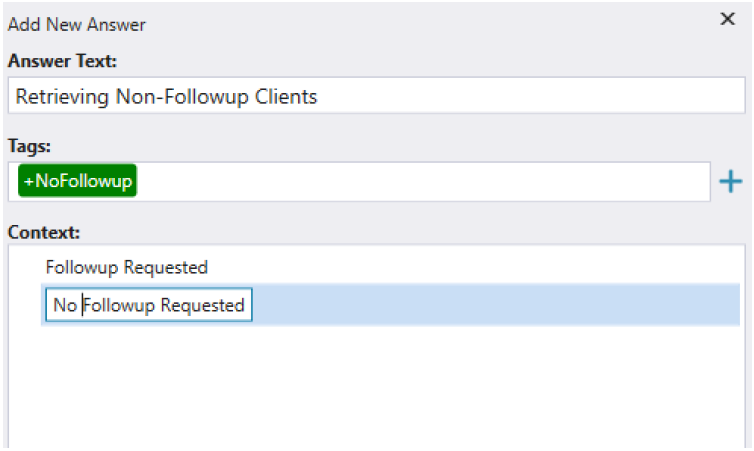
_11. As you add each item, select the Select Button next to the Intent and answer you wish to associate it with, in this case you only have one,



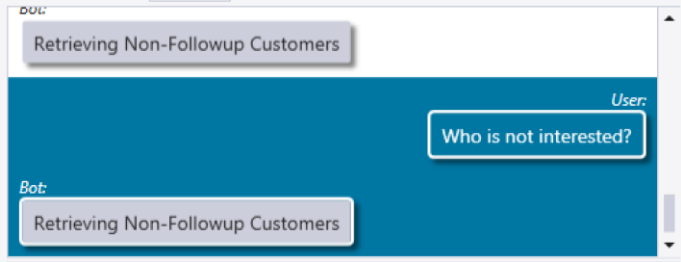


_12. Now follow similar steps for No Follow up Requested and Add a new Answer and matching contexts. Enter and search “Who does not wish to be contacted?”, then add the answers below



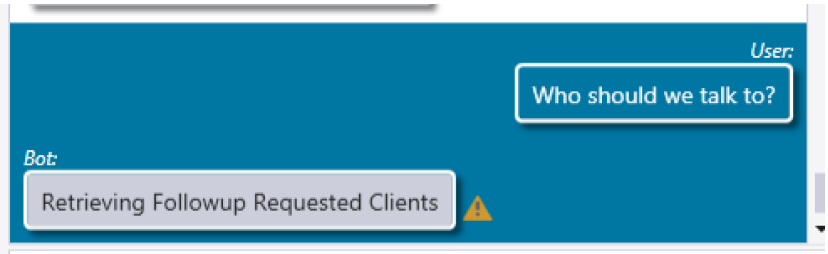


_13. Do the same for a few more contexts for no followup. “Who does not want to be talked to” “Who is not interested”



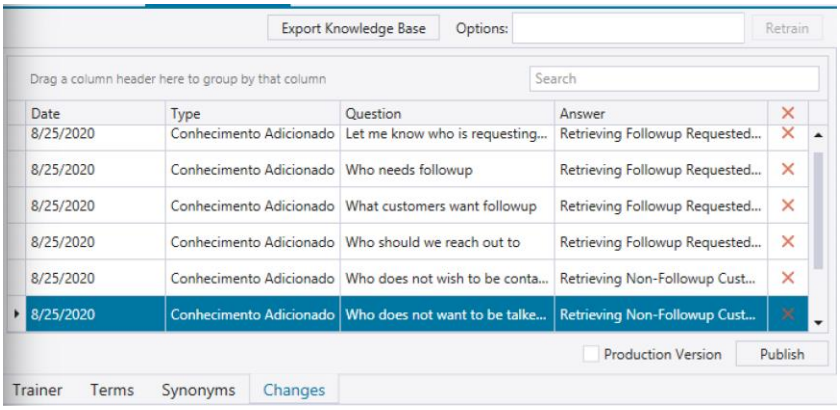
_14. Click Retrain in the top right Corner

