



# Reactor

## Designing Windows Widgets using Generative AI

Peter Bull, Microsoft MVP - .NET & Windows Development



# About



## Peter Bull

*Microsoft MVP - .NET & Windows Development*

**Speaker Bio:** Developer with over three decades of personal experience & over two decades of professional experience for web, mobile & desktop

**Comentsys.com:** Websites, Packages & Software

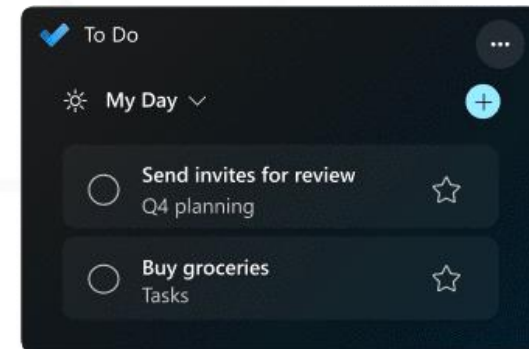
**RoguePlanetoid.com:** Posts, Articles & Podcast

**Tutorialr.com:** Tutorials, Talks & Workshops

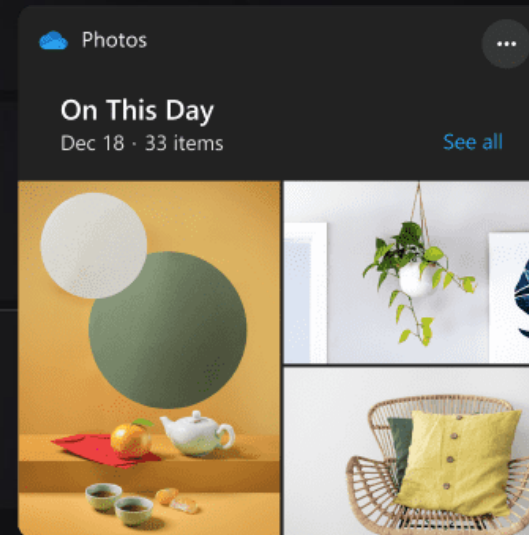


# Agenda

1	Windows Widgets
2	Adaptive Cards
3	Generative AI
4	Demo
5	Summary



# Windows Widgets



# Overview

## Windows Widgets



### Windows 11

Enables seamless productivity and creativity designed for modern users



### Widgets

Quick access to information all from the click or swipe of the Widgets Board



# Windows 11

## Windows Widgets

Windows 11 is Microsoft's latest and most powerful operating system that helps developers, consumers & businesses get things done

### Features

- Optimised for productivity & information
- Elevated for games & entertainment
- Enhanced with AI using Copilot
- [windows.com](https://windows.com)





