

Top 10 Tips

For Debugging Power Apps and Power Automate

Introduction



Jamie Willis-Rose

Power Platform Developer
at AIS (Applied Information Sci...



Jamie Willis-Rose

Power Platform Developer @ Applied Information Sciences

- Experience with Power Platform (including Dynamics 365) and SharePoint
- Experience with non-profit, broadcast and government agencies
- User group leader in the Washington, DC area and speaker

LinkedIn: <https://www.linkedin.com/in/jamiewillisrose/>

Twitter: @jwillisrose



Winner Microsoft Partner of the Year

Power Apps and
Power Automate

Power Apps



Environments

Tenant

Dev



Test



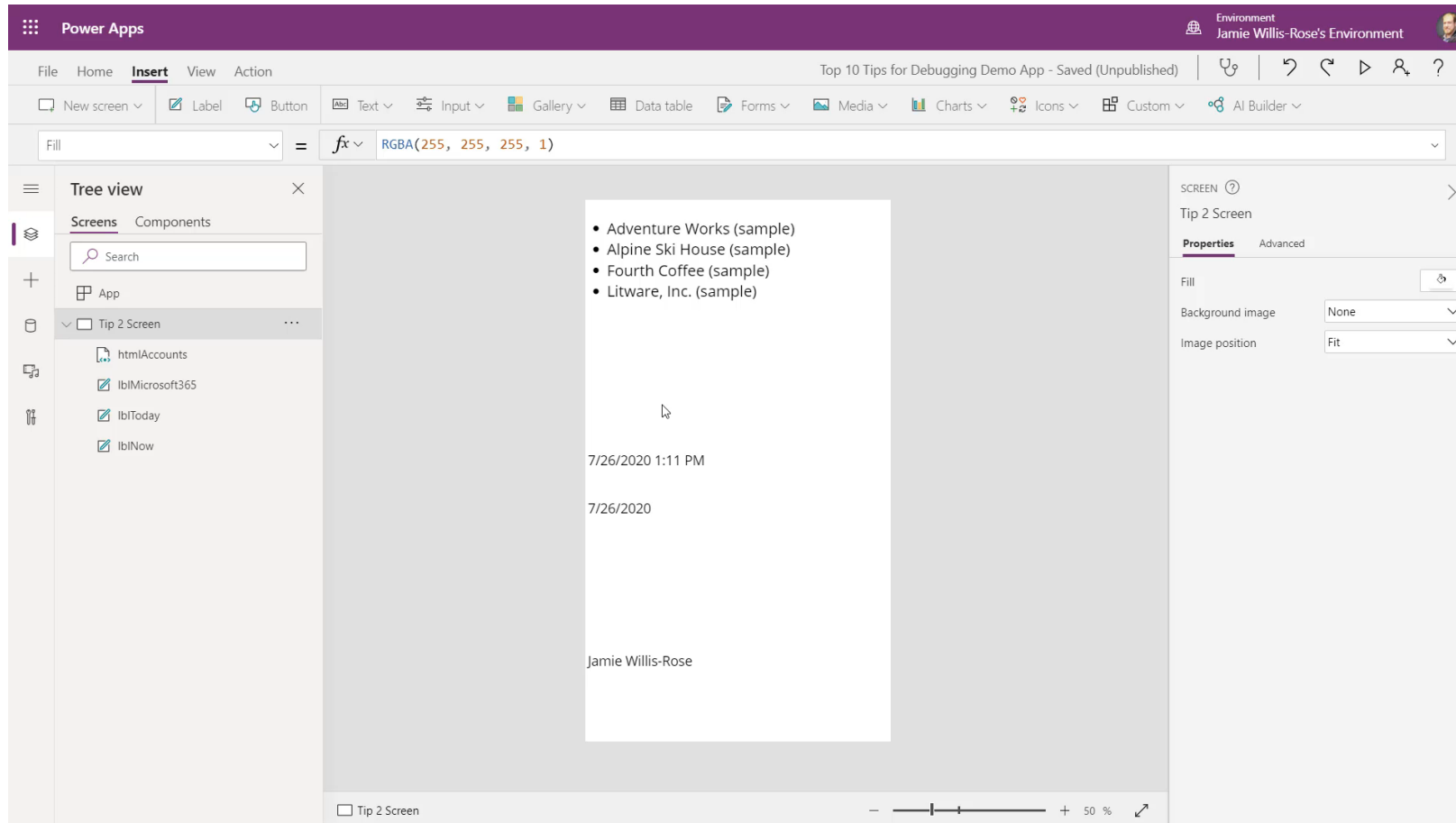
Prod

Power Platform Adoption Framework



<https://PowerPlatform.AF>

Results View

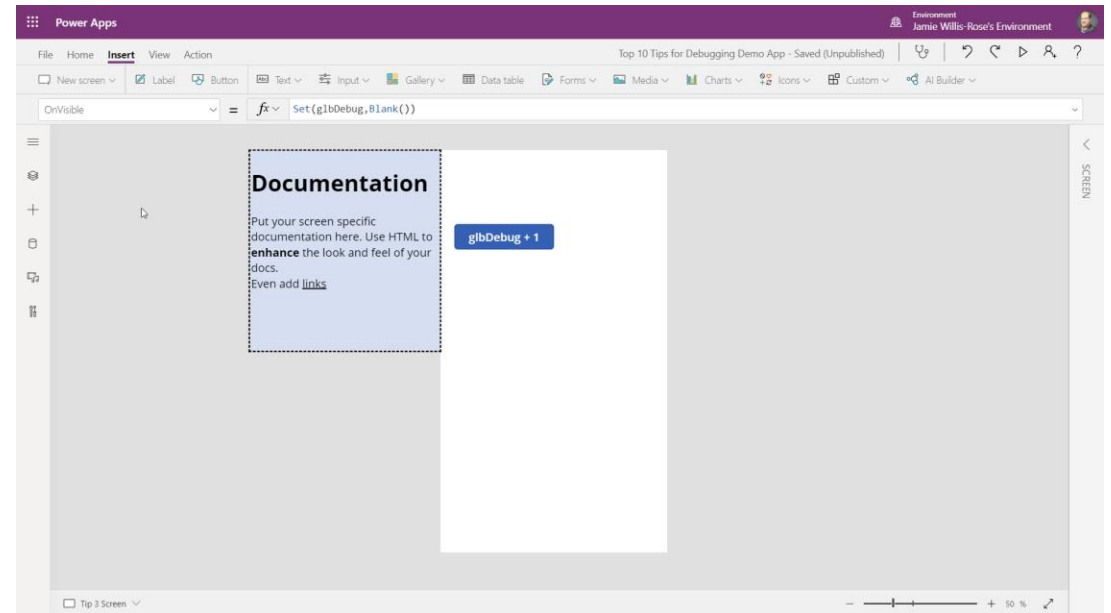


<https://powerapps.microsoft.com/en-us/blog/canvas-debugging-with-results-view/>

Hidden Documentation/Debug Panel



<https://toddbaginski.com/>



Monitor

Power Apps Environment: Jamie Willis-Rose's Environment

File Home Insert View Action Northwind Sample Data

Fill = fit $\text{RGBA}(255, 255, 255, 1)$

Tree view

Screens Components

Search

App

Screen1

- Label1
- Timer1
- ErrorsCount
- ErrorsShow
- Logo
- CancelText
- RemoveText
- LoadText
- HeaderCount
- HeaderStatus
- HeaderEntity
- Header
- CancelButton
- LoadButton
- EntityProgress
- RemoveButton

Sample Data Manager

Load Data Load sample data into Northwind entities.

