



# Microsoft Build 2020

48 horas en 60 minutos

**Pablo Ariel Di Loreto**

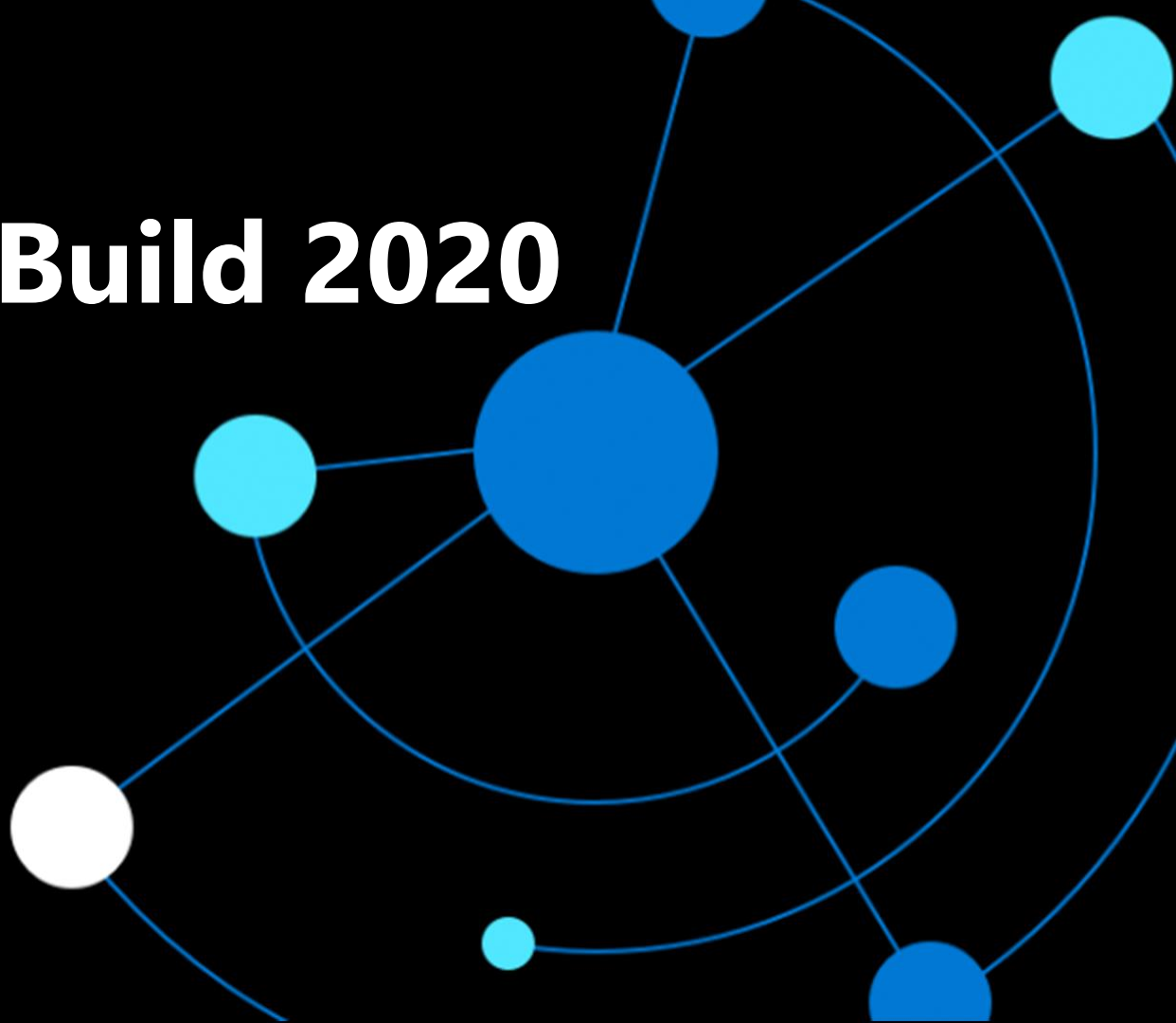
Service Manager | Algeiba Dev

@PabloDiLoreto

**Fernando Sonego**

Software Architect | Algeiba Dev

@FernandoSonego



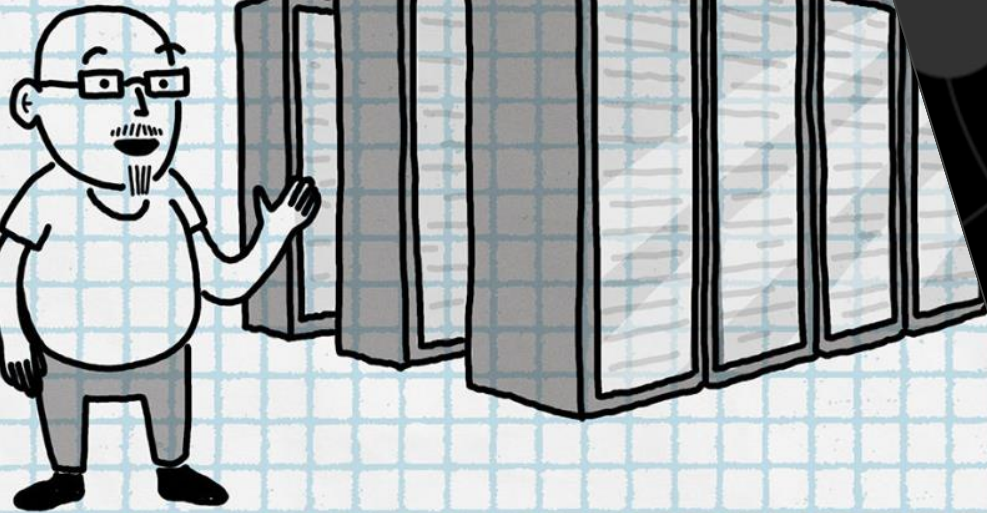
# Microsoft Build



## Evento 100% online

- + 100 mil registrados
- El evento Build más grande de la historia.
- Charlas en vivo en 3 zonas horarias distintas.
- 48 horas seguidas de contenido técnico.

# AI SUPERCOM



## Inteligencia Artificial

- AI Responsable con Azure.
- Interpret & Fairlearn.
- Azure AI Supercomputer.
- WhiteNoise differential privacy toolkit.
- Bot Framework Composer.
- Bot-Human hand-off.