_15. Now enter “Who should we talk to?” and hit enter



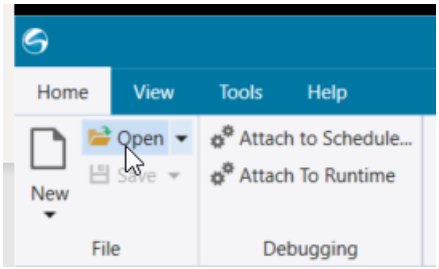
_16. Confirm the action and answer by selecting it on the box on the left, then retrain the base again. We have now taught our knowledge base some things to look for and associate with answers

_17. Navigate to our Change Tab, then select Publish, Respond No to the next prompt

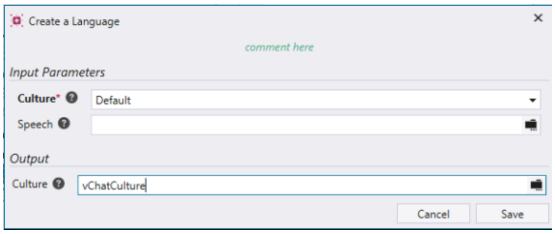


Create your Chatbot Interaction

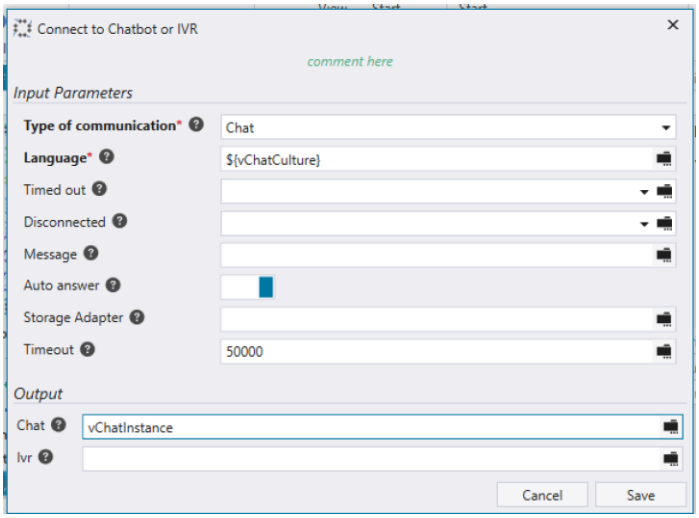
_1. In RPA Studio, Select `New WAL File`.



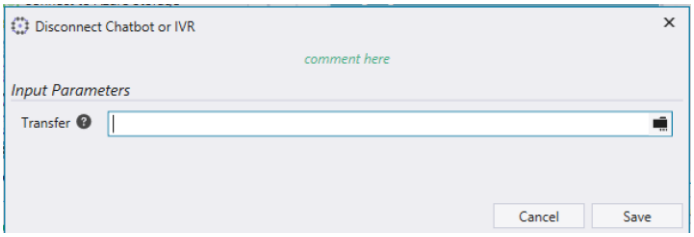
_2. Drag a Create a Language command and bind it to an outputted culture variable as seen below.



