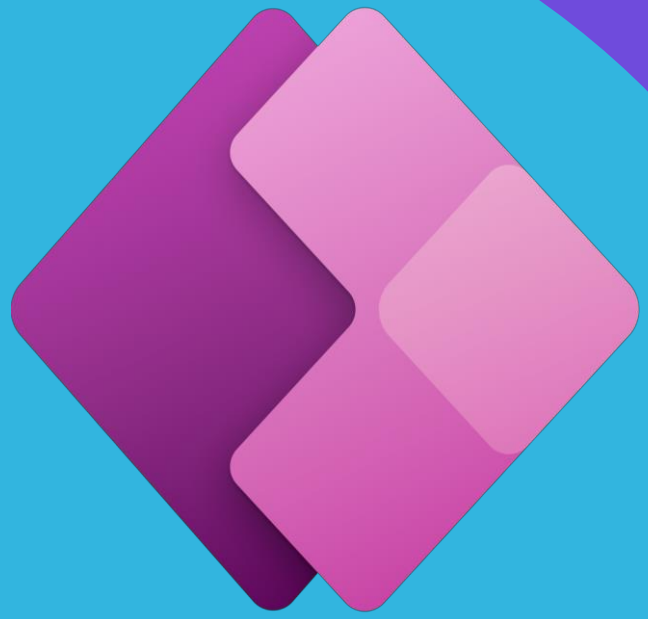


GETTING STARTED WITH PCF CONTROLS

AHMAD PIRANI
CARL DE SOUZA

Power Platform
COMMUNITY CONFERENCE

SEPTEMBER 18–20, 2024 • *Workshops: Sept 16, 17 & 21*

MGM GRAND • *Las Vegas, NV*

Power Platform
COMMUNITY CONFERENCE

GETTING STARTED WITH PCF CONTROLS

Ahmad Pirani

Carl de Souza

AHMAD PIRANI

- 15+ years Dynamics experience
- First time speaker
- HSO booth 228
- Parent of a teenager

Principal Solution Architect

CARL DE SOUZA

- 20+ years Dynamics experience
- 3 x Microsoft MVP (2021 – 2024)
- Worked in the Partner channel
- Parent of a toddler