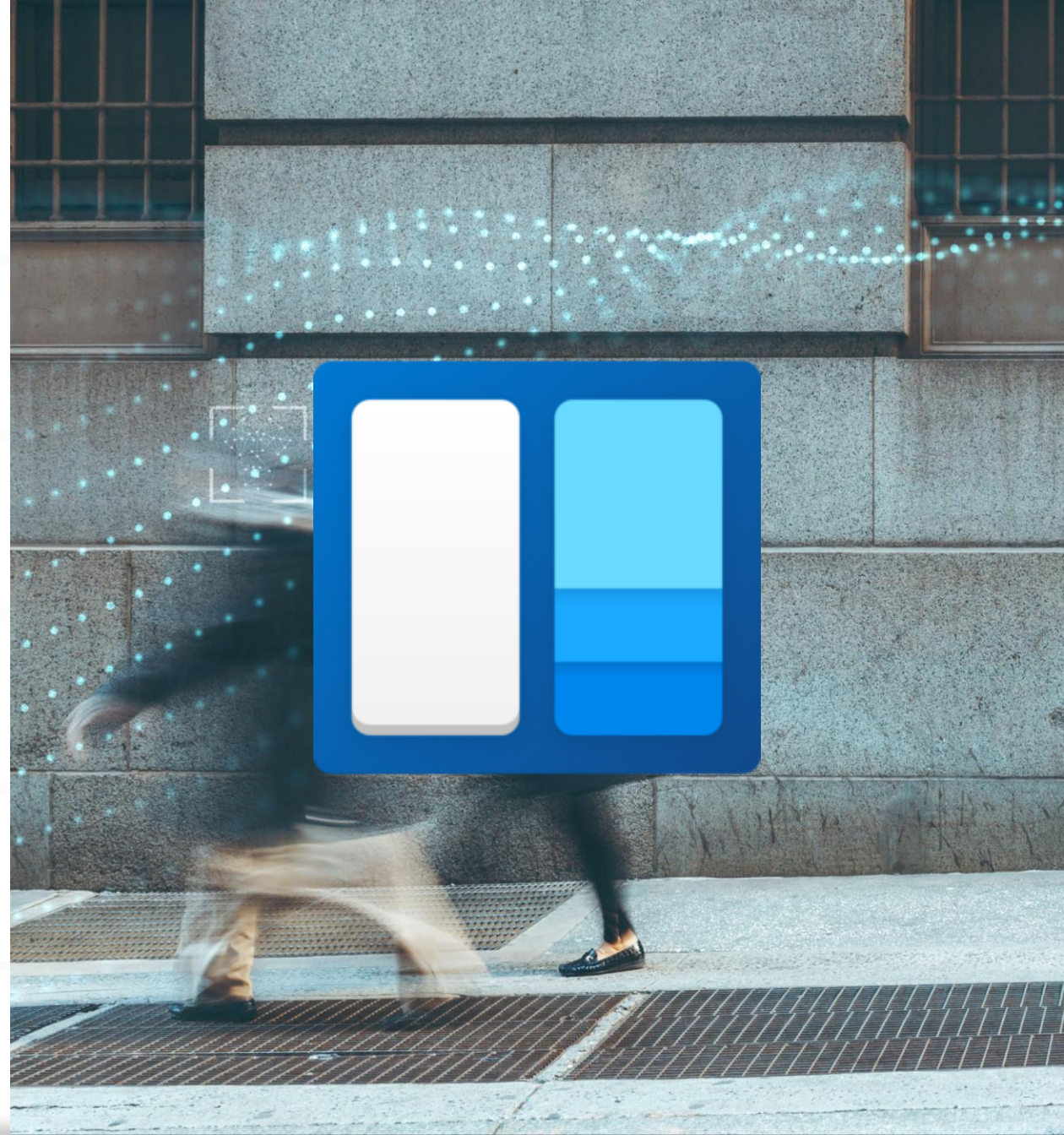
# Widgets

## Windows Widgets

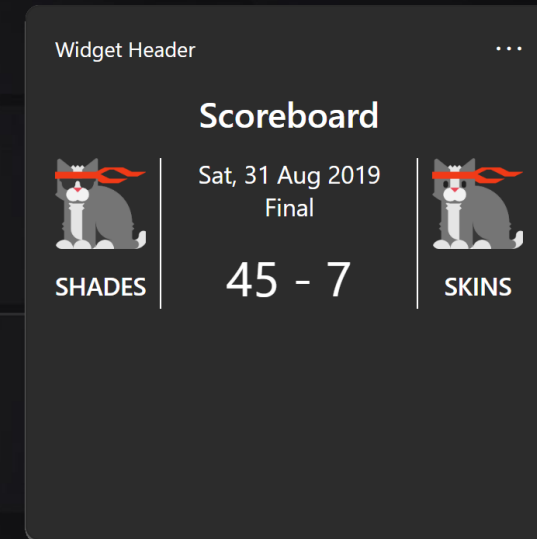
Windows 11 with Widgets Board enables quick-and-easy access to at-a-glance information including built-in & Microsoft Store Widgets

### Features:

- Organise & save time with the Widgets Board
- Customise & personalise what's important
- Interactive & dynamic text or images
- Designed using Adaptive Cards



# Adaptive Cards





# Overview

## Adaptive Cards

Adaptive Cards are platform-agnostic UI snippets in JSON for rich interactive content across platforms or services such as Widgets

### Features

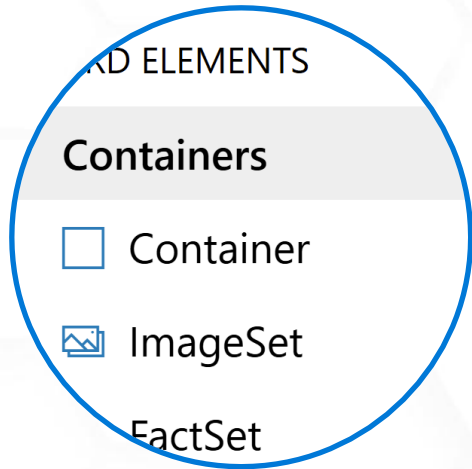
- Exchange at-a-glance content supporting text and images
- Create using JSON schema or drag-and-drop designer
- Update based on user actions or data changes
- [adaptivecards.io](https://adaptivecards.io)



