

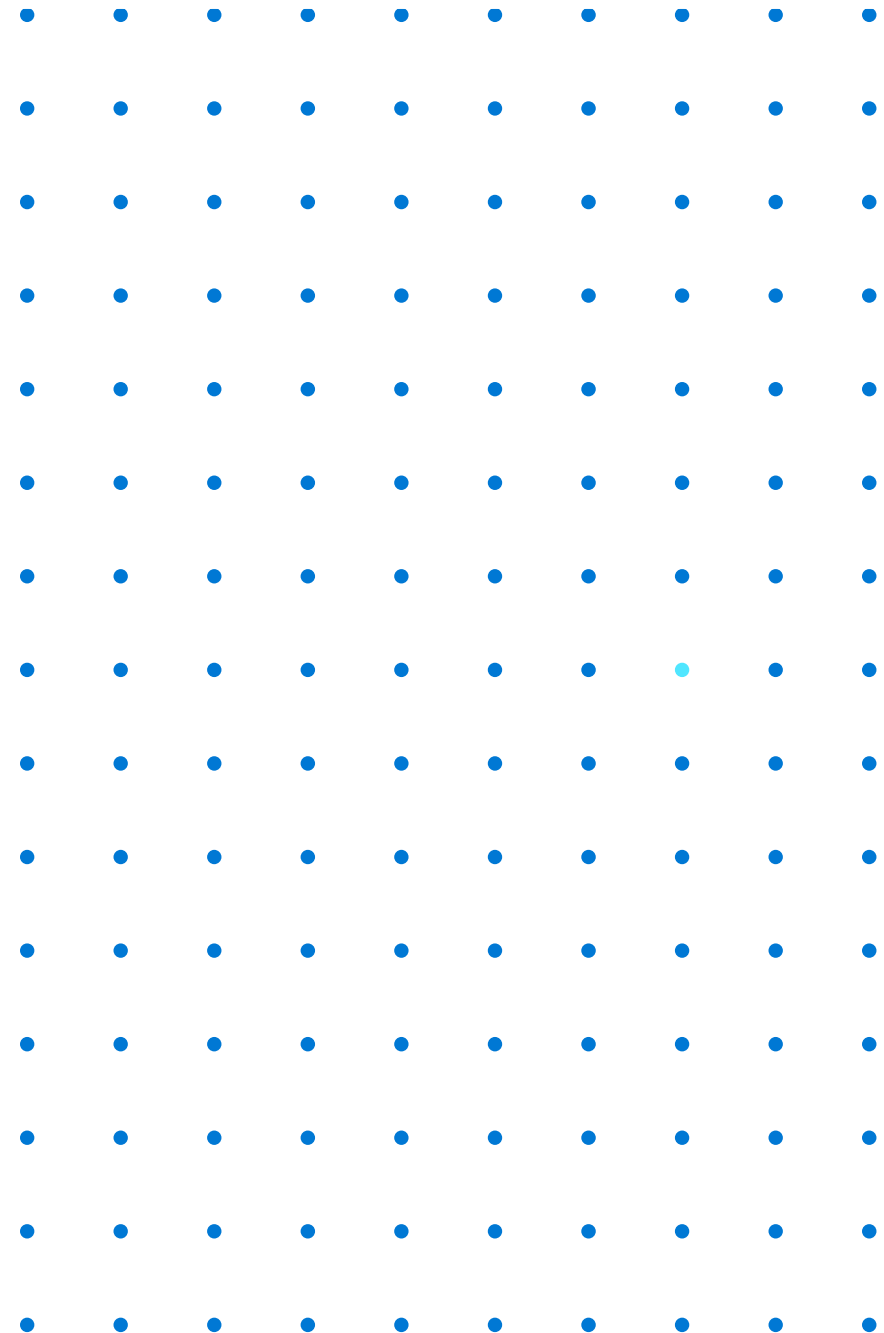
Power Automate Essentials:

Automating Workflows with Cloud Flows



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ABOUT ME



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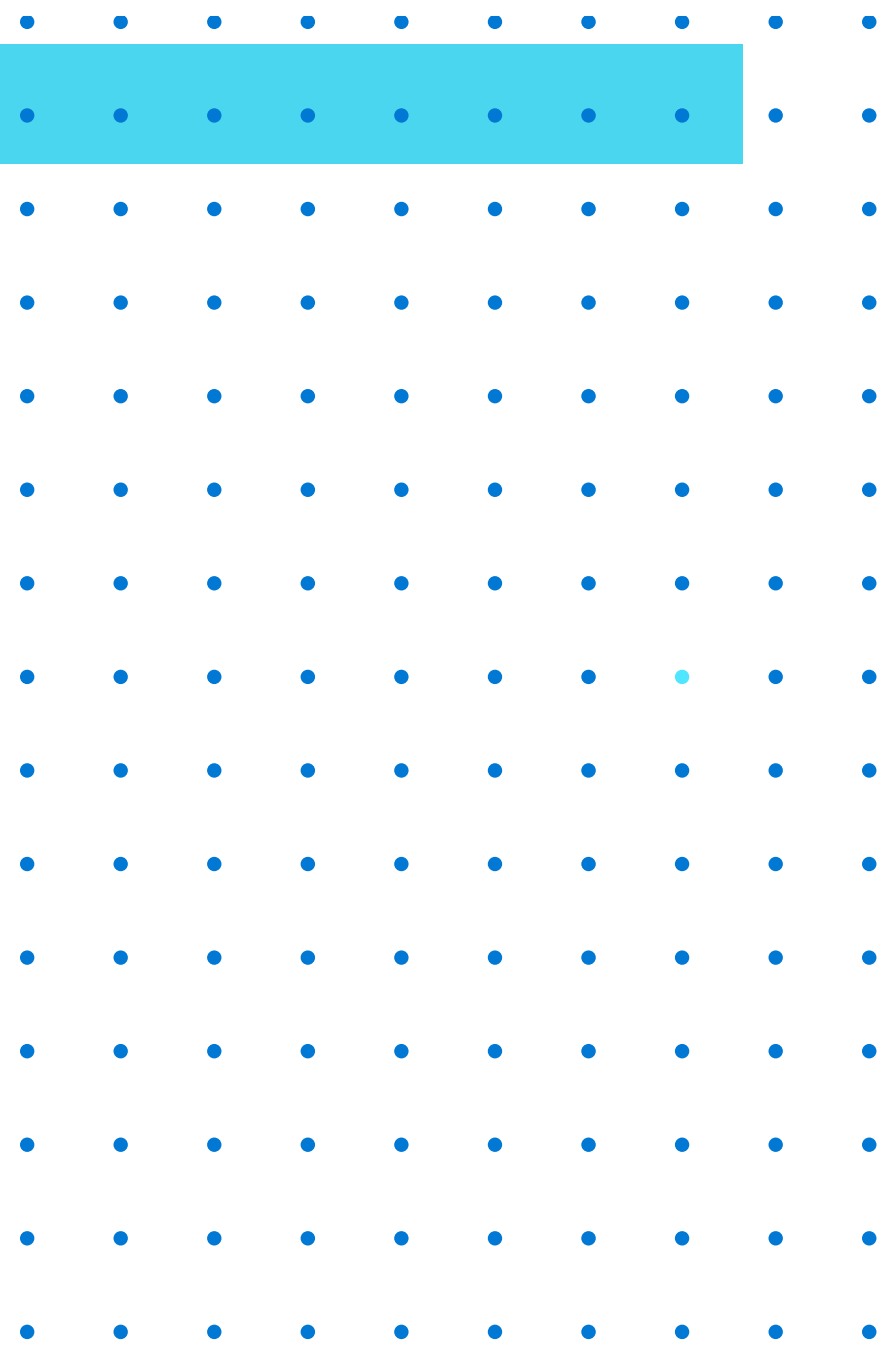
*Technical Instructor &
Consultant*