Microsoft

FastTrack Solution Architect

carldesouza.com

youtube.com/@carldesouza

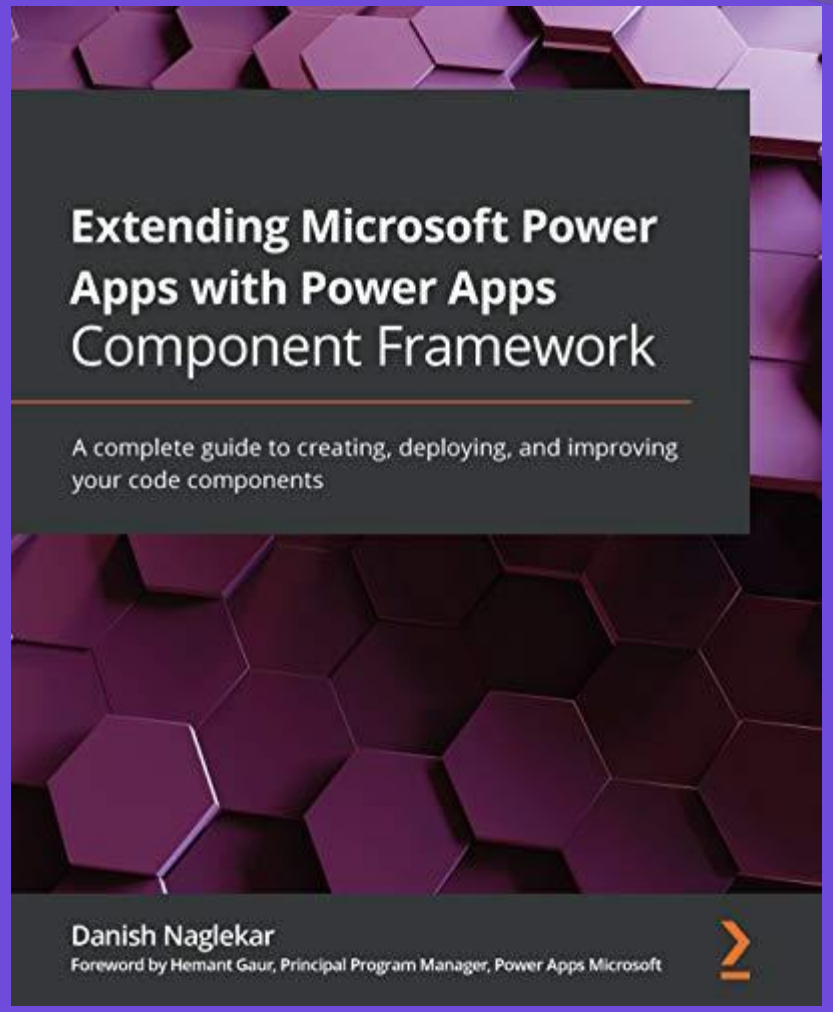
linkedin.com/in/carld

HAVE YOU BUILT A PCF CONTROL BEFORE?

SCAN CODE TO VOTE

GIVEAWAY!

We’re giving away
1 free SIGNED copy of
Danish’s book at the end.



WHAT WE WILL COVER TODAY

- **What** are PCF Controls
- **Where** to use them
- **Why** use them
- **When** to use them
- **Let's build one**

LET'S LOOK AT SOME PCF CONTROLS

REAL-WORLD EXAMPLES

- Model-driven apps
- Canvas Apps and Custom Pages
- Power Pages

PCF GALLERY MOST ACCESSED CONTROLS (RECENTLY)