# Adaptive Card Schema (1.5)

Card Elements	Containers	Actions	Inputs	Types
TextBlock	ActionSet	OpenUrl	Text	BackgroundImage
Image	Container	Submit	Number	Refresh
Media	ColumnSet	ShowCard	Date	Authentication
MediaSource	Column	ToggleVisiblity	Time	TokenExchangeResource
CaptionSource	FactSet	TargetElement	Toggle	AuthCardButton
RichTextBlock	Fact	Execute	ChoiceSet	MetaData
TextRun	Table		Choice	
	TableCell		Data.Query	

# Adaptive Card Designer



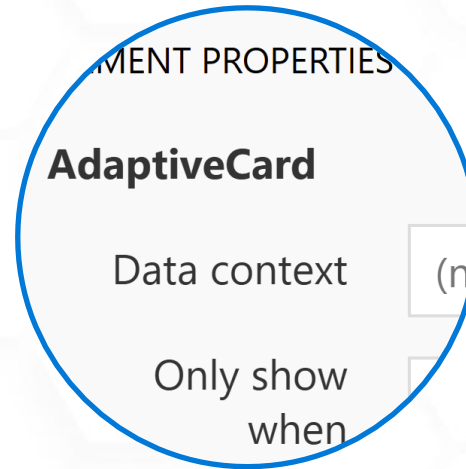
## Card Elements

Card Structure for Adaptive Card including Containers, Elements and Inputs



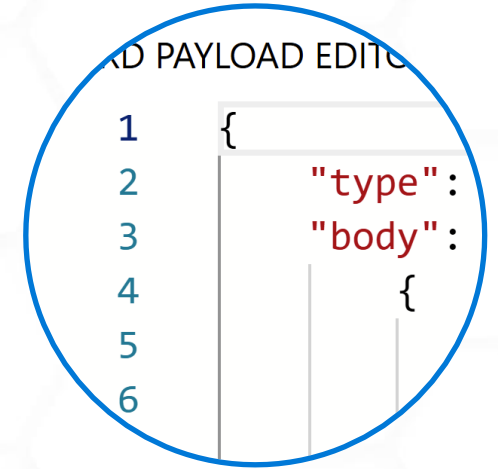
## Select Host App

Widgets Board, Light or Dark theme and Small, Medium or Large container size



## Element Properties




Update properties including data context, layout, styling, content and visibility




## Editors


Card Payload Editor to edit or copy JSON and Sample Data Editor for data binding




# Generative AI

 Design Widget  

 **Generative AI**

Generative AI creates new content like text, images, and music by learning from existing data.

 **Examples:**

-  **Text:** Essays and poems.
-  **Art:** Digital paintings.
-  **Music:** Melodies and songs.

These technologies foster creativity and innovation.





# Overview

## Generative AI

Saves time and effort by leveraging AI models to assist with new ideas, automate content creation or formatting information

### Features:

- Models trained on large datasets of content
- Learn patterns and structures of content
- Generate new content
- Refine output

# ChatGPT

## Generative AI

AI-powered language model that understands natural language to generate ideas, streamline tasks, solve issues or refine information



Answer in-depth questions



Generate creative content



Helpful suggestions



Design templates



Message ChatGPT



Search



Reason



Create image



Summarize text



Analyze images



Make a plan



Code

More



# Copilot

## Generative AI

An AI companion designed to understand natural language to offer solutions, generate ideas, streamline tasks and refine information



Generate creative ideas



Simplify complex tasks



Solve tough problems



Create templates



Message Copilot

Think Deeper 



# Demo




Design Widget



## Generative AI

Generative AI creates new content like text, images, and music by learning from existing data.

### ✦ Examples:

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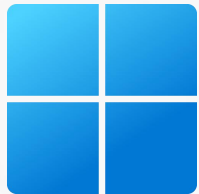
These technologies foster creativity and innovation.



# Summary

## Windows 11

Windows 11 helps developers, consumers and businesses be more productive with Copilot and informed with Widgets



## Widgets

Widgets provide easy-to-use dynamic or interactive access to information at-a-glance using Adaptive Cards



## Adaptive Cards

Adaptive Cards are templates for Widgets created using the JSON Schema or Designer and using Generative AI



## Generative AI

Generative AI like ChatGPT or Copilot can be prompted to design Adaptive Cards for Windows Widgets easily





# Reactor

Thank You!

Q&A



[github.com/rogueplanetoid/designingwindowswidgets](https://github.com/rogueplanetoid/designingwindowswidgets)



[linkedin.com/in/rogueplanetoid](https://linkedin.com/in/rogueplanetoid)

