Day 1 -- 10-01-2022

Project 1 video https://youtu.be/0ml2d_KXEVw

Lifecycle of RPA projects

1. Discovery
    a. Understand or look of problems to solve
2. Analysis and Documentation
    a. Create PDD(Process Definition Document) and SDD(Solution Design document)
3. Development
    a. Actual coding with UiPath or any tool
4. Testing
    a. Code review
    b. Are the requirements met that we initially asked for
5. Deployment
    a. Move code to production
6. Maintenance/Support
    a. In case of errors solve them
7.

Task Capture

Download from here Download UiPath Task Capture | UiPath

1. Create PDD
2. Create Flow diagrams
3. Create Simple skeleton of the program

Re-framework

- Just a template

Usecase1 RPA Challenge

1. Document current process and understanding
    a. As-IS Process
    b. To-Be Process flow
    c. Dependencies must be captured
    d. All tools and applications must be taken
    e. Who are the targeted users
    f. What's the frequency of execution.
    g. Manual hours saved on a year
    h. FTE
    i. Execution time – Daily at least 50 times, each time it taking 10 min
    j. Data is structured
2. PDD Creation
3. Github
    a. GitHub Desktop | Simple collaboration from your desktop

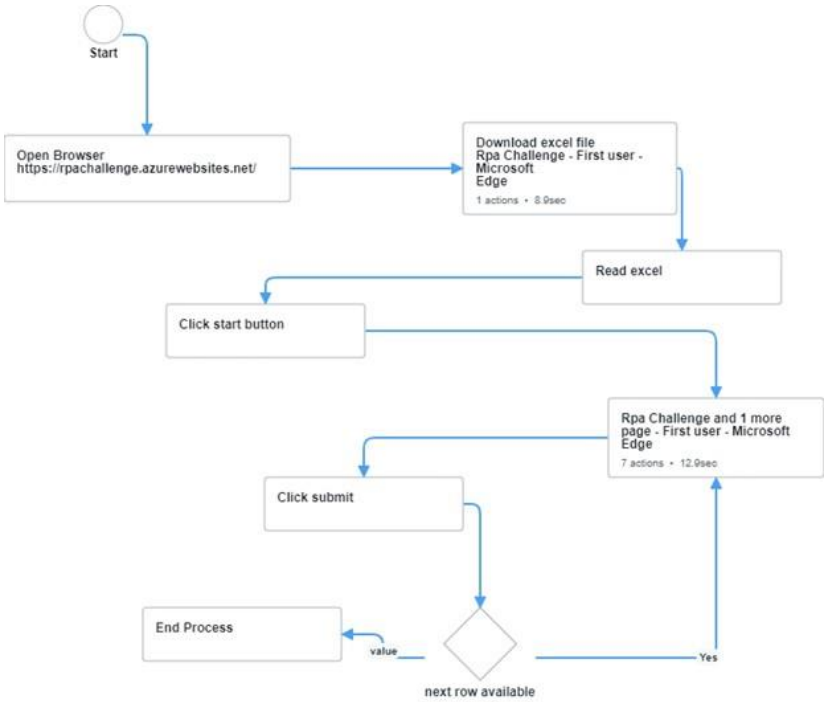
b. [vajrang-b/RPA-Developer-in-30-Days: We will use this repo to understand and develop code, (github.com)]