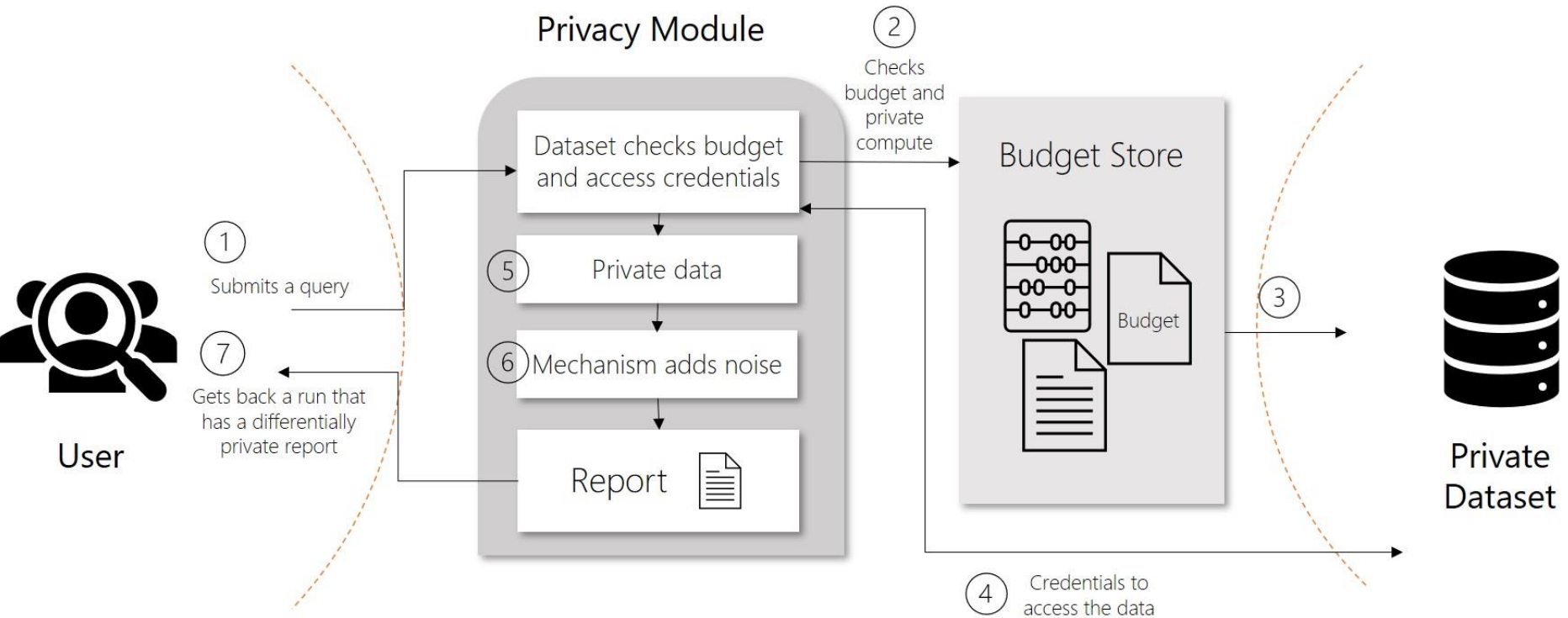
# Interpret & Fairlearn

## AI Responsable

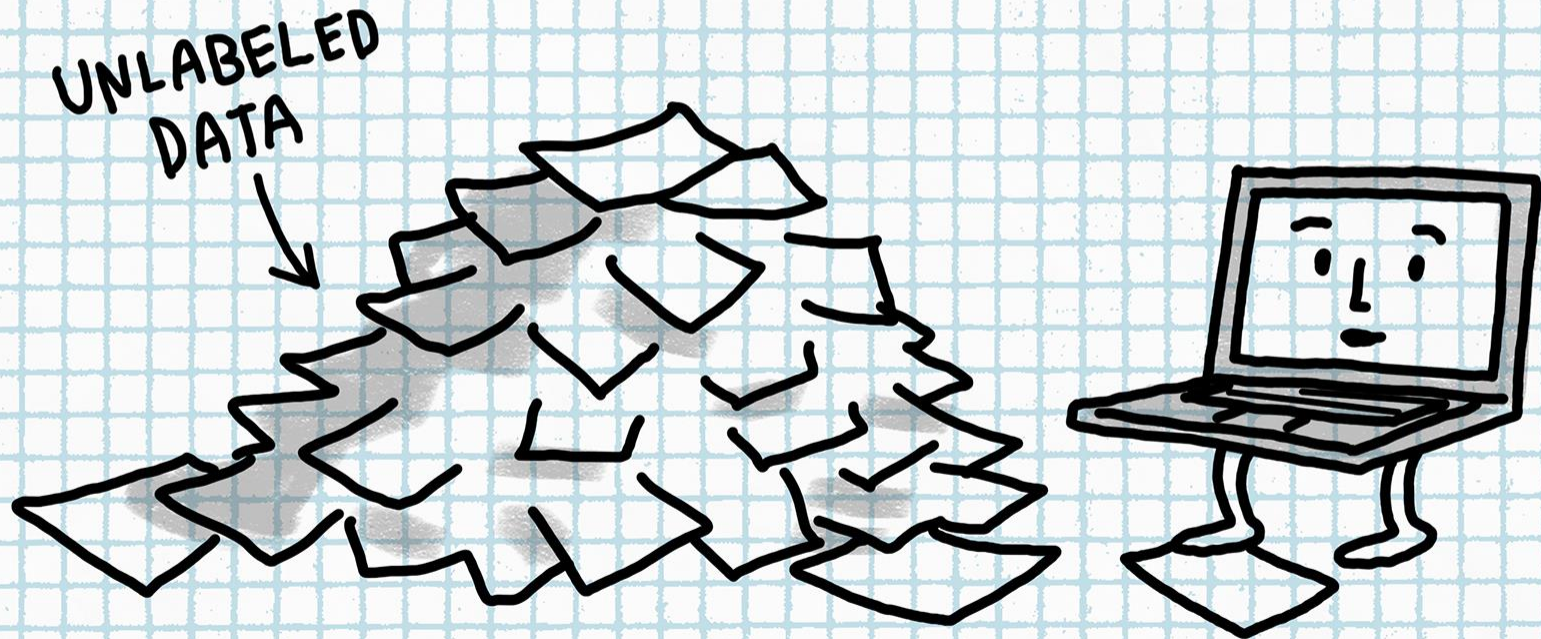
- Interpret:
  - Depuración de modelos: ¿por qué mi modelo cometió este error?
  - Detectar problemas de equidad: ¿discrimina mi modelo?
  - Cooperación humano-IA: ¿cómo puedo entender y confiar en las decisiones del modelo?
  - Cumplimiento normativo: ¿cumple mi modelo los requisitos legales?
  - Aplicaciones de alto riesgo: asistencia sanitaria, finanzas, judicial.
- Fairlearn: evaluación de equidad.

```
ebm = ExplainableBoostingClassifier()  
I
```