Remove Data Remove ALL data from Northwind entities.

Cancel Cancel operations at the start of the next entity.

Entity	Status	Records
Categories		0
Customers		0
Employees		0
Order Products		0
Shippers		0
Suppliers		0
Orders		0
Purchase Orders		0
Inventory Transactions		0
Invoices		0
Order Details		0
Purchase Order Details		0
Many to Many Relationships		--

SCREEN 1

Screen1

Properties Advanced

Fill

Background image: None

Image position: Fit

Trace() function

The screenshot shows the Microsoft Power Apps environment. The top bar indicates the user is in 'Environment: Jamie Willis-Rose's Environment'. The app being viewed is 'Northwind Sample Data - Saved (Unpublished)'. The formula bar at the top shows the expression: `Fill = fX(RGBA(255, 255, 255, 1))`.

The left sidebar shows the 'Tree view' with 'Screens' and 'Components' tabs. Under 'Screens', 'Screen1' is selected, showing a list of components including Label1, Timer1, ErrorsCount, ErrorsShow, Logo, CancelText, RemoveText, LoadText, HeaderCount, HeaderStatus, HeaderEntity, Header, CancelButton, LoadButton, EntityProgress, and RemoveButton.

The main canvas displays the 'Sample Data Manager' app. It features a logo for 'NORTHWIND TRADERS' and a title 'Sample Data Manager'. Below the title are three buttons: 'Load Data' (Load sample data into Northwind entities.), 'Remove Data' (Remove ALL data from Northwind entities.), and 'Cancel' (Cancel operations at the start of the next entity.).