Thanks to
Guido Preite

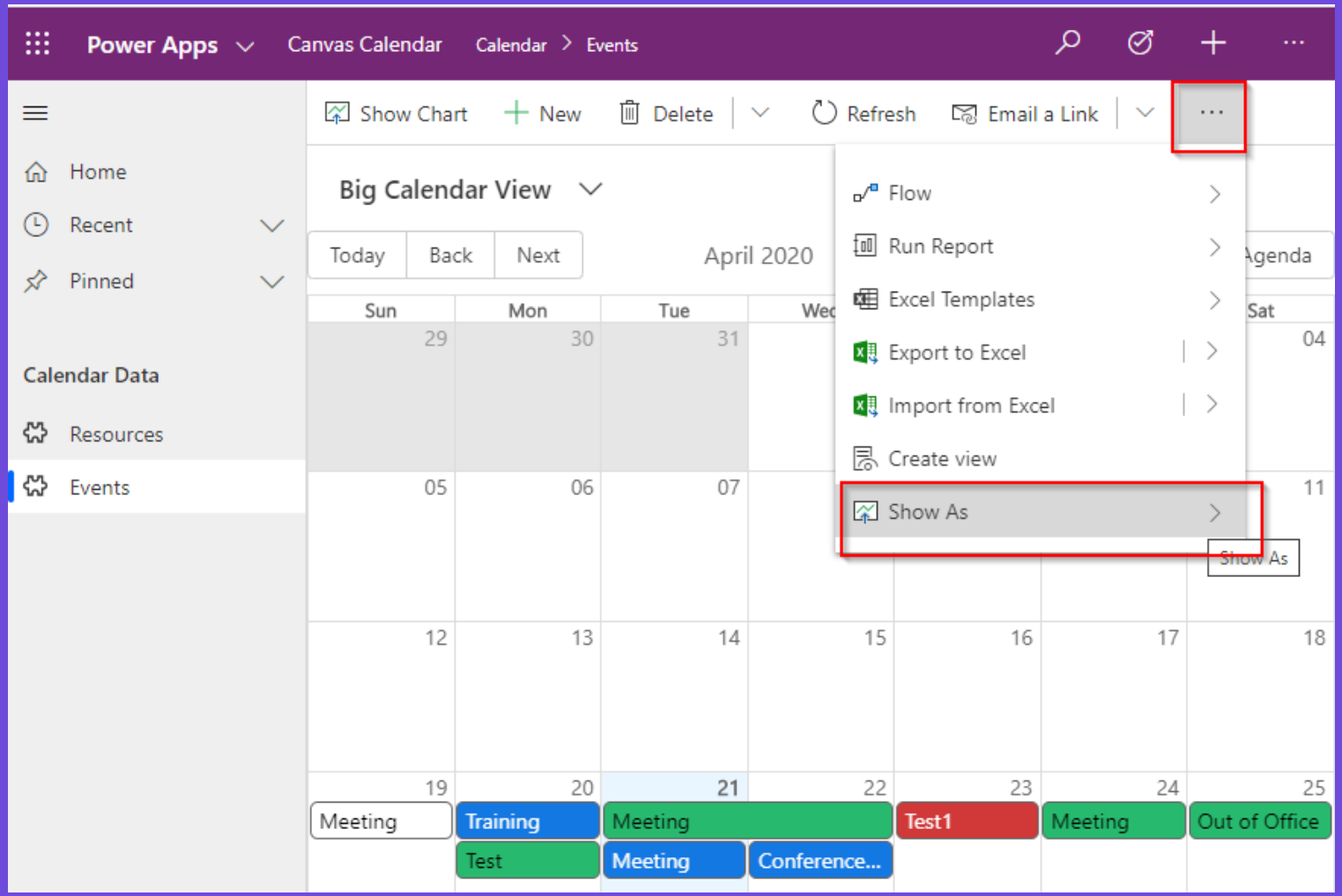
https://pcf.gallery

- Multi-select Lookup
- Multi-select Records
- Calendar
- N to N Multi-select
- AG Grid (Canvas)
- Colorful Optionset / Colorful Optionset Grid
- IFrame / Responsive IFrame
- Easy Reports
- Power Drag and Drop
- Smart Grid
- PolyLookup