_3. Pull a Connect to Chatbot or IVR Command such as below

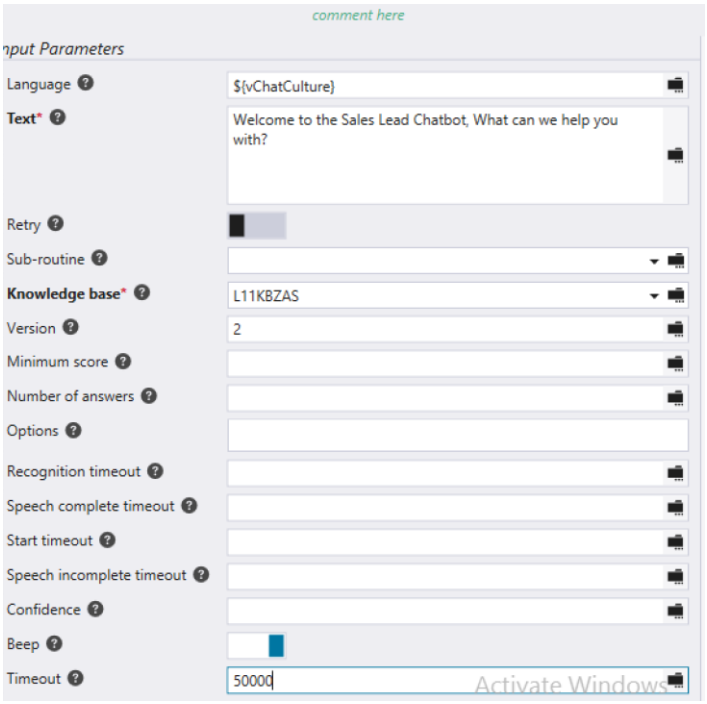


_4. Click Save without entering anything in the Disconnect Chatbot or IVR command that pops up.



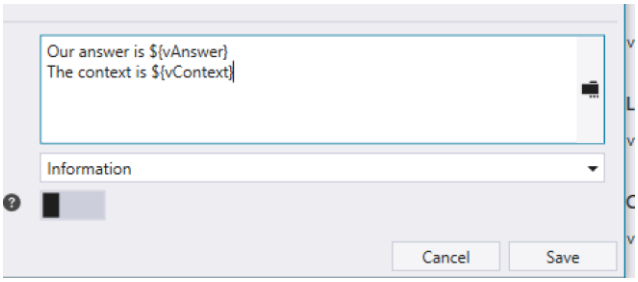
_5. Pull a Bot Ask And Answer Command and drop it between the Connect and Disconnect Command

_6. Add our chatCulture and some standard text asking for user input. Then Inside the Knowledge Base selection option, find your uniquely identified Knowledge Base. Put 2 as the version and timeout as 50000



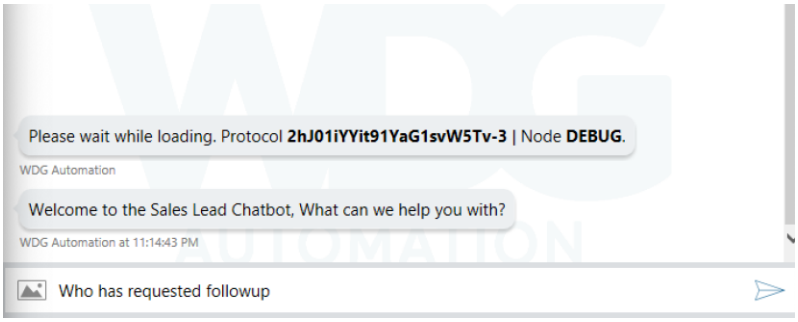
_7. The version above refers to the version of your Knowledge Base and as we only published once, we're on version 2, this can be seen within our tool Knowledge Base dropdown if any more info is needed. For output, please add vContext and vAnswer. Then Click Save

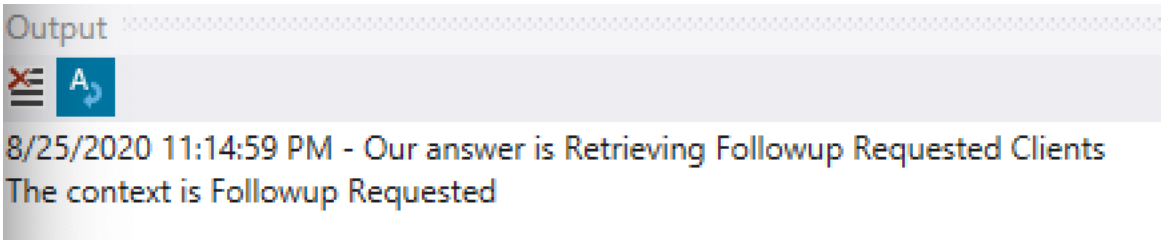
_8. Add a Log Message command after our Bot Ask and Answer and bind it to vAnswer and vContext