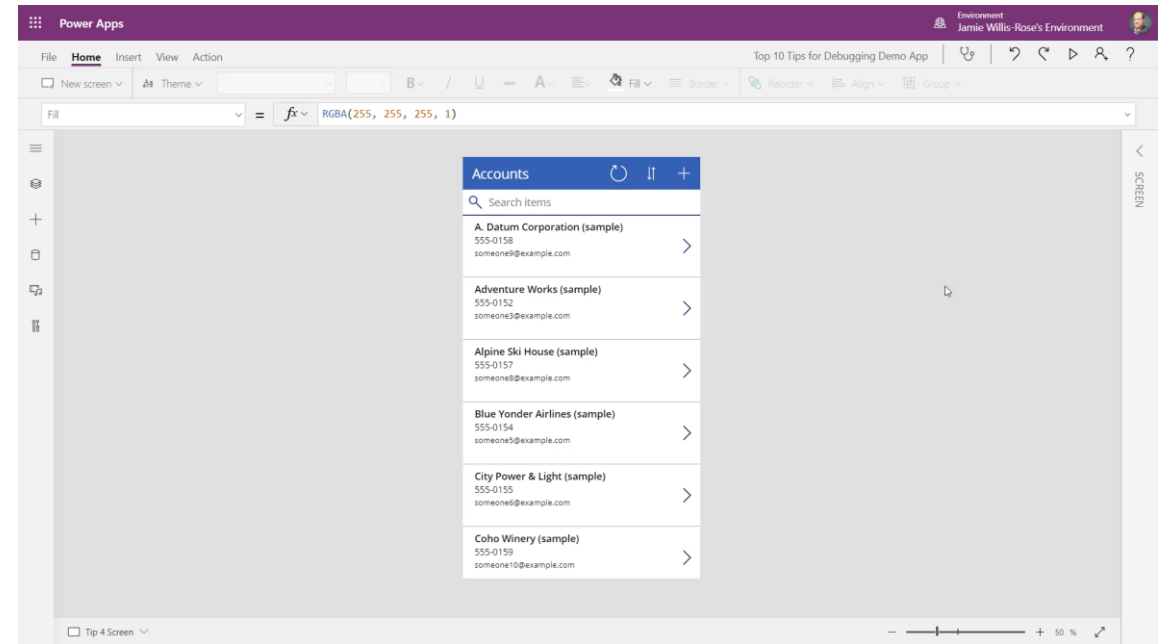
To the right of the buttons is a table showing the status of various entities:

Entity	Status	Records
Categories	Done	0
Customers	Done	0
Employees	Done	0
Order Products	Done	0
Shippers	Done	0
Suppliers	Done	0
Orders	Done	0
Purchase Orders	Done	0
Inventory Transactions	Done	0
Invoices	Done	0
Order Details	Done	0
Purchase Order Details	Done	0
Many to Many Relationships	n/a	---

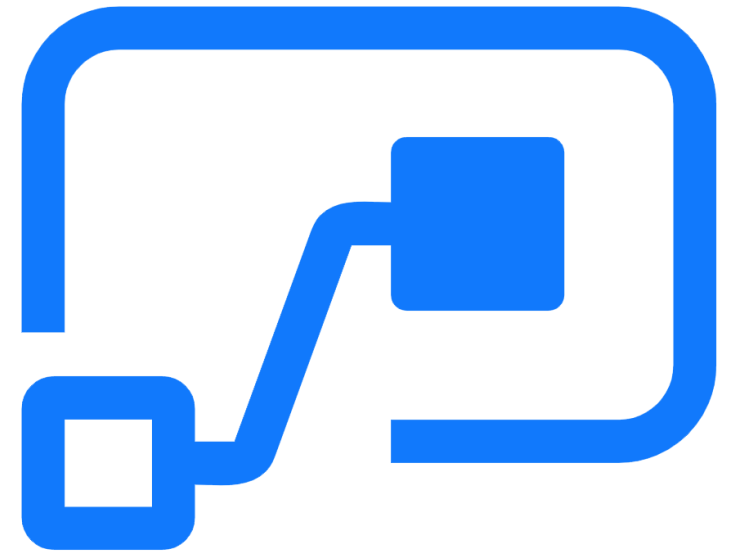
Test Studio



More links at end of presentation



Power Automate



Manual Triggers & Test

The screenshot displays the Microsoft Power Automate web interface. The top navigation bar is blue with the 'Power Automate' logo, a search bar, and user information. The left sidebar contains navigation links: Home, Action items, My flows, Create, Templates, Connectors, Data, AI Builder, Solutions, and Learn. The main content area features a welcome message, a search bar for templates, and a section titled 'Featured template collections' with four cards: '9 templates to help your sales team', '12 templates that keep you informed when on-the-go', '12 templates that improve your productivity', and '8 templates that make software development easier'. Below this is a 'Popular services' section with icons for SharePoint, Office 365, OneDrive, Twitter, Dropbox, Outlook.com, Dynamics 365, Yammer, Excel Online, and Google.

Power Automate Search for helpful resources

Environments Jamie Willis-Rose's Envi...