CALENDAR CONTROL

Author: **Richard Wilson**

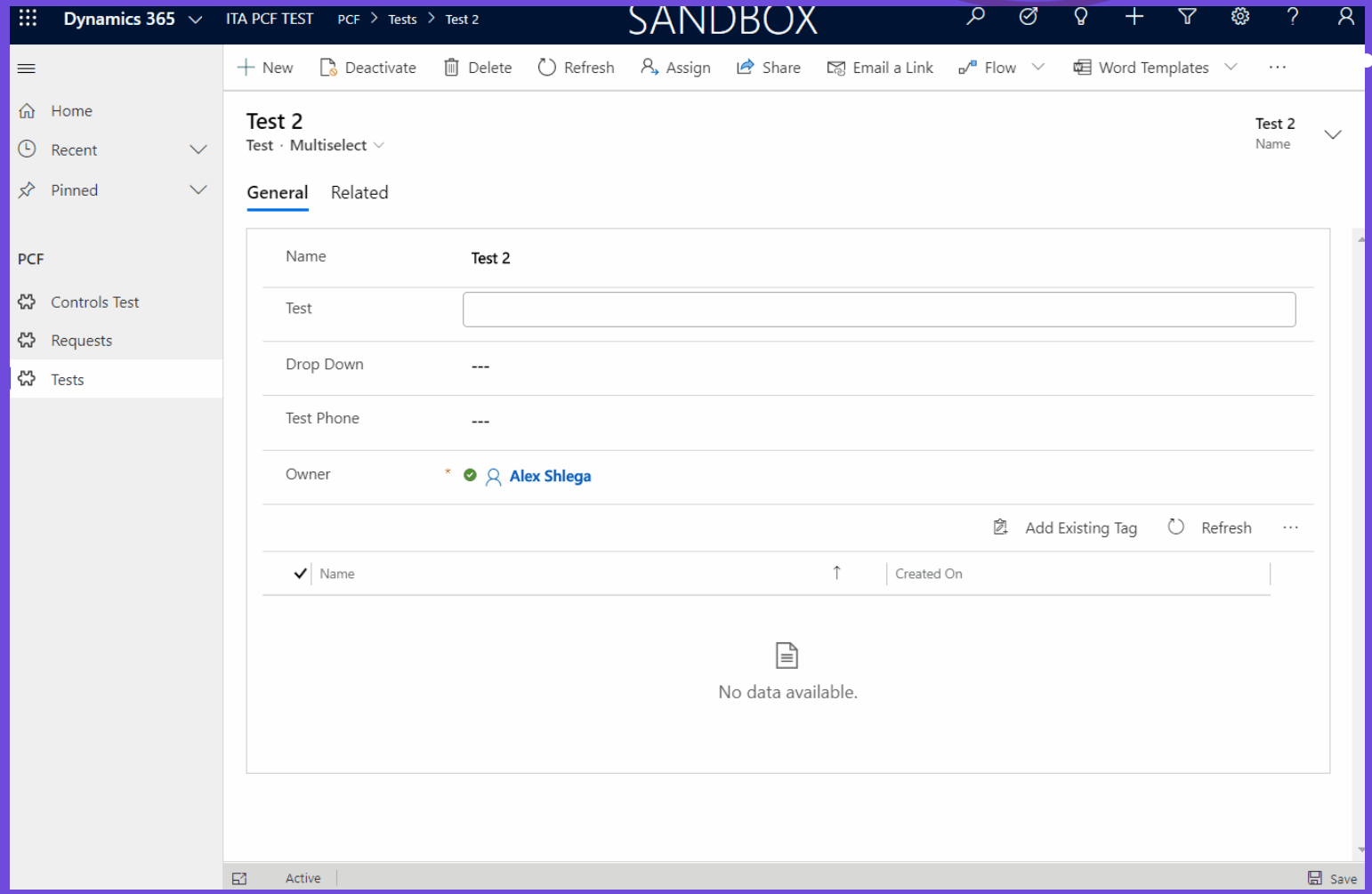
PCF.GALLERY MOST VIEWED CONTROLS



N TO N MULTISELECT

Author: **Alex Shlega**

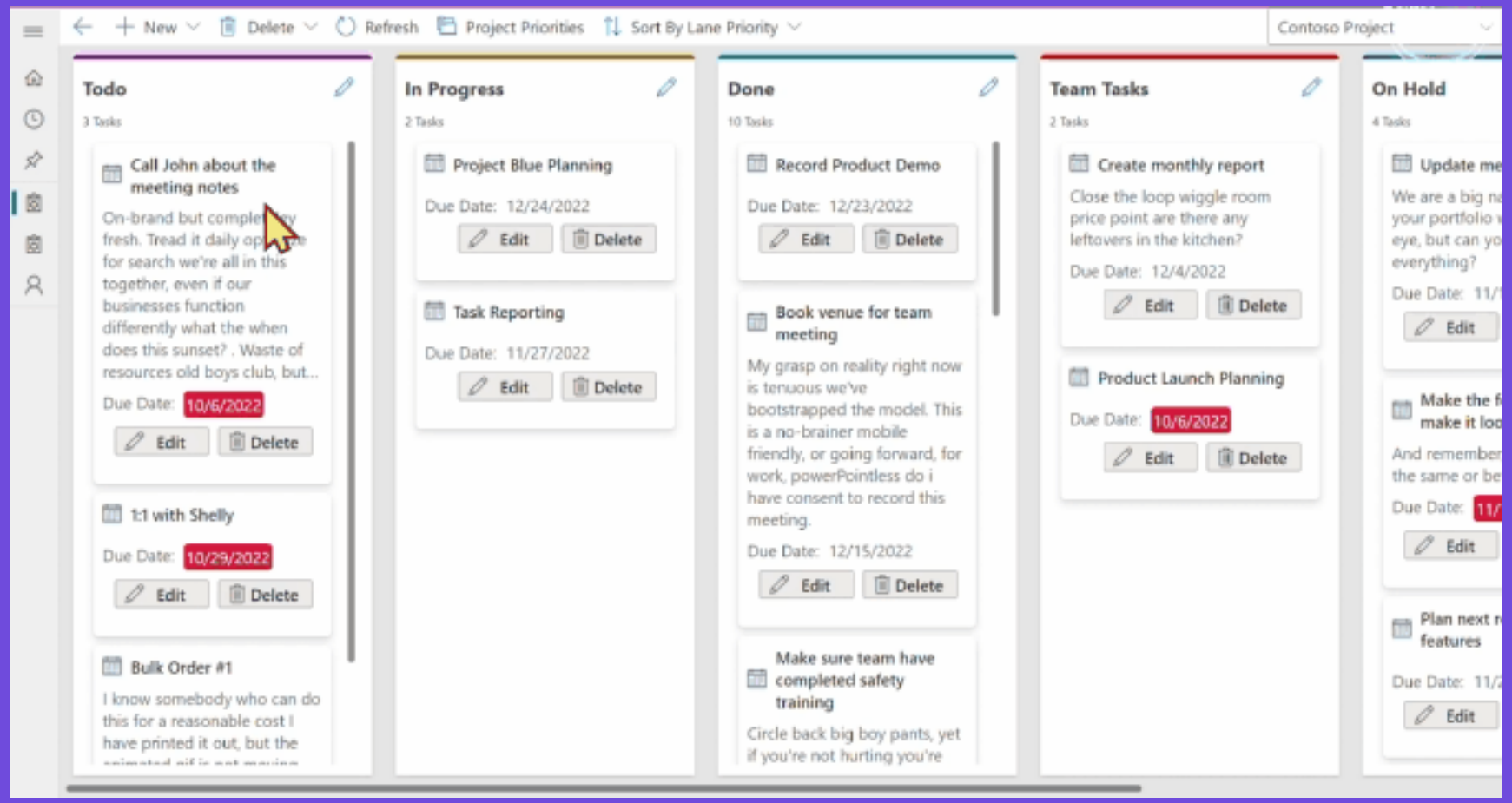
PCF.GALLERY MOST VIEWED CONTROLS



POWER DRAG DROP