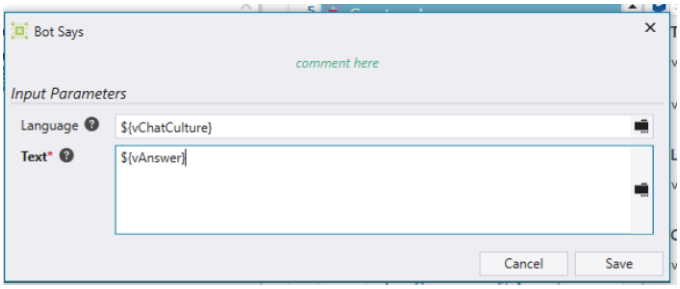
_9. Click Save and Save your Chatbot, then please run the bot

_10. In the pop up that appears, please ask the bot “Who has Requested Followup”

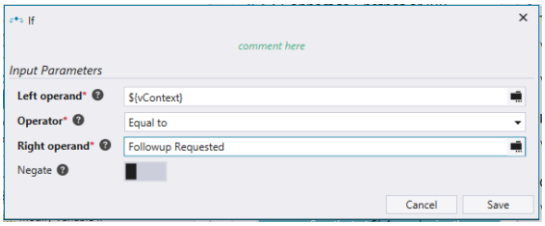


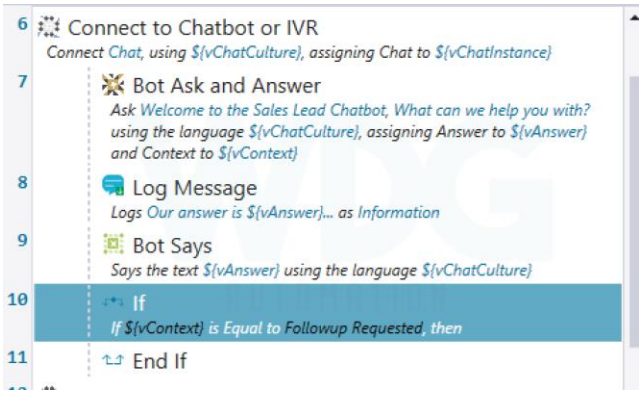


_11. We can see it found our answer and our context, add a Bot Says Command after our Log message command. Bind it to our answer variable.



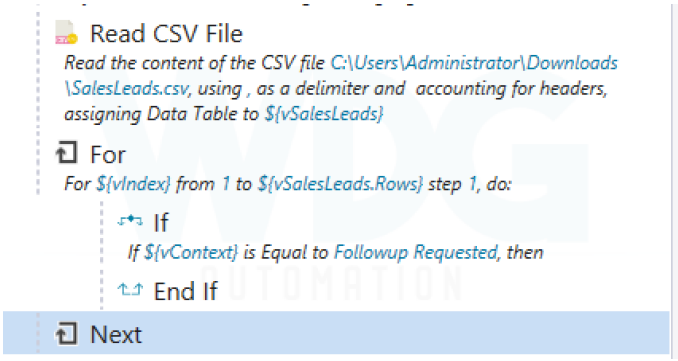
_12. Now add an if Statement after the bot says with these values



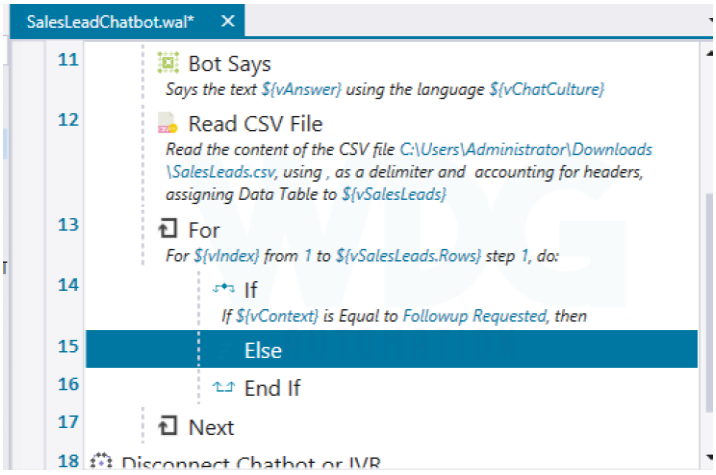


_13. Pull a Read CSV Command and put it BEFORE the if loop and add the iterator logic, please see earlier labs or the completed lab to see how this is done. These commands are the Read CSV, the For and Next Command