This is a developer environment and not meant for production use. [Learn more](#)

Take care of what's important. Automate the rest.
Create automated workflows with Microsoft Power Automate.
[Watch a quick video](#)

Search for a template by app, task, or industry

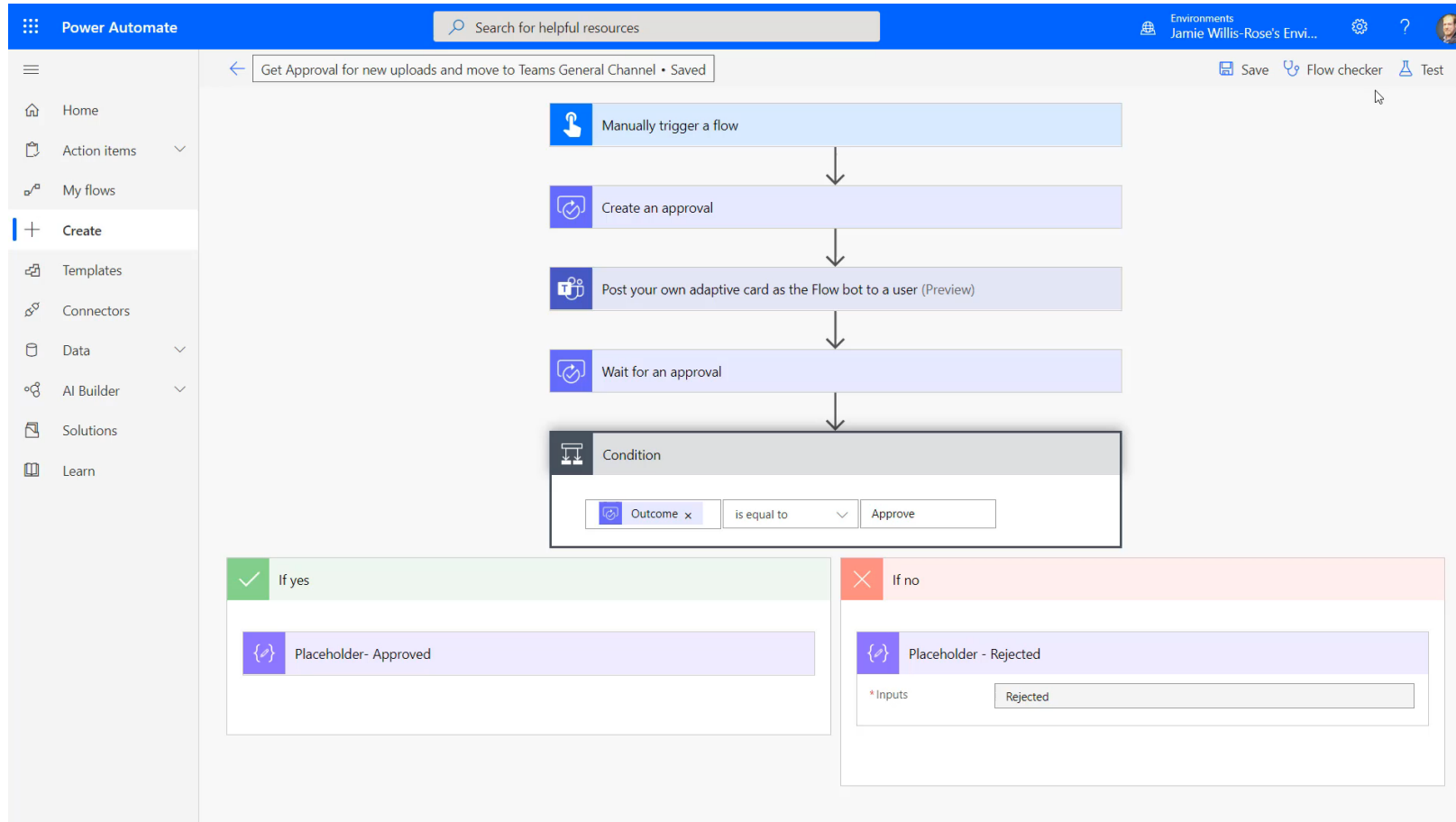
Featured template collections

- 9 templates to help your sales team
- 12 templates that keep you informed when on-the-go
- 12 templates that improve your productivity
- 8 templates that make software development easier

Popular services See all 361 >

- SharePoint
- Office 365
- OneDrive
- Twitter
- Dropbox
- Outlook.com
- Dynamics 365
- Yammer
- Excel Online
- Google

Manual Triggers & Test



Flow Checker

Power Automate Search for helpful resources

Environments
Jamie Willis-Rose's Envi...

Save Flow checker Test

← Get Approval for new uploads and move to Teams General Channel

When a file is created in a folder

Create an approval

Post your own adaptive card as the Flow bot to a user (Preview)

Wait for an approval

Condition

+ New step Save

Error Handling

Power Automate Search for helpful resources

Environments: Jamie Willis-Rose's Envi...