# Differential Privacy

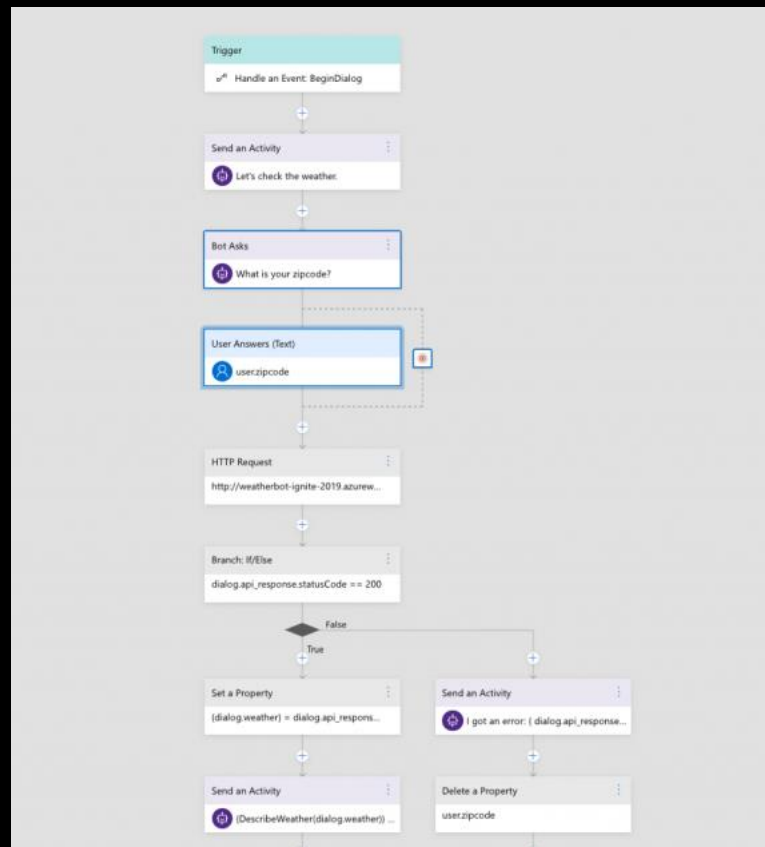


# SELF-SUPERVISED LEARNING



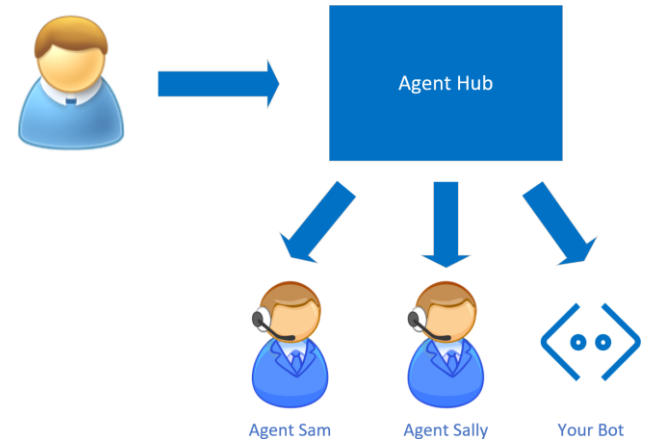
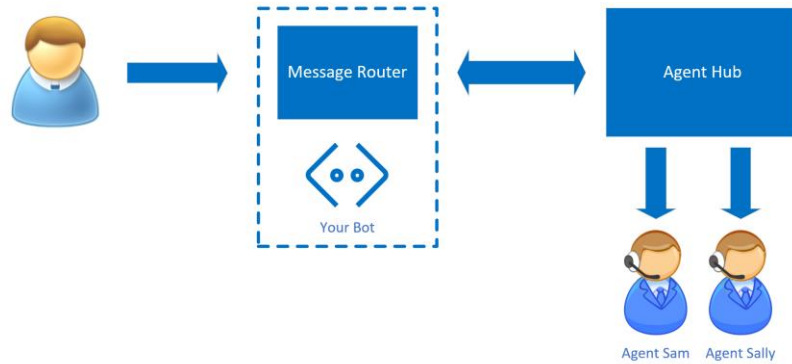
# Bot Framework Composer

- Editor de diálogo visual.
- Herramientas para capacitar y gestionar la comprensión del lenguaje (LU).
- Sistemas de generación de lenguaje y plantillas.



# Human hand-off scenarios

- Handoff protocol.
- Bot as an agent.
- Bot as a proxy.







# Novedades en Data & Analítica

- Azure Synapse Link

# Azure Synapse Analytics



# Azure Synapse Link

- Procesamiento híbrido transaccional / analítico (HTAP).
- Disponible con Cosmos DB.
- Próximamente disponible con otros orígenes de datos internos y externos a Azure.