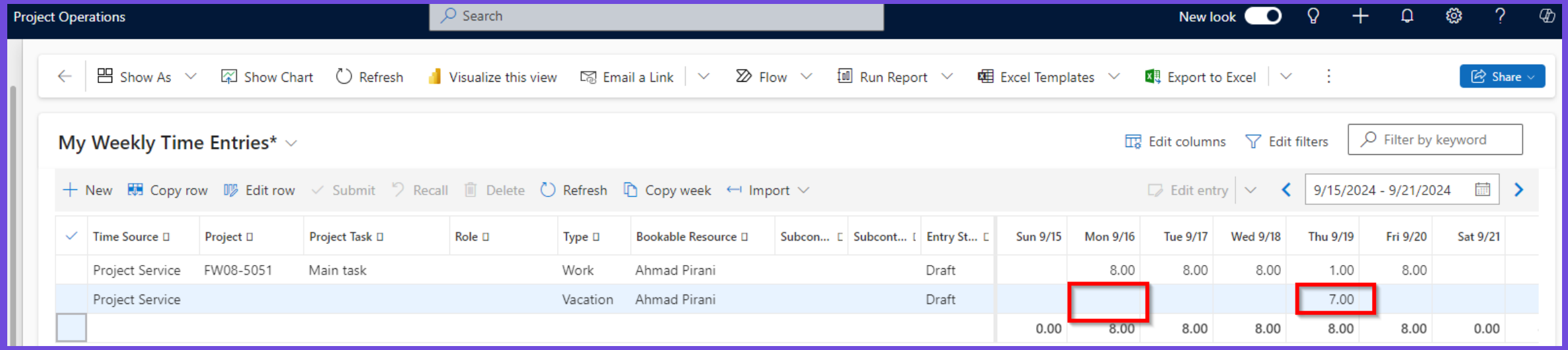
Author: Scott Durow

PCF.GALLERY MOST VIEWED CONTROLS



PROJECT OPERATIONS LITE

Time Entry Grid



WHAT AND WHY

- Customization and flexible
- Reusable
- Change behavior of a control
- Performance
- Enhance user experience