- Industry/Academic Experience: **15 Years (8 Years in RPA, Microsoft 365 Apps , 4 years in DevOps & Cloud , 3 Years in Data Analytics)**
- **Official Instructor of Microsoft 365, UiPath, (20+ Trainings delivered)**
- **Delivered 120+ Trainings (LinkedIn, Snapchat, Walmart, HCL, Accenture etc.)**
- **Delivered training to 30+ Companies**
- **Delivered training in 12+ Countries physically**
- Core Technical Domains: **Microsoft 365 Apps, UiPath RPA, DevOps, Cloud Computing, Data Analytics**
- Academic Qualifications: **Ph.D. (CSE), M.Tech (CSE)**
- Certifications:
 - **UiPath RPA Certified Associate**
 - **Azure AI-104 Certified**
 - **Docker Certified Associate**
 - **Neo4J Certified Associate**
 - **Maven Certified Professional**
- **5 Books Published**
- **45 Patents Published**
- **02 Copyright Published**

Course Pre-requisites

This course assumes you have a basic understanding of Microsoft Office applications

Familiarity with basic workflow concepts is beneficial but not required



Course Objectives

By the end of this course, you will understand:

The Business value of Power Automate

How to create cloud flows

How to create business process flows

Power Automate Desktop Flows

Automate business processes in your organization.

Introduction to Power Automate

Microsoft Power Automate

Power Automate is a cloud-based service that makes it practical and simple for line-of-business users to build workflows that automate time-consuming business tasks and processes across applications and services.

<https://docs.microsoft.com/en-us/power-automate/frequently-asked-questions>

Power Automate Audience



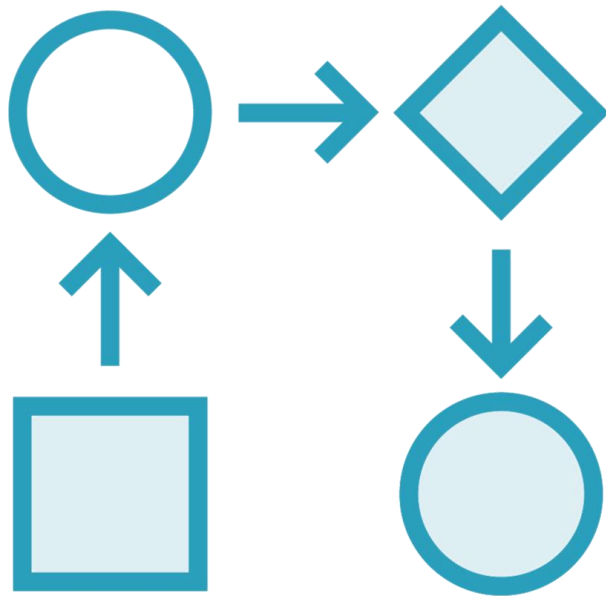
Anyone with a basic tech knowledge can automate business processes

- Line of business users
- IT Specialists

Create powerful workflows without any single line of code

- Developers can also take it to the next level

Power Automate and Flows



- Microsoft Power Automate was called Microsoft Flow
- Renamed to Power Automate in November 2019
- In Power Automate you create flows
 - *Lowercase f*

Three Types of Flows

Cloud flows

Create a cloud flow when you want your automation to be triggered either automatically, instantly, or via a schedule. Those are the most popular types of flows in Power Automate

Business process flows

Business process flows provide a guide for people to get work done. They provide a streamlined user experience to help users follow a predefined process

Desktop flows

Robotic Process Automation (RPA) workflows that enable you to automate processes even in legacy applications with no APIs!

Power Automate Terms and Concepts

Power Platform Connectors



- Used in many products part of the Power Platform suite
- Connectors are a bridge from your data source to your flow
- Allow you to interact with data sources without any technical knowledge

Power Platform Connectors

Over 400 connectors available

Internal to Microsoft

SharePoint / OneDrive / Outlook

External to Microsoft

Twitter, Mailchimp, Salesforce

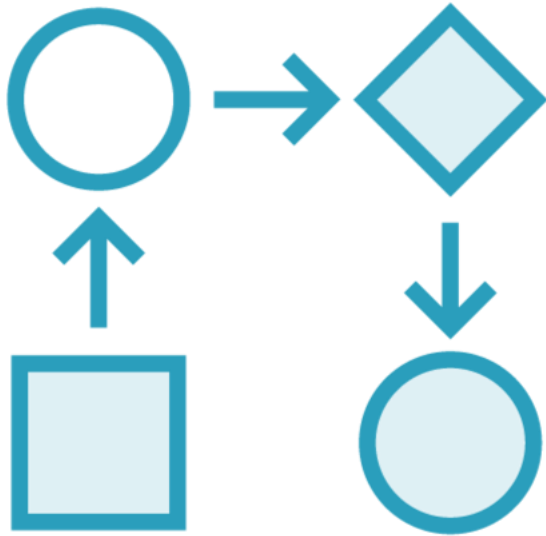
Two types of connectors from a licensing point of view