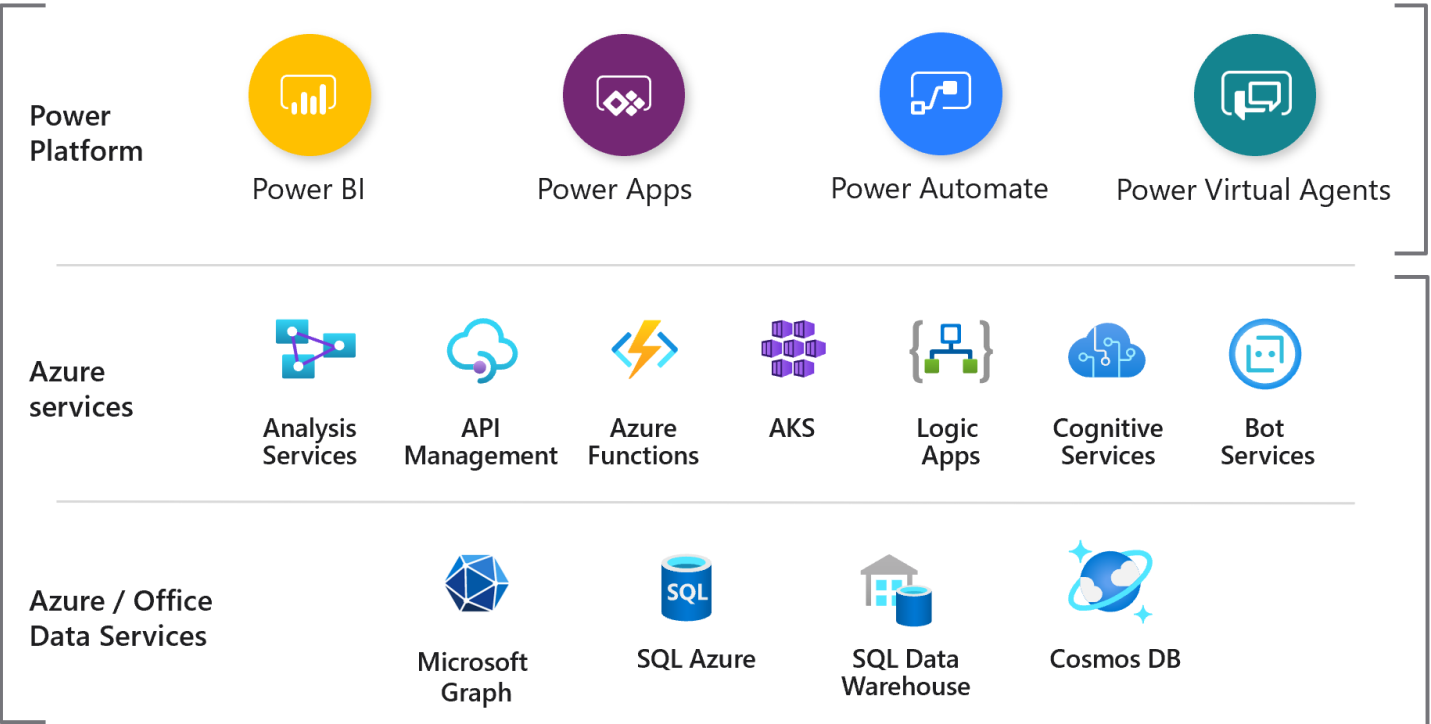


# Novedades en Power Platform

- Integraciones Power Platform & Teams.
- Microsoft Power Apps.
- Microsoft Power Automate.
- Microsoft Power Virtual Agents.
- Microsoft Power BI.

# Power Platform

Azure DevOps  
GitHub



Every Developer (Low-Code)

Pro Developer (Code-First)

Visual Studio

VS Code