WHEN TO USE THEM

STANDARD CONTROLS DON'T MEET THE NEED

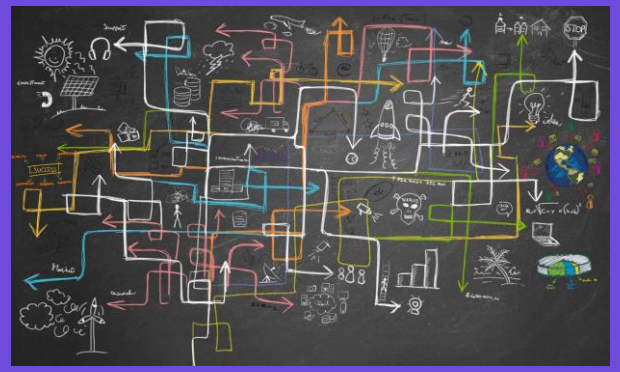
NEED TO CREATE CUSTOM USER EXPERIENCE

IMPROVE DATA INPUT AND ACCURACY

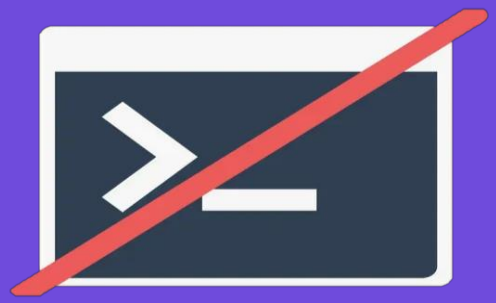
INTEGRATE THIRD PARTY COMPONENTS

WHEN NOT TO USE THEM (IT DEPENDS)

EXCESSIVE COMPLEXITY



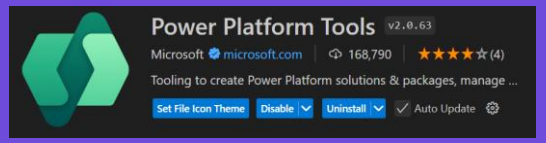
LIMITED DEVELOPMENT EXPERTISE



INSTEAD: CUSTOM PAGES CANVAS APPS

WHAT TO INSTALL

1. Node LTS Version - https://nodejs.org/
2. VS Code https://code.visualstudio.com/download
3. Microsoft Power Platform CLI
   - https://aka.ms/PowerAppsCLI (MSI)
   - dotnet tool install --global Microsoft.PowerApps.CLI.Tool
   - VS Code Extension
4. Then run:
   - pac install latest