Standard

Premium



Triggers and Actions



There are two types of operations for Connectors

- Triggers & actions

Triggers only apply to Power Automate

Actions apply to both Power Apps and Power Automate

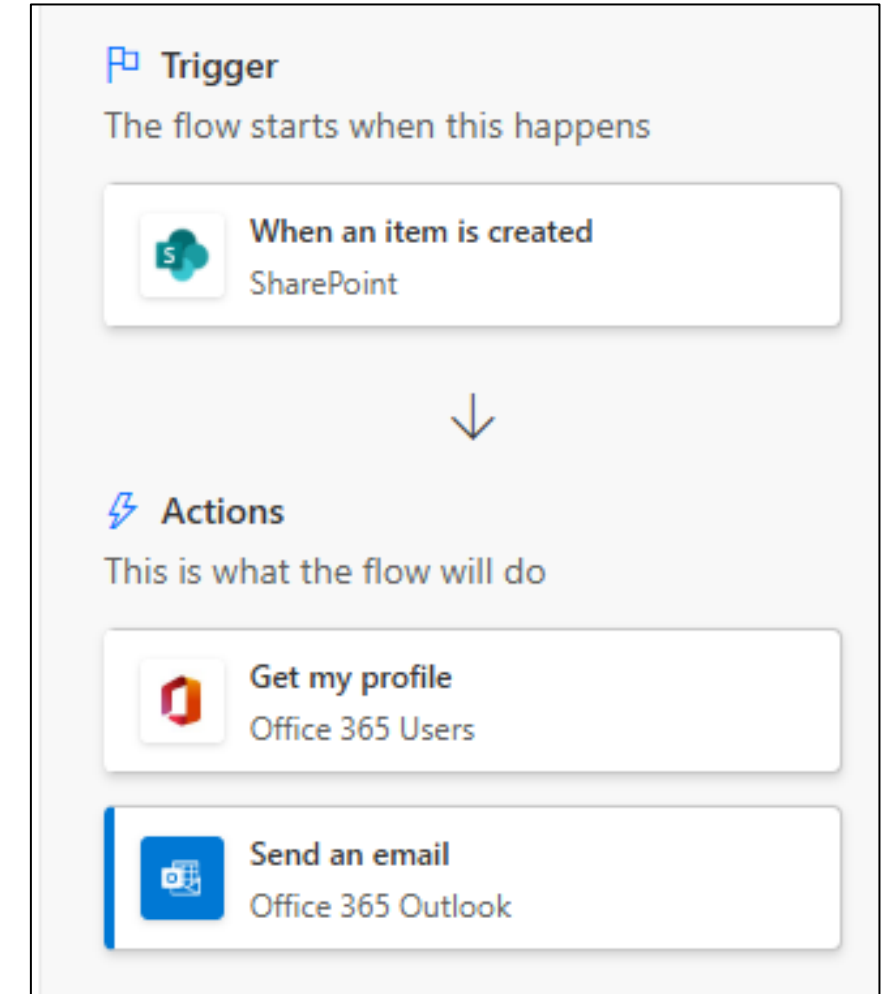
Triggers and Actions

There are two types of operations for Connectors

- Triggers & actions

Triggers only apply to Power Automate

Actions apply to both Power Apps and Power Automate



Triggers

A trigger is the event that starts a flow

Automated - event from another system

New item added in SharePoint List
New file added in OneDrive

New tweet with the #Globomantics
hashtag

A trigger can be time based

Every day at 5:00 am


A trigger can also be Instant

Triggered manually as needed



Experience in Power Automate Cloud Flows

Three ways to make a flow

Start from blank 



Automated cloud flow

Triggered by a designated event.



Instant cloud flow

Triggered manually as needed.



Scheduled cloud flow

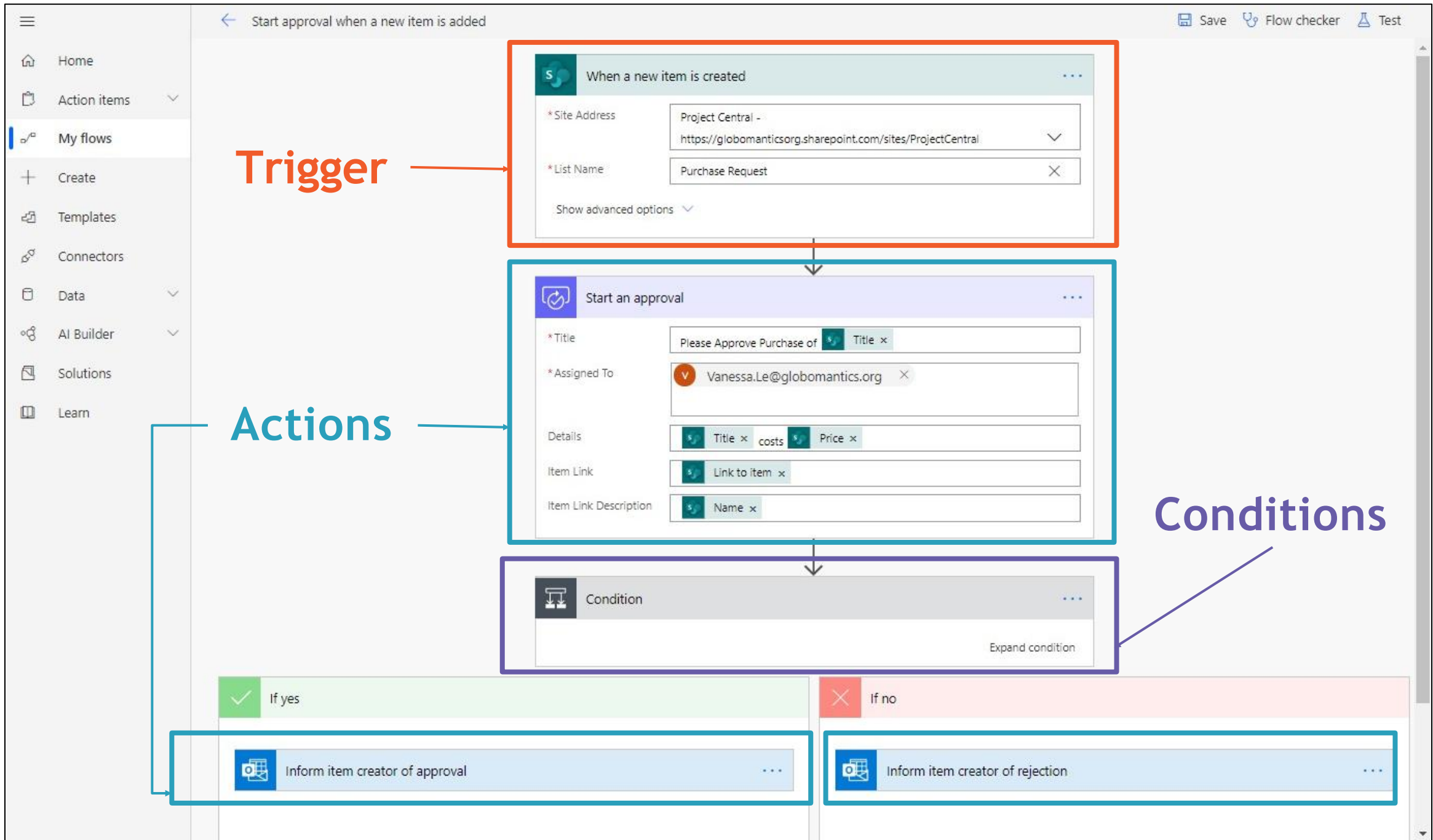
You choose when and how often it runs.