Activities to complete

1. Download and install
    a. task capture
    b. Github desktop
    c. Access teams and check with notes

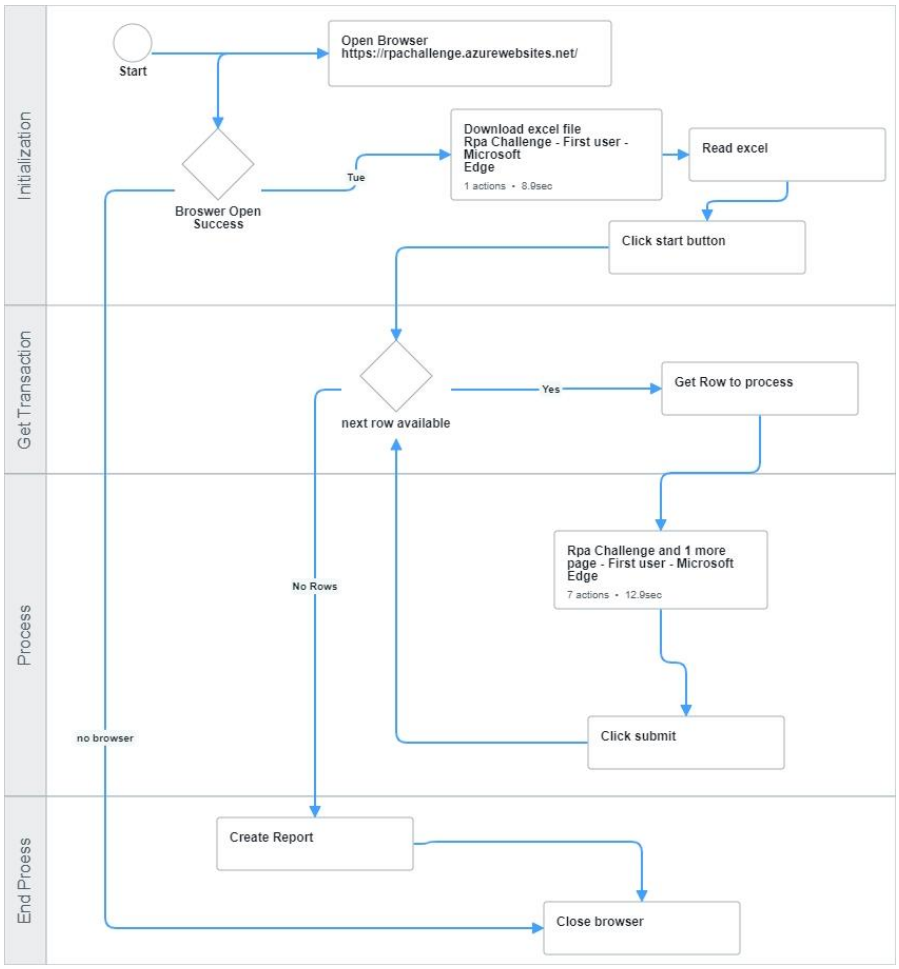
Day 2 -- https://youtu.be/gaoZDGfdz0s

1. All team members must understand what other team member is writing
2. Any predefined structure?
    a. Reframe work is must as it can act as base.
        i. Init
        ii. Get transaction data
        iii. Process
        iv. End Process
    b. Basic structure explained
    c. Day1

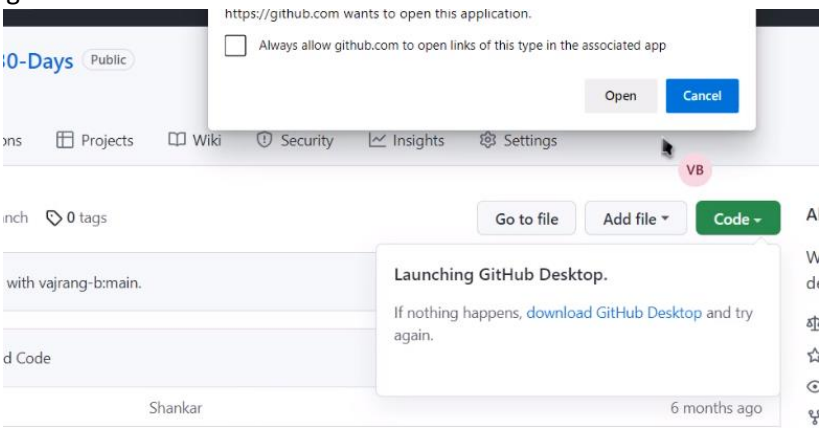


    i.
    d. Day2

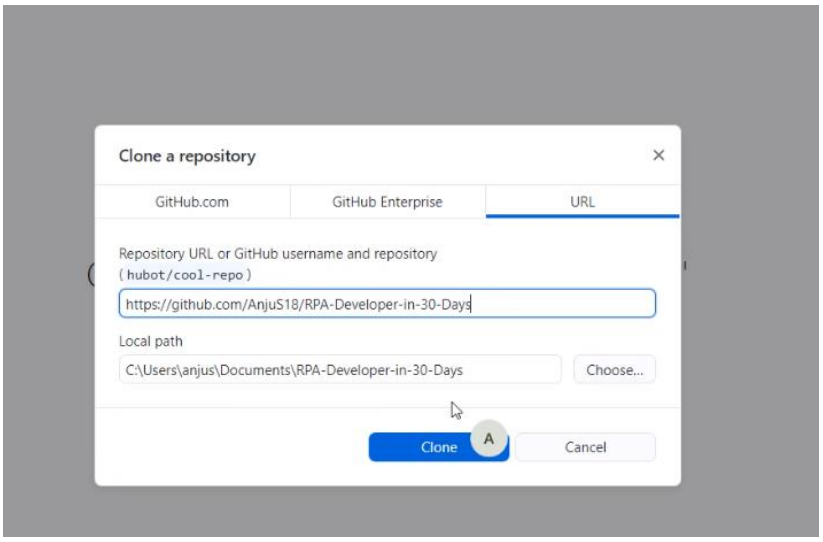
e.



f. How to clone github
   i. Navigate to github repo rpa dev in 30 days
   ii. Click on fork on top
      1. It will create your separate code base where we can make changes
      2. Click on green code button



      a.
      3. Click clone

a. 