# Microsoft Power Apps to Teams in one-click

The screenshot displays the Microsoft Power Apps web interface. The browser address bar shows the URL: <https://make.powerapps.com/environments/23fc1c55-bfcf-4d11-8e86-1e352a09f5c4/home>. The page title is "Power Apps" and the environment is "CT Electronics".

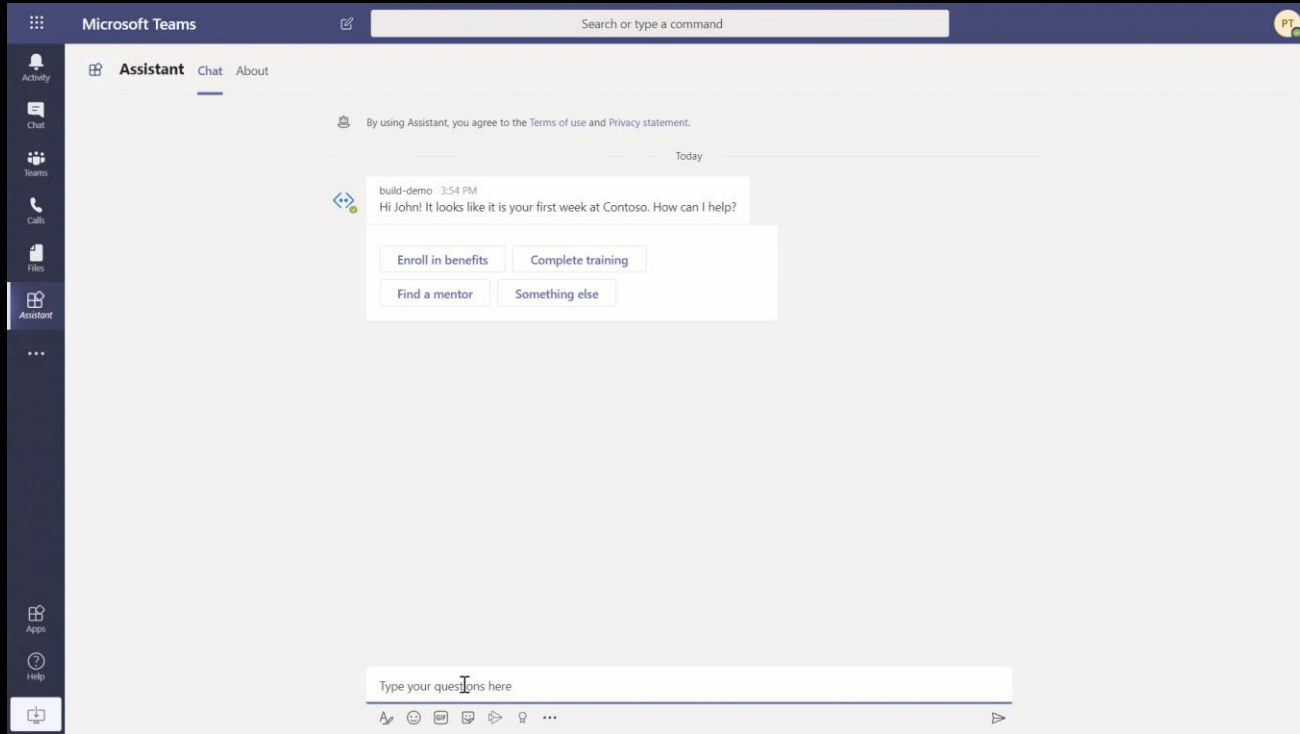
The interface is divided into several sections:

- Home:** A sidebar on the left with navigation options: Home, Learn, Apps, Create, Data, Flows, AI Builder, and Solutions.
- Templates:** A row of four template cards: "Canvas app from blank" (Canvas app), "Model-driven app from blank" (Model-driven app), "Portal from blank" (Portal), and "Power Apps Training" (Canvas app). A link "All templates →" is located below this row.
- Learning for every level:** A row of four learning cards: "Get started with canvas apps" (Beginner, 2 mins), "Get started with canvas app formulas" (Beginner, 3 mins), "Show a list of items in Power Apps" (Beginner, 2 mins), and "Share a canvas app in Power Apps" (Beginner, 6 mins).
- Your apps:** A table listing the user's apps.

Name	Modified	Owner	Type
CT Returns v2	4 d ago	Pete Daderko	Canvas
Crisis Communication	1 mo ago	Pete Daderko	Canvas
Crisis Communication Admin	2 mo ago	Pete Daderko	Canvas

A link "All apps →" is located at the bottom right of the "Your apps" section.

# Microsoft Power Automate triggers and actions



# Microsoft Power BI "share to Teams" feature







# Novedades para Desarrolladores

- Visual Studio Codespaces.
- .NET vNext.
- ASP.NET Blazor.
- .NET MAUI.
- WebView 2.
- Learn TV.
- GitHub Codespaces.

# .Visual Studio Codespaces

The screenshot displays the Visual Studio Code interface for a C# project named 'TicTacToe'. The main editor shows the 'Program.cs' file with the following code:

```
19 Tuple<int, int> move
20
21 gameBoard = new char[dimension]
22
23 ClearBoard(gameBoard);
24
25 do
26 {
27     ClearBoard(gameBoard)
28     Console.WriteLine("Decide
29     Console.ReadLine());
30     strMove = "";
31     moveCount = -1;
32
33     while (!EndOfGame(gameBoard))
34     {
35         moveCount++;
36         currentPlayer = !currentPlayer;
37         PrintBoard(gameBoard);
38         Console.WriteLine("P1
39         strMove = Console.ReadLine();
40
41         try
42         {
43             move = Convert.ToInt32(strMove);
44             SetMove(gameBoard, move, currentPlayer);
45         }
46         catch (Exception ex)
47         {
48             if (ex is InvalidMoveException)
49             {
50                 Console.WriteLine("Invalid move. Please try again.");
51             }
52             Console.WriteLine("Invalid move. Please try again.");
53         }
54     }
55 }
```

The 'Connect to a Codespace' dialog box is open, showing the following configuration:

- Billing Plan:** BillingPlan-1
- Codespaces:** My Quick Codespace
- New Codespace Name:** eshoponweb
- Git repository (optional):** https://github.com/dotnet-architecture/eShopOnWeb
- Instance type:** Premium (Windows): 8 cores, 16 GB RAM
- Suspend idle Codespace after:** 30 minutes