Interaction with your data source

Sample actions

- Start an approval
- Get the user's manager
- Send an e-mail



Recap



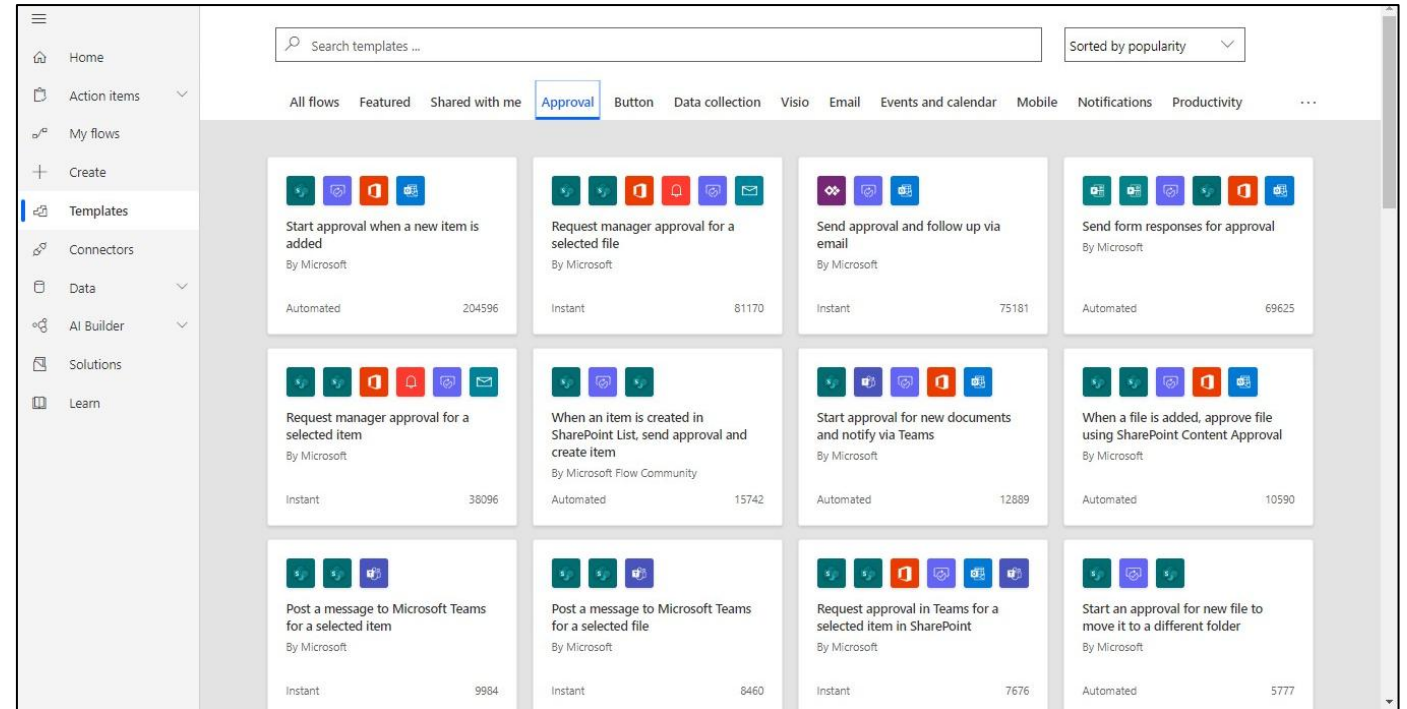
- Trigger
 - Event that starts the flow
- Actions
 - Everything your flow does
- Conditions
 - Allows you to do different actions depending on a value
- Connectors
 - All the services Microsoft Power Automate connects to

Templates

Hundreds of templates available

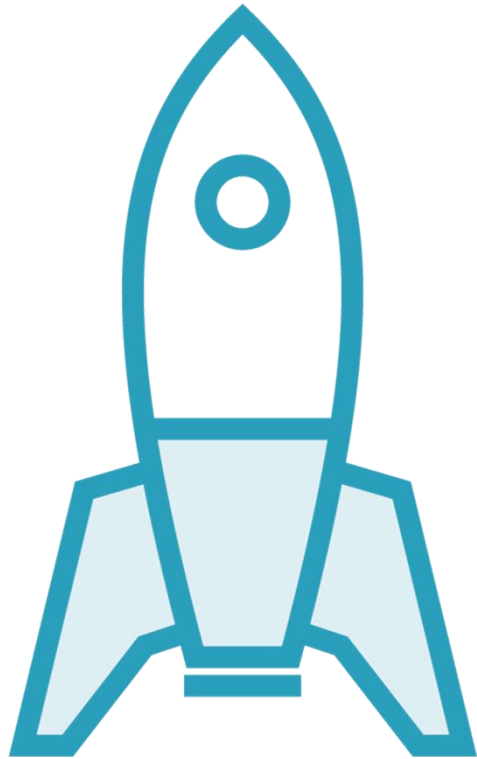
Useful as a quick start for your flows

You can customize them to fit your needs



Power Automate User Interface

Getting to Power Automate



Most flows are created from the web interface

- <https://make.powerautomate.com/>

There is a desktop tool for Desktop flows (RPA)






- Power Automate Desktop

Cloud flows not shared with anyone

Desktop flows (RPA)

Flows you have shared with other people or they shared with you

The screenshot shows the Microsoft Power Automate interface. On the left is a sidebar with navigation options: Home, Approvals, My flows (highlighted with a red box), Create, Templates, Connectors, Data, Monitor, and All flows. The main area is titled 'Flows' and has a top bar with '+ New flow' and '< Import'. Below this are three filter tabs: 'Cloud flows' (highlighted with a red box), 'Desktop flows' (highlighted with a green box), and 'Shared with me' (highlighted with a blue box). An 'Install' button is in the top right. Below the filters is a table of flows.