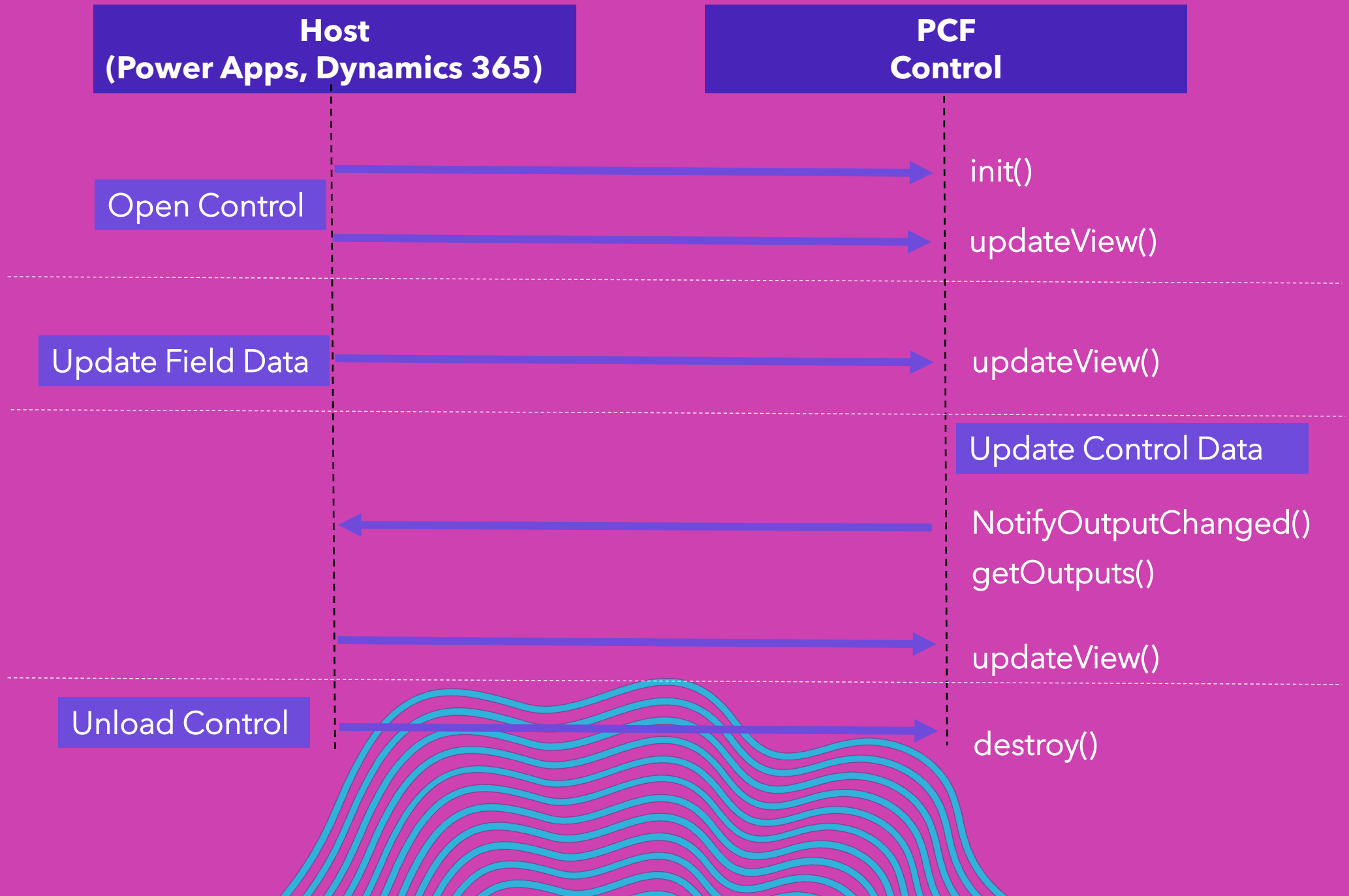
STANDARD (NONE)	VIRTUAL (REACT) CONTROLS
You don't know React (maybe you should learn)	You know React
Outputs HTML Div	Outputs ReactElement
Bring your own libraries	Use React and Fluent platform libraries + Bring your own other libraries
Maybe larger file size	Lightweight
Not as fast depending on what you're doing	Better performance / rendering
If using Fluent, use Virtual	**Fluent UI** platform look and feel (v8 templates with Fluent 2 / v9 support)
	Note the version restrictions (React and Fluent)

WHICH FRAMEWORK?

STANDARD OR REACT

LET'S BUILD A PCF CONTROL

1. Build a standard control, basic Dice
2. Look at a React Dice control


Host
(Power Apps, Dynamics 365)
PCF
Control
Open Control
init()
updateView()
Update Field Data
updateView()
Update Control Data
NotifyOutputChanged()
getOutputs()
updateView()
Unload Control
destroy()

Resources:

- Microsoft Learn
- Carl's Video on YouTube (2.5 hours)
- Scan the Linktree QR Code

Build your 1st control!

1. Download and install VS Code, pac cli, Node.js
2. Run this command:
    1. pac pcf init –n PCFName –ns PCFNamespace –fw standard –t field –np
3. Create your first control
4. Deploy your control
5. Be known as a PCF Genius!

Scan for more resources
https://linktr.ee/ppcc24

NEXT STEPS AND RESOURCES

THANK YOU! AND GIVEAWAY ☺