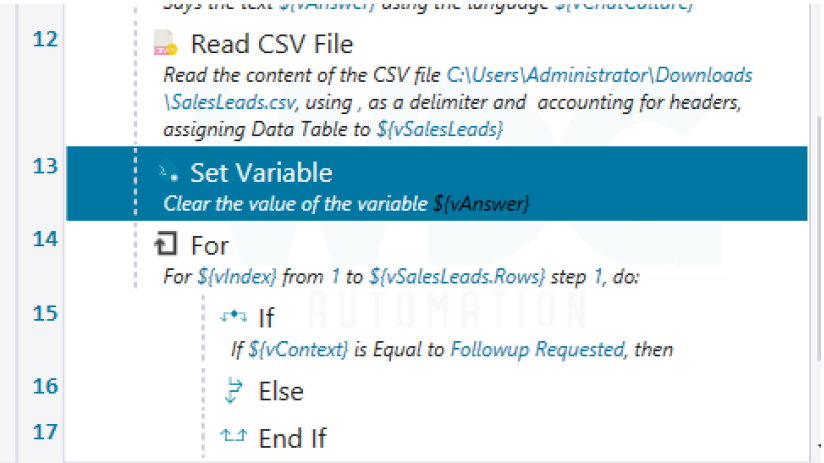
_14. Drag the next command after the If loop as seen here



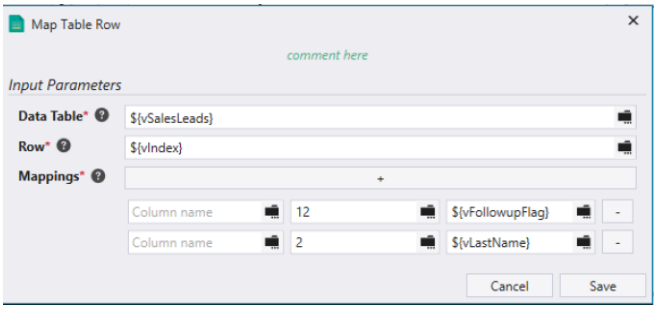
_15. Also add an else after the if command

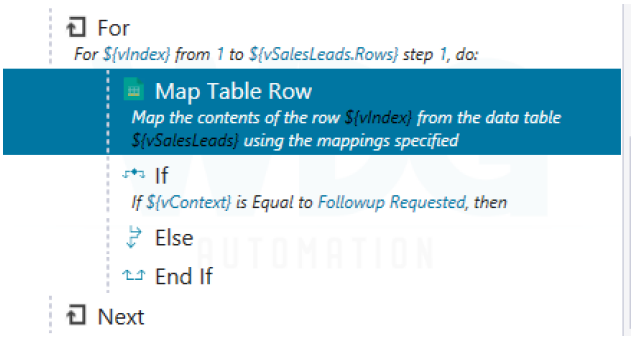


_16. Pull a set variable command before the FOR command, bind it to our vAnswer and then click save leaving it empty.

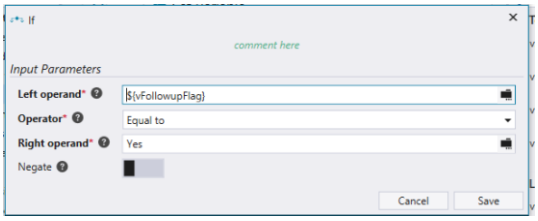


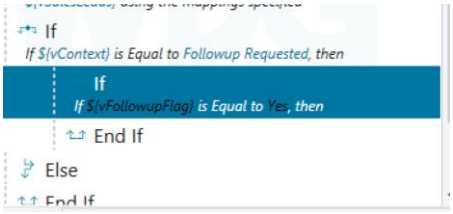
_17. Pull our Map Table Row command and capture the followup variable (Column 12) and the Last Name Variable (Column 2). You will need to create these two variables