	Name	Modified	Type
	Purchase Approvals	3 sec ago	Automated
	New Course Marketing 	47 sec ago	Instant
	Contracts Notification Reminder 	11 h ago	Instant

Flow name and details

Connectors Used

Home

Action items

My flows

Create

Templates

Connectors

Data

Monitor

AI Builder

Process advisor

Solutions

Learn

Chat with a bot

EditShareSave AsDeleteSend a copySubmit as templateExportAnalyticsTurn offFlow checker

Flows > Holiday Request Approval

Details

Flow

Holiday Request Approval

Status

On

Description

Holiday Approval Process for the Globomantics IT Team

Created

Feb 3, 12:23 PM

Owner

Vlad Catrinescu

Modified

Dec 11, 11:09 AM

Type

Automated

Plan

Per-user plan

Connections

Approvals

Office 365 Outlook Permissions

Office 365 Users Permissions

+1 Connections Multiple permissions

Owners

VC Vlad Catrinescu

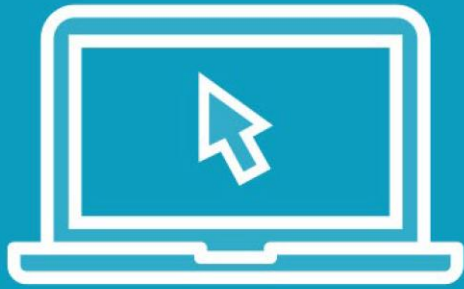
28-day run history

Start	Durati...	Status
Oct 14, 12:04 PM (38 sec ago)	00:00:30	Succeeded

History of flow runs and durations

Flow owners

Demo



Getting familiar with the Power Automate user interface

Conclusion



Introduction to Power Automate

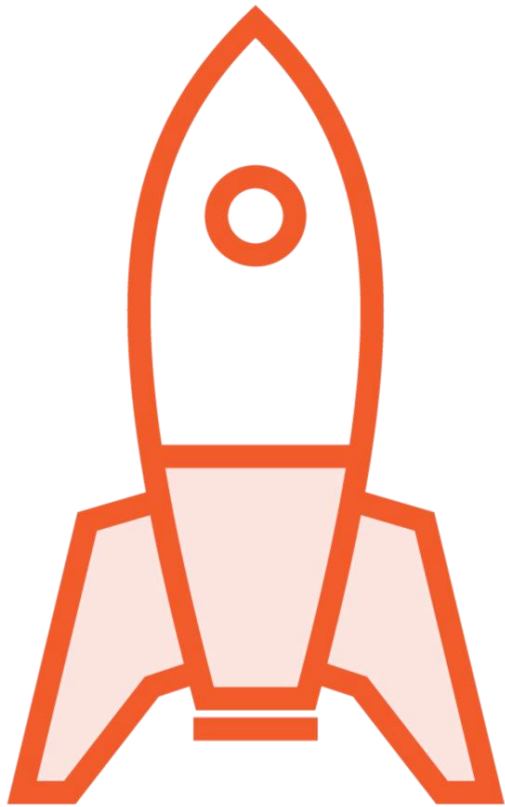
Power Automate terms and concepts

- Connectors
 - Triggers
 - Actions
- Templates

Power Automate user interface

Creating a Cloud Flow from a Template

Microsoft Power Automate Templates



Great way to get started with Power Automate

Templates can be customized

- Add / delete actions

Hundreds of templates offered out of the box

Home

Action items

My flows

Create

Templates

Connectors

Data

Monitor

AI Builder

Process advisor

Solutions

Learn

Chat with a bot

Search templates ...