4. Add your personal code and make changes
5. Make commits and create a pull request

Day 3: 12-1-2022 https://youtu.be/oiLU4Wyrj1Q

ReFramework

1. Folder Structure
    1.1. Data
        1.1.1. Input – All input files that are required for a program to run
        1.1.2. Output – All reports generated, or all output data
        1.1.3. Temp – Any data that need to be created after start of execution and must be deleted before end of the job
        1.1.4. Config.xlsx
    1.2. Documentation
        1.2.1. Try not to publish along with code in orchestrator packages
        1.2.2. All files required for the program to be executed or understood must be placed here
    1.3. Exceptions_Screenshots
        1.3.1. System exceptions will be taken as screenshot and will be stored in this location, code is already written in framework on where to store screenshots
    1.4. Framework
        1.4.1. CloseAllApplications - Do the necessary procedures for ending the process (e.g., logout) and close the used applications.
        1.4.2. GetTransactiondata – Get one item to process
        1.4.3. InitAllApplications – Initialize all apps we need to work for the process
        1.4.4. InitAllSettings – Read all config sheets and store information in a **config dictionary**
        1.4.5. KillAllProcess - Kill required applications before execution
        1.4.6. Process – All the process steps must be placed here
        1.4.7. RetryCurrentTransaction – If we need retry any transaction then we have code in this

1.4.8. SetTransactionStatus – Mark transaction as
1.4.8.1. Success
1.4.8.2. BusinessRuleException
1.4.8.3. SystemException
1.4.9. TakeScreenshot – Take one screenshot at current instance
1.4.9.1. Out – outFilePath
1.4.9.2. In – InFolder – Location at which screenshot must be stored

1.5. Tests
1.5.1. Files we use for testing our process

2. Convert ReFramework to use Datatable - [Using ReFramework with Datatable|Transaction item as data row|#vajrangtalks|#uipath - YouTube]

Day3 13-1-2022 https://youtu.be/Bk6p-UhWAho

1. ReFramework Main
    a. States
        i. Initialization
            1. Reading config
            2. Opening browsers and clicking on start
            3. Variables – memory locations that can be used only within that work flow
                a. Config – Dictionary datatype
                    i. Initially on execution config will be empty and this will be used to execute first run sequence
                b. dt_TransactionData - Used in case transactions are stored in a DataTable, for example, after being retrieved from a spreadsheet.
            4. Arguments – Send values from one workflow to other
                a. In – gets data into a workflow
                b. Out – sends data out of the workflow
                c. In\out - gets data into workflow and sends data out of workflow
            5. Sequence
                a. FirstRun – This code executes only in the first iteration of the process execution of a transition
                    i. After execution of “Initallsettings” config will not be empty
                    ii. Kill all process – makes environment a clean slate for process execution
                b.
        ii. GetTransactionData
            1. Get One row item to process
        iii. Process
            1. Add code to process workflow
                a. Datarow

i. Row("Key").toString
b. QueueItem
i. In_TransactionItem.SpecificContent("Key").toString

2. There can be 2 types of exceptions
    a. Exception
        i. System Exception
            1. Any exception that you have not configured as BRE is a system exception
        ii. Business rule exception
            1. Any custom condition or rules created by a developer

3. Set Transaction Status

iv. EndProcess

2. General points
    a. State and final state must be placed in Statemachine scope
    b. State
        i. 
        ii. Data can flow in and out of this state
    c. Final State
        i. 
        ii. Data can come into this state but cannot go out of this state

Day4 17-01-2022 Convert process to Dispatcher and performer https://youtu.be/4PW0qkzMoj4

Courses to complete: https://academy.uipath.com/channeldetail/rpa-developer-foundation

