# (Module Overview)

# Key outcome of the workshop:

This beginner-level lab gives you hands-on experience designing and developing an end-to-end RPA automation using Power Automate. We'll show you the steps to build automate in less than a day.

Here's what you'll learn:

- Power Automate Desktop flows Create desktop flows that can record and playback manual steps against Win 32 desktop application or website. Learn how to run UI automation in attended or unattended mode.
- Integration of Desktop flows with API connectors Create a cloud flow that automates an endto-end business process by connecting the desktop flow and other API cloud services such as Outlook and Microsoft Teams together.

Prerequisites - The main goal of the Pre-requisite tasks is to fully set-up the user environment (Workstation

- Setting up a Tenant and Environment
- Create a browser profile (Optional)
- Install required software on the user's computer (Power Automate Desktop / Register Machine / Contoso Invoice app)

# Module - I

#### How to generate insights to optimize and automate your process using Process advisor

Process advisor records and analyzes your manual business tasks. It discovers inefficiencies and provides optimization and automation opportunities. You can see which activities take the longest, how many variations of the process there are, and what variations and actions take the most time. Using this information and the powerful features in Process advisor, you can drive improvements to make a difference for business.

## Module - II

#### Create your first dekstop flow

Users will complete the following tasks:

- Getting familiar with Power Automate Desktop flows
- Create a new desktop flow
- Record actions performed in the desktop-installed Contoso Invoicing application
- Perform a test run of the new desktop flow

## Module - III

### Use Input and Output Parameters

- Users will complete the following tasks:
- Create a new Power Automate Desktop flow with predefined inputs
- Record actions performed in the desktop-based Contoso Invoicing application using these inputs, and capturing application data for output

### • Perform a test run of the new desktop flow with a new set of inputs

## Module - IV

#### Integrate with cloud flows (create machine connection)

Users will complete the following tasks:

- Create a cloud flow
- Configure machine connection to enable the cloud flow to execute the desktop flow on your device
- Add the "Enter invoice with input" desktop flow to this new cloud flow
- Perform a test run of the new cloud flow

# Module - V

### Integration with Outlook connector

#### Key outcome:

Connect with API world. Use Outlook email to trigger desktop flows and pass input.

Users will complete the following tasks:

- Create a new Solution to package the end-to-end invoice processing solution
- Create a new Cloud flow that initiates the invoicing process via receipt of an email
- Integrate the Desktop flow from Lab 3 into the Cloud flow
- Perform a test run of the new Cloud flow

# Module - VI

#### Use AI builder to process invoice forms

Users will complete the following tasks:

- Build a new AI model for Form Processing
- Train the new AI model to process Contoso Invoice forms
- Integrate the new AI model into the Cloud flow from Module 6
- Perform a test run of the updated Cloud flow and associated AI Builder-based predictions

## Module - VII

#### Create approvals using Microsoft Teams connector and adaptive cards

Users will complete the following tasks:

- Integrate a Microsoft Teams-based approval model and the associated conditional logic into the invoice processing Cloud flow
- Integrate the Desktop flow for entering the invoice information into the approval process
- Integrate Outlook-based approval/rejection notifications into the invoice process
- Perform a test of the end-to-end invoice processing Cloud flow

Web and Microsoft Excel automation using Power Automate Desktop

Users will perform the following exercises:

- Exercise 1 Build a Power Automate Desktop subflow to write notes into Microsoft Excel
  - Create a process with fixed value variables.

- $\circ$  Test and run this process.
- Exercise 2 Web automation using Power Automate Desktop
  - $\circ$   $\;$  Web data scraping and writing to Microsoft Excel.
  - Test and run this process.

## \*Note:

The following three (3) modules are optional due to a more advanced specialization requirement. The following modules are only recommended for users that plan on actually using Power Automate for either monitoring, governance or flow creation.

# Module - VIII

## Run Power Automate Desktop flows in unattended mode (Optional)

Users will complete the following tasks:

- Exercise 1 Basic desktop flow in Unattended mode
  - Register a new virtual machine and add it to a machine group
  - Create a new cloud flow that calls an existing desktop flow from Lab 4 in unattended mode
  - Perform a test run of this simple unattended desktop Flow scenario
- Exercise 2 Desktop flow + cloud flow scenario in Unattended mode
  - Streamline the invoice processing solution to simplify the test scenario
  - Perform a test run of the updated invoice processing solution in unattended mode
- Exercise 3 Unattended machine group scenario
  - Register a second virtual machine
  - $\circ$   $\;$  Add the second VM's to the machine group with the first VM's  $\;$
  - Perform multiple tests runs of the updated invoice processing solution in unattended mode, distributing the test runs across the machine group

# Module - IX

## Enhanced error handling in Power Automate Desktop (Optional)

This module will walk future users and moderators through the basics of how to do Error handling in desktop flows.

# Module - X

## Monitor Desktop flow runs and manage gateway queues (Optional)

Users will complete the following tasks:

- Setting a desktop flow priority
- Monitor desktop flow runs
- Monitor desktop flow queues

# Workshop paths and additional details

The listed modules represent a broad retrospective of knowledge that the workshop attendees will be able to attain through participation. To maximise the attainment of knowledge, we suggest that the attendees decide on two workshop paths, **practice workshop or educational workshop**.

In the case of choosing a practical workshop path, the attendees will need to follow up on several pre-requisite modules for setting up the work environment (Setup Tenant and environment, create a browser profile and installing required software). The workshop lecturers will send the prerequisite modules and instructions but are not responsible for the preparation and setup of the attendee workstations.

or

<u>Regarding the educational workshop path</u>, the lecturers will hold an educational session type. The lecturers will conduct and explain all the exercises and tasks for the mentioned modules. The attendees will be able to view the executions and tasks on a shared desktop screen through Microsoft Teams.

**Lecture time:** The duration of a fully conducted workshop for the modules is six hours (6 h) with breaks, respectively. Best-practice scenario for conducting the workshop is within two (2) days, with two, three-hour sessions (2x 3h).