Edit Share Save As Delete Send a copy Submit as template Export Analytics Turn off Repair tips off

Flows > Get Approval for new uploads and move to Teams General Channel

Details Edit

Flow	Get Approval for new uploads and move to Teams General Channel	Status	On
Owner	Jamie Willis-Rose	Modified	Jul 28, 06:31 PM
		Type	Automated
		Plan	Per-user plan

Connections Edit

Approvals	Approvals	✓
SharePoint Permissions	jamie@willisrose.onmicrosoft.	✓
Microsoft Teams	jamie@willisrose.onmicrosoft.	✓

Owners Edit

Want to share your flow with others? Upgrade now for more features and faster performance. [Compare plans](#)

28-day run history All runs

Start	Duration	Status
Jul 28, 07:47 PM (1 min ago)	00:00:32	Succeeded
Jul 28, 07:47 PM (1 min ago)	00:01:04	Failed
Jul 28, 07:44 PM (4 min ago)	00:00:33	Failed
Jul 27, 08:23 PM (23 h ago)	00:00:53	Succeeded
Jul 27, 07:41 PM (1 d ago)	00:32:12	Test succeeded
Jul 27, 07:39 PM (1 d ago)	00:05:02	Test canceled

Error Handling

Automated		
Plan		
Per-user plan		

28-day run history ⓘ			🔄 All runs
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Error Handling

The screenshot displays the Microsoft Power Automate web interface. The top navigation bar is blue with the 'Power Automate' logo, a search bar, and user information. The left sidebar contains navigation links: Home, Action items, My flows (selected), Create, Templates, Connectors, Data, AI Builder, Solutions, and Learn. The main content area shows the details of a flow named 'Get Approval for new uploads and move to Teams General Channel'. The flow is owned by 'Jamie Willis-Rose' and is in an 'On' status. The '28-day run history' table shows the flow's execution status over time. On the right, there are sections for 'Connections' (Approvals, SharePoint Permissions, Microsoft Teams) and 'Owners' (a message about sharing the flow).

Power Automate Search for helpful resources

Environments Jamie Willis-Rose's Envi... ?

Edit Share Save As Delete Send a copy Submit as template Export Analytics Turn off Repair tips off

Flows > Get Approval for new uploads and move to Teams General Channel

Details Edit

Flow	Get Approval for new uploads and move to Teams General Channel	Status	On
Owner	Jamie Willis-Rose	Modified	Jul 28, 06:31 PM
		Type	Automated
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Connections Edit

Approvals	Approvals	✓
SharePoint Permissions	jamie@willisrose.onmicrosoft.	✓
Microsoft Teams	jamie@willisrose.onmicrosoft.	✓

Owners Edit

Want to share your flow with others?
Upgrade now for more features and faster performance. [Compare plans](#)