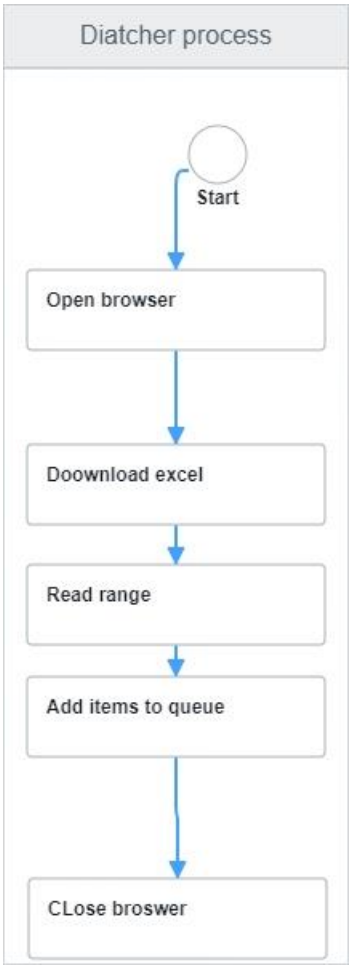
https://academy.uipath.com/channeldetail/rpa-developer-advanced-

1. Recap – Open browser- > Download excel -> Read excel ->each row must be filled - >click submit
2. Having single process cannot be used my multiple machines with same data
    a. Having separate performer and dispatcher
    b. How to provide access to other robots
        i. Login to orchestrator admin panel
        ii. Navigate to admin
        iii. Provide email id to invite users
        iv. Invited user will get email
        v. User need to accept invitation and register into tenant organization
        vi. Open Uipath assistant.

vii. Login using interactive sign on

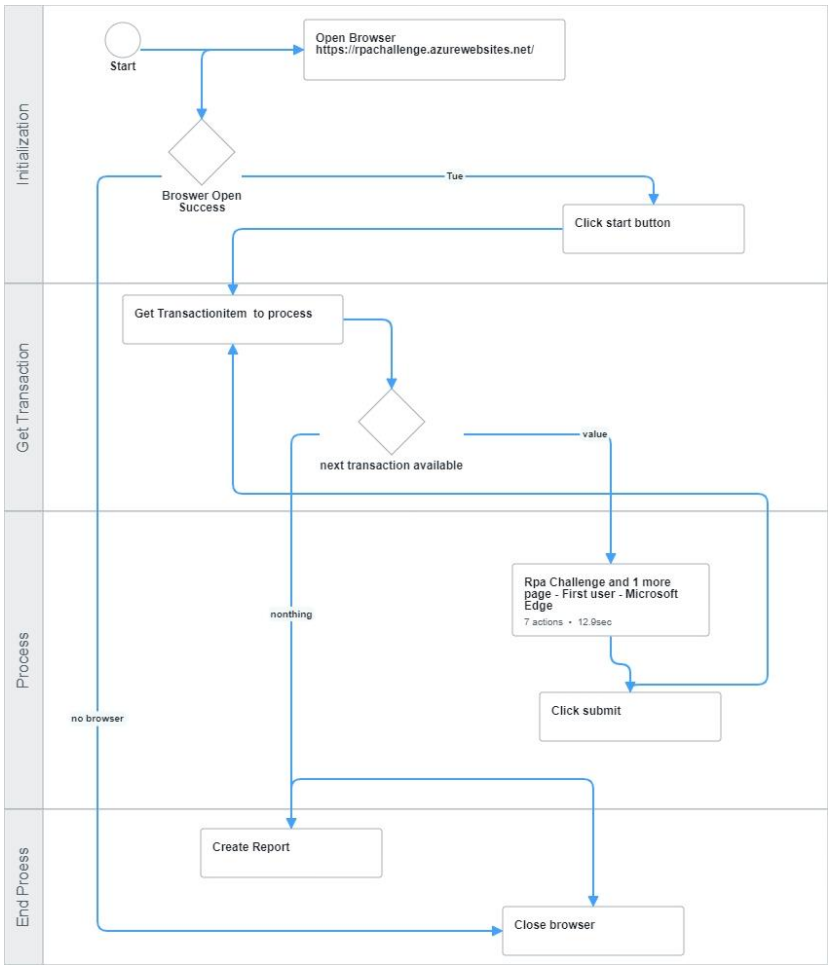
c. Dispatcher can work on a separate machine

i.



d. Performer can work on separate machine

i.



e. How to publish code
    i. Directly from studio
    ii. Manually upload Nupkg
f. How to run published packages
    i. Published packages are available at tenant level
    ii. Go to published folder
    iii. Click add process
    iv. Select package name
    v. Select entry point
    vi. Click next
    vii. Process will be available for execution