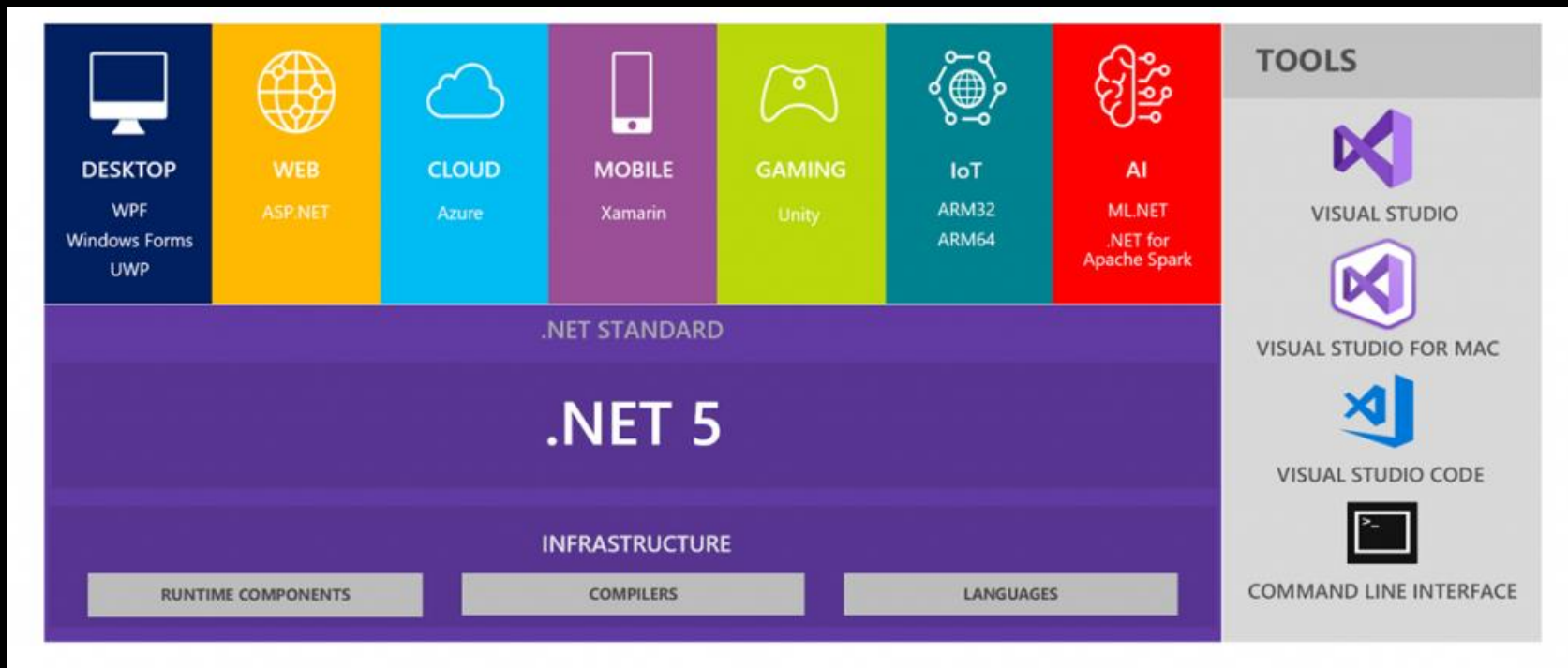
The 'Output' window at the bottom shows the following message:

```
Show output from: Package Manager
Time Elapsed: 00:00:20.7966582
***** Finished *****
```

The Solution Explorer on the right shows the project structure:

- TicTacToe (2 of 2 projects)
- Dependencies
- Game.cs
- InvalidMoveException.cs
- Program.cs
- XUnitTests
- Dependencies
- UnitTest1.cs

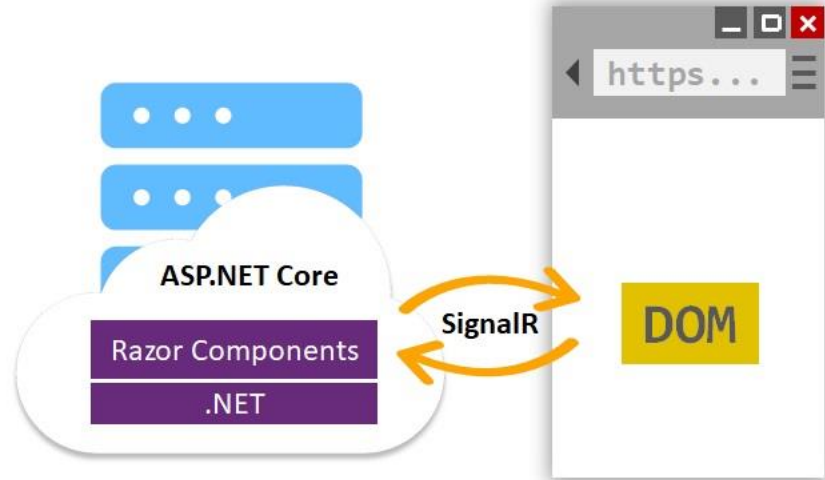
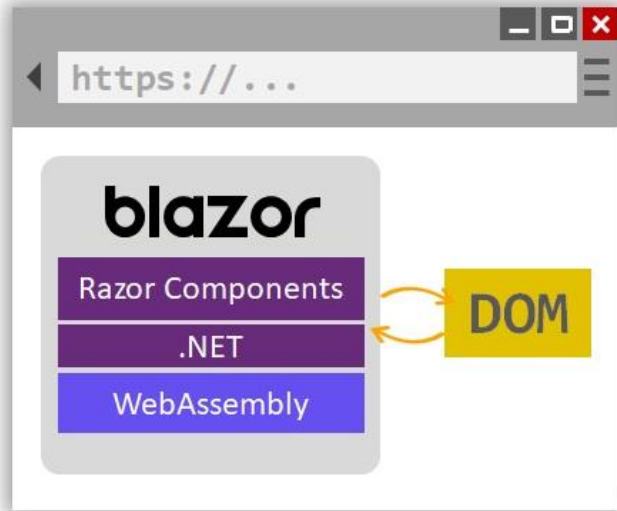
# .NET 5 + vNext