Sorted by popularity

All flows

Featured

Shared with me

Remote work

Approval

Button

Visio

Data collection

Email

Events and calendar

Post MSN Weather updates to Yammer group everyday

By Microsoft

Scheduled953

Save Outlook.com email attachments to your OneDrive

By Microsoft Power Automate Community

Automated152904

Save email attachments from Outlook.com to Dropbox

By Microsoft

Automated4341

Complete a custom action for the selected file

By Microsoft

Instant21341

Keep my schoolwork in sync with my Google Drive

By Microsoft

Automated5653

Save Gmail attachments to a Dropbox folder

By Microsoft

Automated3766

Get daily reminders from your Outlook.com email

By Microsoft

Scheduled3732

Run sentiment analysis on tweets and push results to a Power BI dataset

By Microsoft

Automated3805

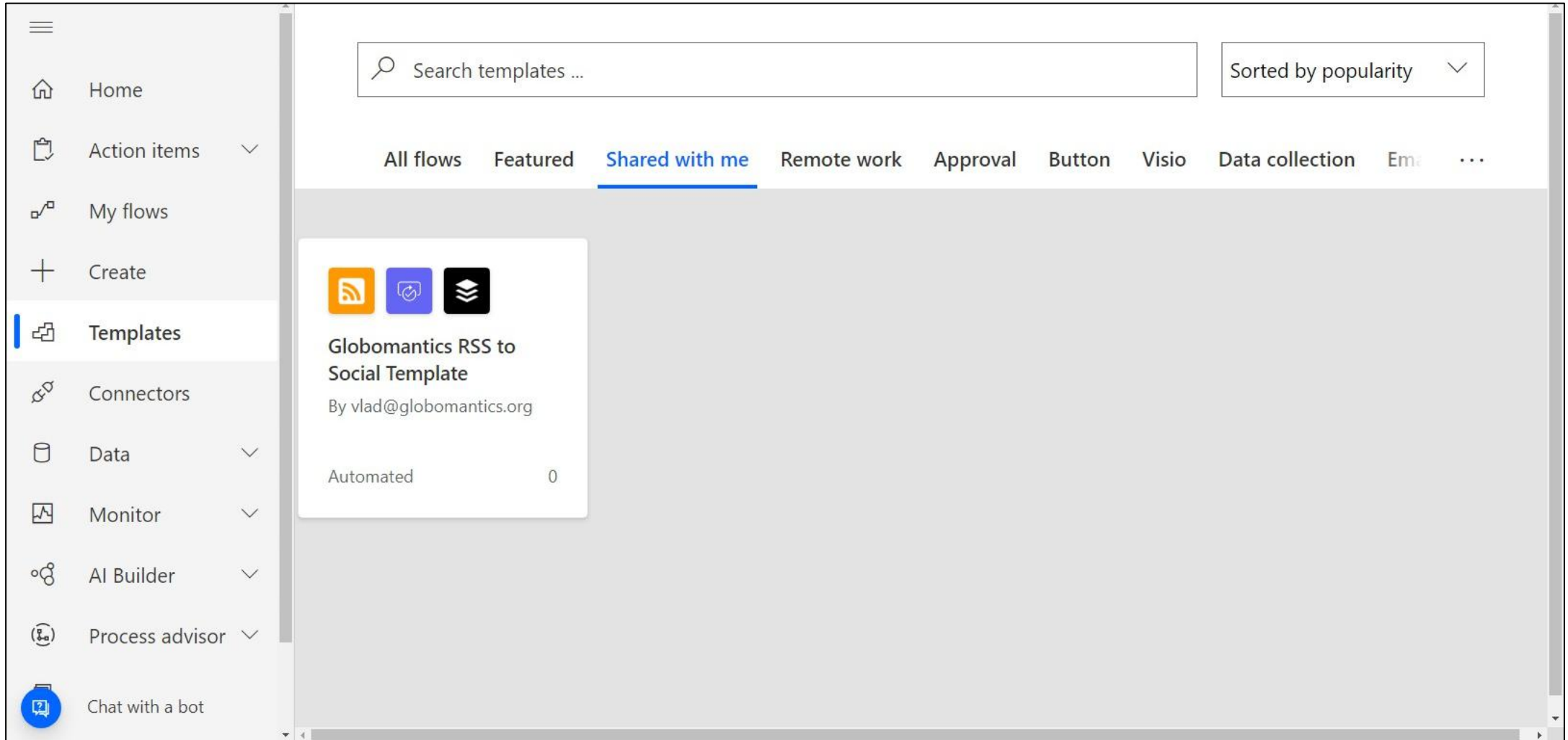
Notify and Email when a new file

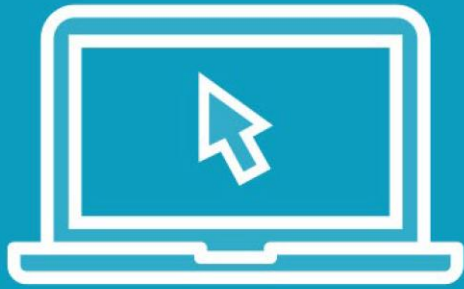
Create an issue in Azure DevOps

Send an email for new Tweets

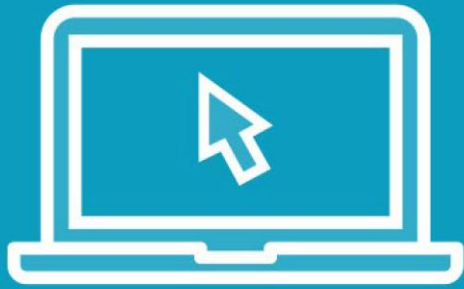
Trigger a flow with a Power BI

Other Makers Can Also Share Templates with You





Send approval email when a new item is added to a SharePoint List



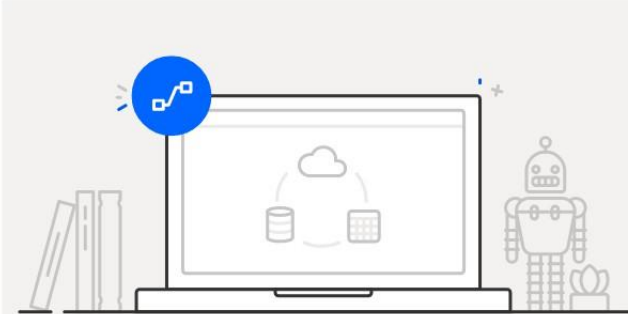
Copy files between One Drive and
SharePoint

Creating a Cloud Flow from Scratch

Power Automate makes it easy even when starting from blank

You can search all triggers depending on the type of flow

Build an automated cloud flow



Free yourself from repetitive work just by connecting the apps you already use—automate alerts, reports, and other tasks.

Examples:


- Automatically collect and store data in business solutions
- Generate reports via custom queries on your SQL database


Flow name


Add a name or we'll generate one


Choose your flow's trigger * ⓘ


Search all triggers


 When a new response is submitted
Microsoft Forms ⓘ

 When an item is created
SharePoint ⓘ

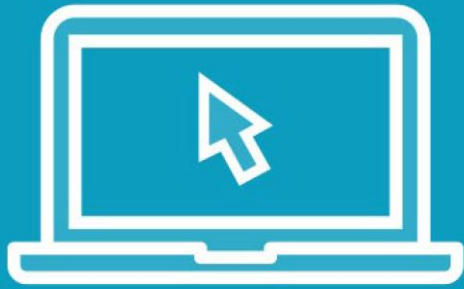
 When an item is created or modified
SharePoint ⓘ

 When a file is created in a folder
SharePoint ⓘ

 When a file is created
OneDrive for Business ⓘ

 When a task is assigned to me
Planner ⓘ

[Skip](#) [Create](#) [Cancel](#)



Creating a flow from scratch -
Overdue Tasks

Conclusion



Created our first cloud flows

- Based on a template
- From scratch
- Basic flows

Sharing flows

- My flows
- Shared with you

Creating Advanced Cloud Flows

Implement Logic Control

Logic Control in Power Automate



Conditions

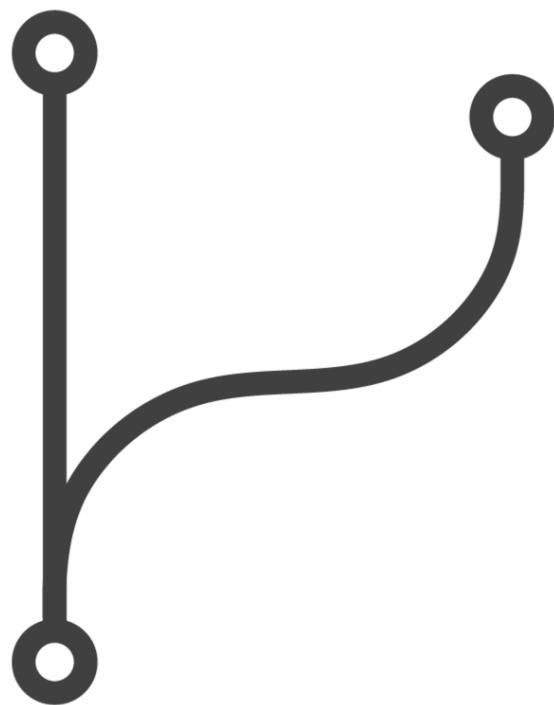
Branches



Conditions

Use a condition to specify that a cloud flow performs one or more tasks only if a condition is true or false.

Conditions



Allows us to choose which actions to run depending on a condition

Limited to two choices

- Is the result true or false

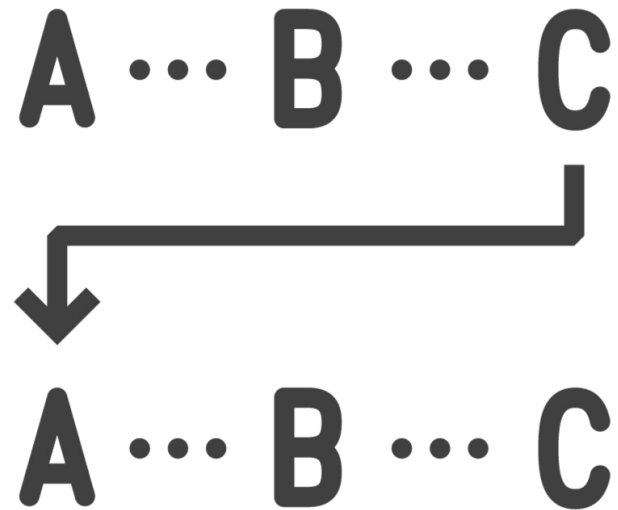
You can add multiple criteria to your conditions

Based on different properties

You can also have multiple groups

The screenshot shows a configuration window titled "Condition 2". On the left, there is a tree view with a node labeled "Or" and a dropdown arrow. A blue line connects this node to a list of two criteria. Each criterion consists of a checkbox, a property name in a light blue box with a refresh icon and a delete 'x' icon, a comparison operator in a dropdown menu, and a value in a text box. The first criterion has the property "Used", the operator "is equal to", and the value "No". The second criterion has the property "value", the operator "contains", and the value "PTO". Below the list is a button with a plus icon and the text "Add".