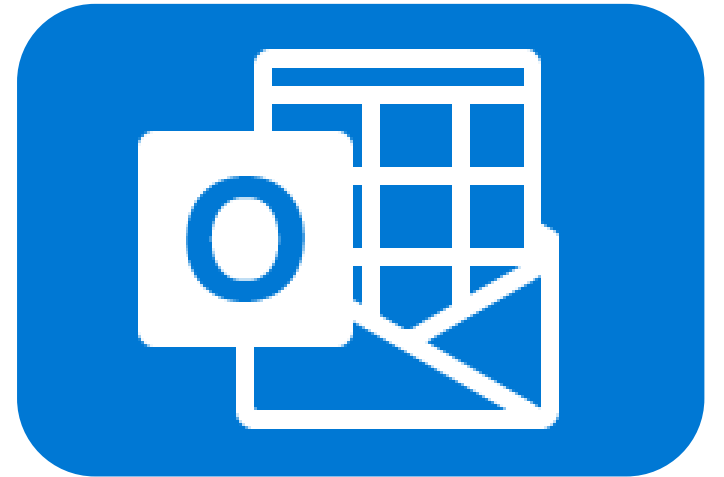
Send Notifications



Notification

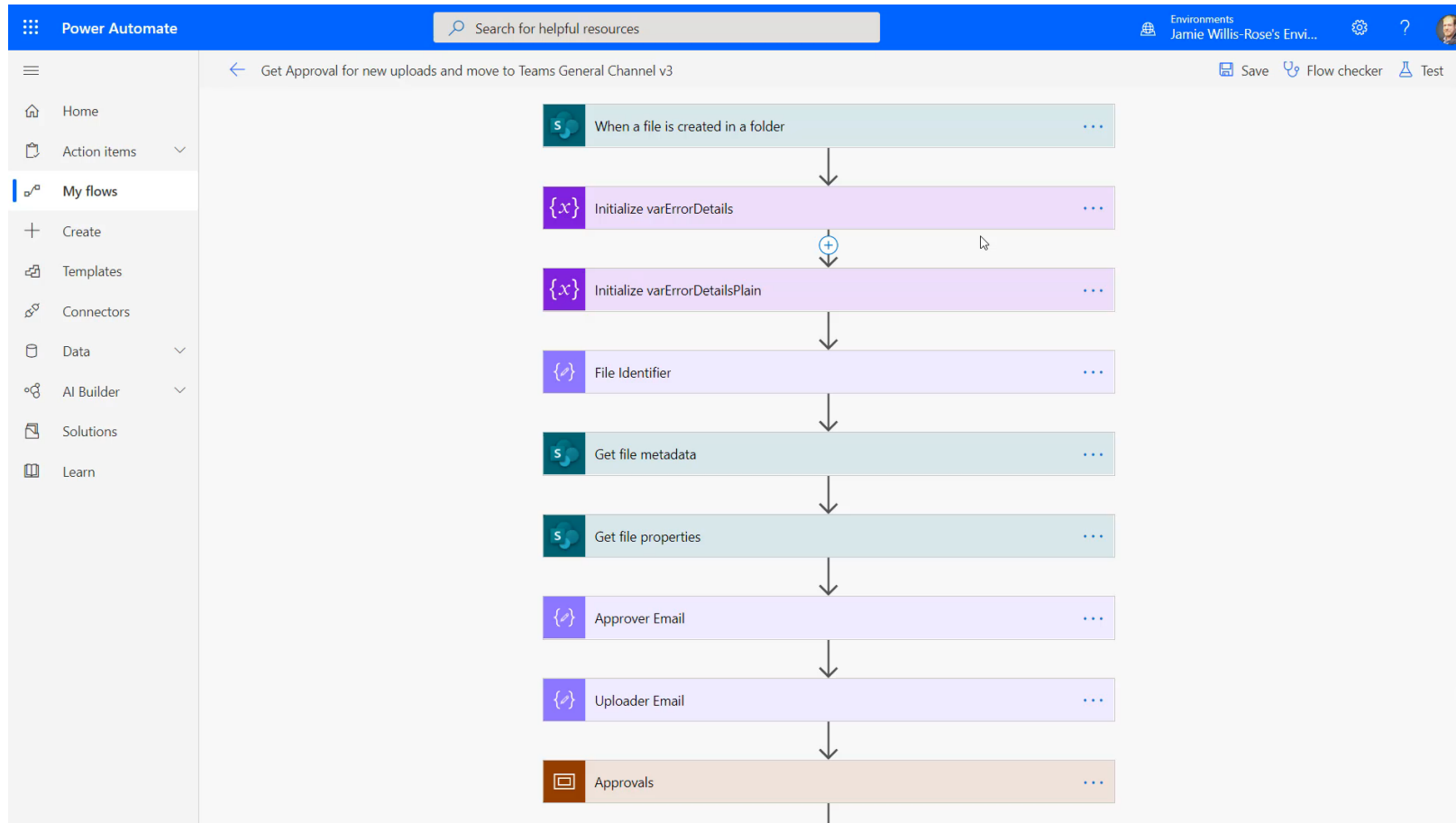


Teams



Outlook

Send Notifications



Send Notifications



Child Flows

Why Child Flows

Single Flow

Pros

- Everything in one flow
- Does not require solution

Cons

- Difficult to debug
- Complex error handling

Parent-Child Flows

Pros

- Reusable functionality
- Easier to debug
- Parallel functions
- Improved Error Handling
- Easier to import/export

Cons

- Requires Solution
- Planning required

Child Flows

Design

Build
Child
Flows

Build
Parent
Flow



Child Flows



A screenshot of the Microsoft Power Automate web interface. The top navigation bar is blue with the "Power Automate" logo and a search bar. Below the navigation bar, there is a "Solutions" section with a table of installed solutions. The table has columns for "Display name", "Name", "Created", "Version", "Managed externally?", and "Solution check". The table lists various solutions, including "Microsoft Flow Approvals", "Northwind Traders", "AI Sample Data", "Asset Checkout", "Innovation Challenge", "Fundraiser", "Power Apps Checker Base", "Power Apps Checker", "Contextual Help Base", "Contextual Help", "Common Data Services Default Solution", and "Default Solution".