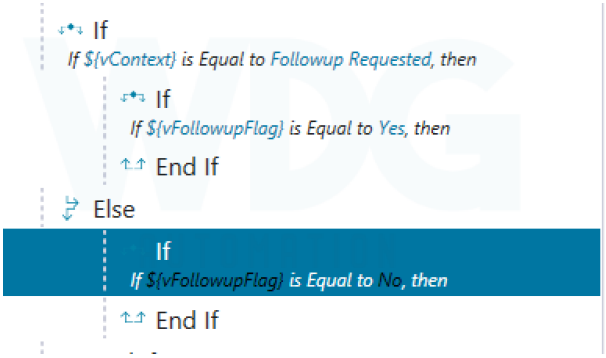


_18. Add these if commands within our if statement

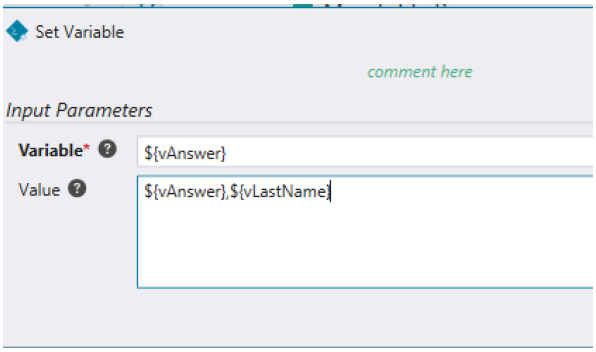


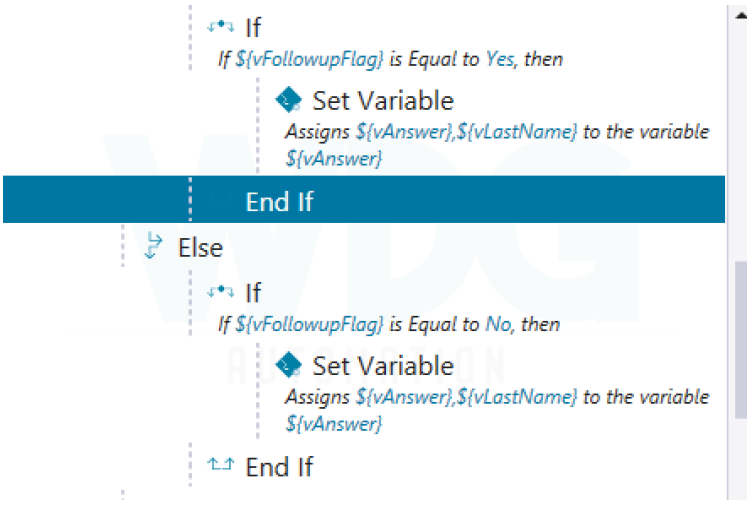


_19. Do the same for the Else with No

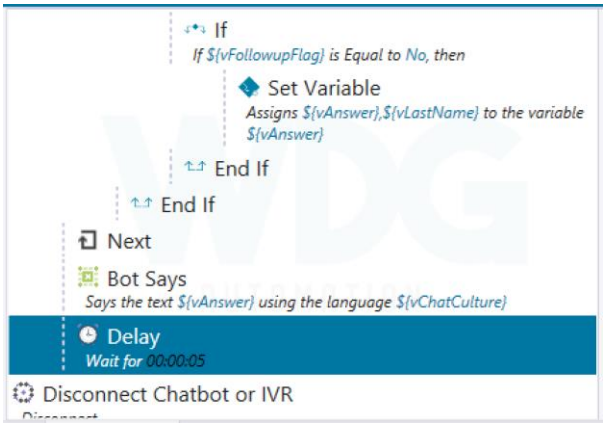


_20. Pull a set variable in each and concatenate the Last Name





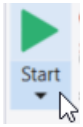
_21. Add a final Bot says command bound to the answer and then a delay right after the Next but before the Disconnect



Test your automation

To test your automation,

_1. Click the green `Start` icon form the top toolbar. Alternatively, you can hit `F5`.



_2. Try starting our automation and asking “What customers need to be followed up with” and “What customers are not interested”

_3. Train your knowledge base as needed to tailor your expected answers and don’t forget to update the version of your KB Pointed to within your code

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THIS COMPLETES THIS HANDS-ON LAB