Group	Property	Operator	Value
Or	Used	is equal to	No
	value	contains	PTO

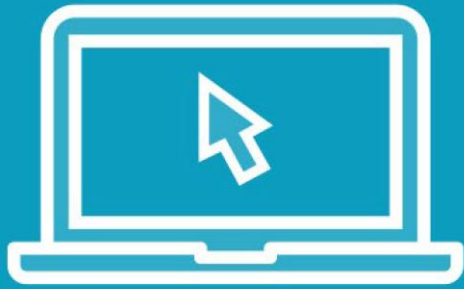


Switch statements can evaluate a single property

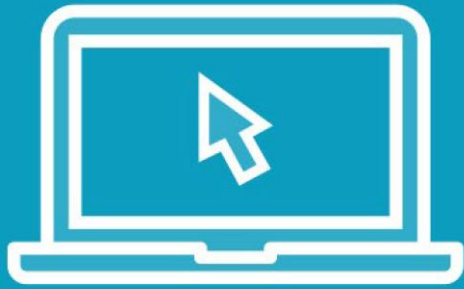
- But they allow you to have multiple potential results

Examples

- Provisioning flow with multiple template options
- Expense report with different options depending on value



Conditions and switch statements inside
Power Automate



Advanced flow with Flow control,
Variables, Expressions and Loops

Creating Desktop Flows

Overview



Introduction to Desktop flows

Creating a Desktop flow

Desktop flows integrations

Introduction to Desktop Flows

Robotic Process Automation is a newer offering inside the Power Platform

- General availability in April 2020
- Initially released as “UI flows”

Enables Power Automate to automate all your business processes

- Whether they are modern or legacy

Premium licensing required



Connectors (Cloud Flows) or Desktop Flows?

Connectors (Cloud flows)

Modern apps with APIs

Desktop flows

Legacy apps (no APIs)



Creating a Desktop Flow

Getting Ready to Create Desktop Flows

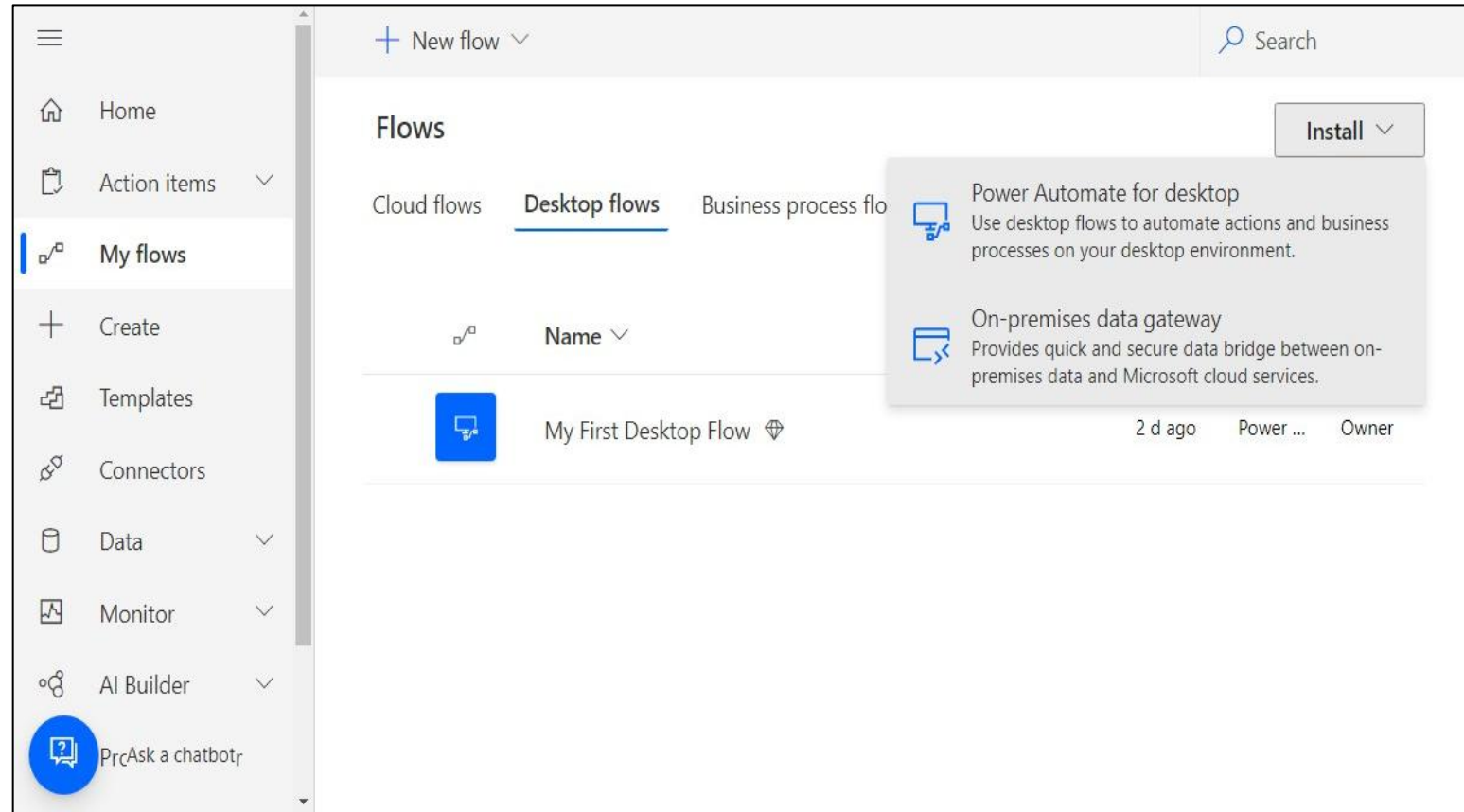
Make sure you have the licensing required for Desktop flows

You will need to install Power Automate for Desktop

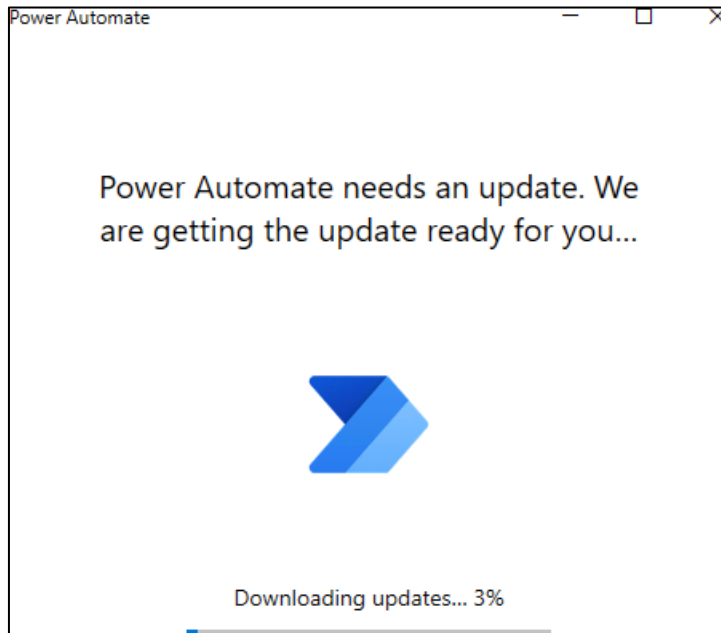
Tool used to create Desktop flows



Download it from the
Desktop flows tab
Install button at the
top right



Windows 11 Users



Power Automate Desktop is pre-installed on Windows 11 devices

- It might need an update first time you open it!