Display name	Name	Created	Version	Managed externally?	Solution check
Microsoft Flow Approvals	msdyn_FlowApprovals	7/27/2020	2.0.1.0	Yes	Checked by Micr...
Microsoft Flow Approvals Core Solution	msdyn_FlowApprova...	7/27/2020	2.0.1.0	Yes	Checked by Micr...
Northwind Traders	NorthwindTraders	7/26/2020	1.0.0.6	Yes	Hasn't been run
AI Sample Data	msdyn_AIBuilderSam...	7/25/2020	1.0.0.6	Yes	Checked by Micr...
Asset Checkout	AssetCheckout	7/25/2020	0.0.0.1	Yes	Checked by Micr...
Innovation Challenge	InnovationHub	7/25/2020	0.0.0.1	Yes	Checked by Micr...
Fundraiser	msdyn_SampleApp	7/25/2020	1.0.0.4	Yes	Checked by Micr...
Power Apps Checker Base	msdyn_PowerAppsC...	7/25/2020	1.2.0.22	Yes	Checked by Micr...
Power Apps Checker	msdyn_PowerAppsC...	7/25/2020	1.2.0.22	Yes	Checked by Micr...
Contextual Help Base	msdyn_ContextualH...	7/25/2020	1.0.0.10	Yes	Checked by Micr...
Contextual Help	msdyn_ContextualH...	7/25/2020	1.0.0.10	Yes	Checked by Micr...
Common Data Services Default Solution	Cra31b9	7/25/2020	1.0.0.0	Yes	Hasn't been run
Default Solution	Default	7/25/2020	1.0	Yes	Not supported L...

Review

Environments

Results View

Hidden Panel

Monitor

- Trace()

Test Studio

Manual
Triggers

Flow Checker

Error
Handling

Send
Notifications

Child Flows

Events



<https://dynamicscon.com/>

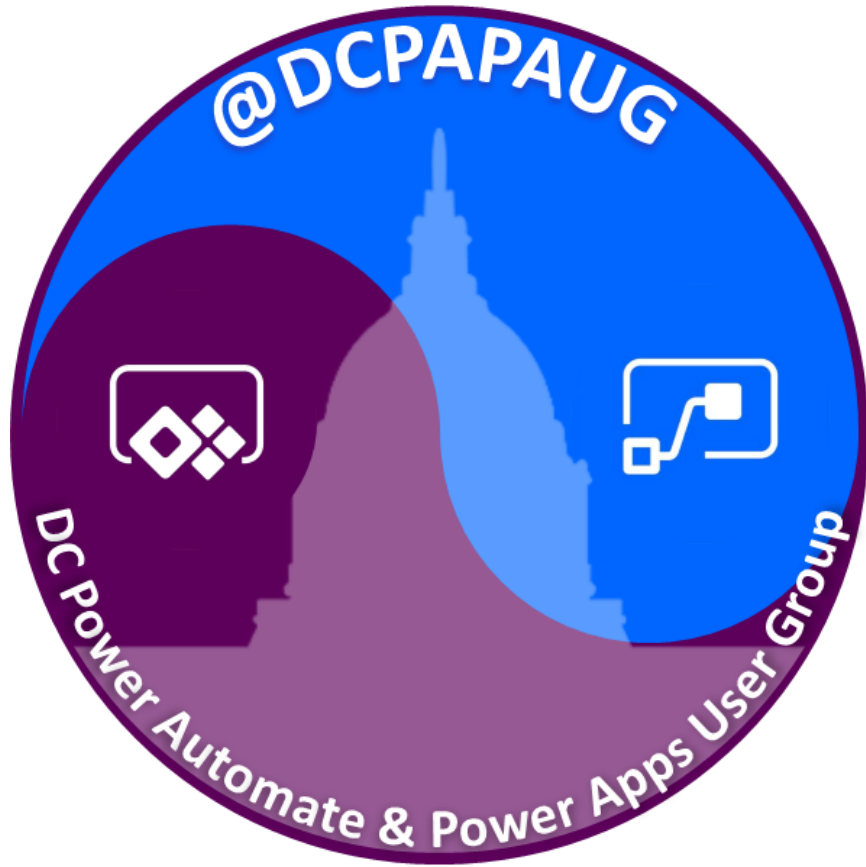
A blue background with a white starburst shape in the center. The word "VOTE" is written in large red letters inside the starburst. Below it, "Voting Ends August 1st" is written in black. There are four pink stars around the starburst. At the bottom, a yellow box contains the text "Power Apps 101" and "Jamie Willis-Rose". To the right of the yellow box is a black and white portrait of a man with a beard and mustache, wearing a suit jacket.

VOTE

Voting Ends August 1st

Power Apps 101
Jamie Willis-Rose

A small version of the DynamicsCon logo, featuring the word "DYNAMICS" in red and "CON" in blue, with a cloud shape around them.



 @DCPAPAUG

August 20th at 5:30pm EDT (2130 UTC)

**How to use UI Flows
with WinAutomation to
enable legacy/manual
tasks**



Uday Adhikari

Session will cover

- Installing & configuring WinAutomation
- Submitting a web form and integration to UI Flows
- Tips and tricks

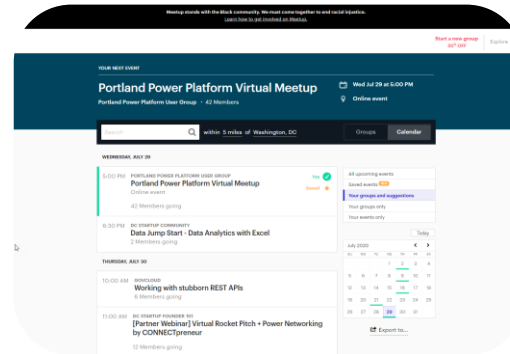
Full Details and Register here:

<https://www.flowug.com/dc>

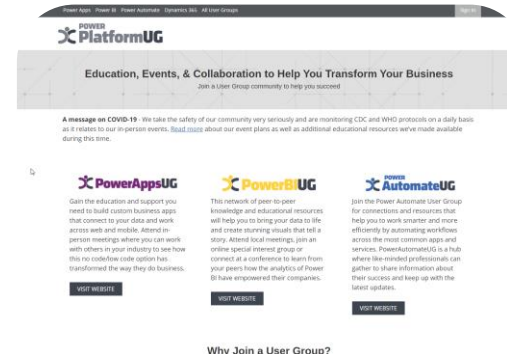
Find More Events



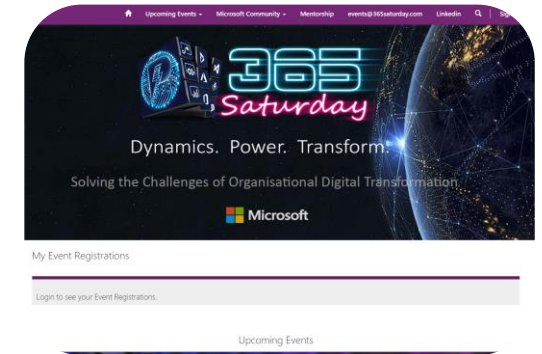
www.virtualeventshub.com



www.meetup.com



www.powerplatformug.com



<https://www.365portal.org/>

Resources

Power Apps

Environments

- <https://docs.microsoft.com/en-us/power-platform/admin/environments-overview>
- <http://www.powerplatform.af/>

Results View

- <https://powerapps.microsoft.com/en-us/blog/canvas-debugging-with-results-view/>

Monitor

- <https://powerapps.microsoft.com/en-us/blog/introducing-monitor-to-debug-apps-and-improve-performance/>
- <https://powerapps.microsoft.com/lv-lv/blog/use-monitor-to-debug-your-published-app/>
- <https://knowledgefrommanish.com/powerapps/power-apps-use-monitor-to-debug-your-published-app/>

Trace()

- <https://docs.microsoft.com/en-us/powerapps/maker/canvas-apps/functions/function-trace>

Hidden Panel

- <https://toddbaginski.com/blog/how-to-create-a-hidden-documentation-and-debug-panel-in-powerapps/>

Test Studio

- <https://docs.microsoft.com/en-us/powerapps/maker/canvas-apps/test-studio>
- [\[VIDEO\]: Power Apps Test Framework - Automated Testing](#)
- [\[VIDEO\]: Power Apps - New Test Studio](#)
- [\[VIDEO\]: Power Apps - Test Studio Intro Revisited](#)
- [\[VIDEO\]: Power Apps - Save Test Studio Results](#)
- [\[VIDEO\]: Power Apps test framework](#)

Power Automate

Manual Triggers

- <https://docs.microsoft.com/en-us/power-automate/introduction-to-button-flows>

Flow Checker

- <https://docs.microsoft.com/en-us/power-automate/error-checker>

Error Handling

- <https://poszytek.eu/en/microsoft-en/office-365-en/powerautomate-en/try-catch-pattern-in-microsoft-flow/>
- <https://blogs.msmvps.com/windsor/2019/04/25/microsoft-flow-error-handling/>
- <https://sergeluca.wordpress.com/2018/03/12/pattern-for-microsoft-flow-error-handling/>
- <https://sharepains.com/2018/02/07/power-automate-try-catch-finally-flow/>

Send Notifications

- <https://docs.microsoft.com/en-us/connectors/flowpush/>
- <https://docs.microsoft.com/en-us/connectors/teams/>
- <https://docs.microsoft.com/en-us/connectors/office365/>

Child Flows

- <https://flow.microsoft.com/en-us/blog/helpful-tips-for-using-child-flows/>
- [\[VIDEO\]: Power Automate Tutorial - Parent & Child Flows](#)
- [\[VIDEO\]: Microsoft Flow call another Flow - Power Automate, MailChimp, Excel, child flow, and more](#)



Thank You

Microsoft
Partner

2020 Partner of the Year Winner
PowerApps and Power Automate Award

2020/2021 INNERCIRCLE
for Microsoft Business Applications

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