The machine-runtime app is not pre-installed

- Install it from settings

Two ways to create your flow

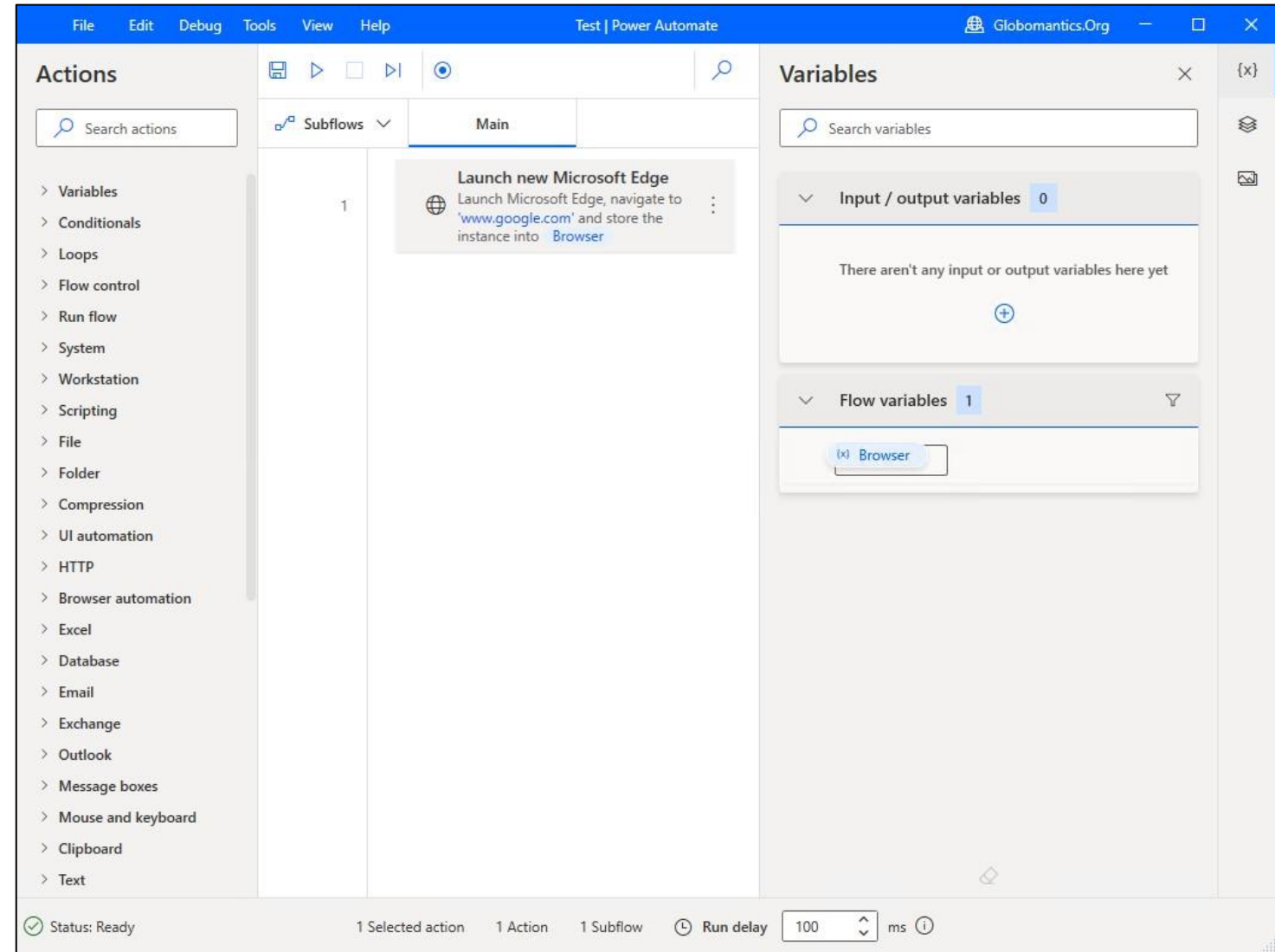
Add from the hundreds of possible actions

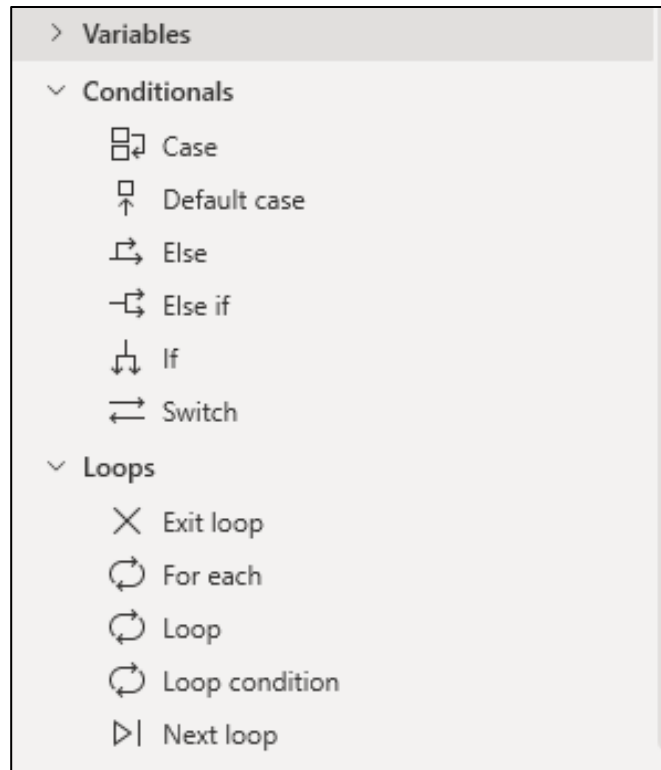
Record yourself doing the process

Most of the time it's a mix of both!

Record the process

Clean up / optimize





Power Automate desktop has multiple logic controls

- Variables
- Conditions
- Loops

Allows you to create advanced flows that follow your business logic

Thank You



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