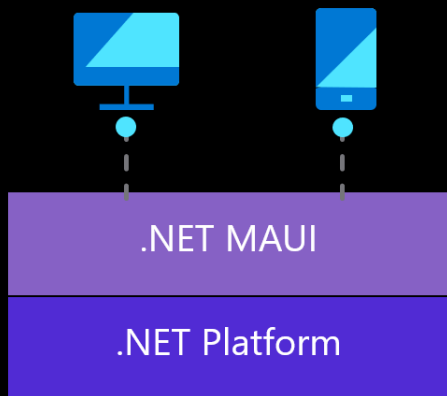
# .NET vNext Timeline



# ASP.NET Blazor



# .NET Multi-platform App UI (MAUI)



Cross-platform, native UI

Single project, single codebase

Deploy to multiple devices, mobile & desktop

Evolution of Xamarin.Forms

Targeting .NET 6, previews end of year

**Build beautiful, native UI for any device**

[github.com/dotnet/maui](https://github.com/dotnet/maui)

# WebView 2

The screenshot shows the NuGet Package Manager interface for a project named 'WebViewSample'. The search bar contains 'microsoft.web.webview2'. The package 'Microsoft.Web.WebView2' by Microsoft, version v0.8.147, is displayed. The description states: 'The New Microsoft Edge WebView 2 control enables you to host web content in your Windows app.' The interface includes an 'Install' button, an 'Options' section, and a 'Description' section. The 'Description' section contains the following information:

- Version:** 0.8.147
- Owner(s):** Microsoft
- Author(s):** Microsoft
- License:** [View License](#)
- Date published:** Thursday, May 2, 2019 (5/2/2019)
- Project URL:** <https://aka.ms/webview>
- Tags:** Microsoft Web WebView Native native package

At the bottom of the package list, there is a disclaimer: 'Each package is licensed to you by its owner. NuGet is not responsible for, nor does it grant any licenses to, third-party packages.' Below this, there is a checkbox labeled 'Do not show this again' which is currently unchecked.

# Learn TV



<https://docs.microsoft.com/en-us/learn/tv/>



# GitHub Codespaces

The screenshot displays the GitHub interface for the repository `mrdoob / three.js`. At the top, there is a search bar and navigation links for Codespaces, Pull requests, Issues, Marketplace, and Explore. The repository name is shown as `mrdoob / three.js`. Below this, there are tabs for `Code` and other repository features. A toolbar contains icons for cloning, forking, and other actions. A navigation bar includes a dropdown for the current branch (`master`), a `New pull request` button, and buttons for `Create new file`, `Upload file`, `Find file`, `Open codespace`, and `Clone or download`. The commit history section shows the current branch is even with `mrdoob:dev`. A recent pull request by `munrocket` is highlighted, with the latest commit `eb8639e` from 14 hours ago. Below this, a list of commit entries is shown, each with a folder icon, a commit message (represented by a bar), and a timestamp.

Search or jump to...

Codespaces Pull requests Issues Marketplace Explore

mrdoob / three.js

Code

Edit

Branch: master New pull request Create new file Upload file Find file Open codespace Clone or download

This branch is even with mrdoob:dev. Pull request Compare

munrocket Merge pull request mrdoob#19147 from munrocket/ci Latest commit eb8639e 14 hours ago

Folder	Commit message	yesterday
Folder	Commit message	4 days ago
Folder	Commit message	yesterday
Folder	Commit message	3 days ago
Folder	Commit message	15 hours ago
Folder	Commit message	4 months ago
Folder	Commit message	2 days ago
Folder	Commit message	14 hours ago
Folder	Commit message	11 days ago
Folder	Commit message	11 months ago

60+ regions worldwide

140 available in 140 countries





# Novedades en Azure

- Azure Arc updates.
- Azure Stack Hub updates.
- App Service Static Web Apps.
- Azure Quantum.

# Learn TV

## Azure Arc



Management  
and security



Azure data services  
anywhere

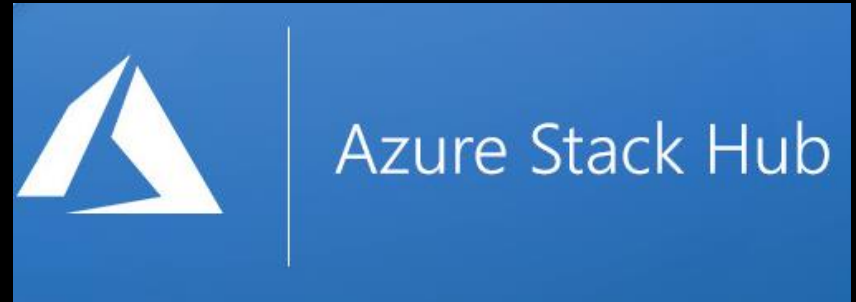


Programming and  
deployment model

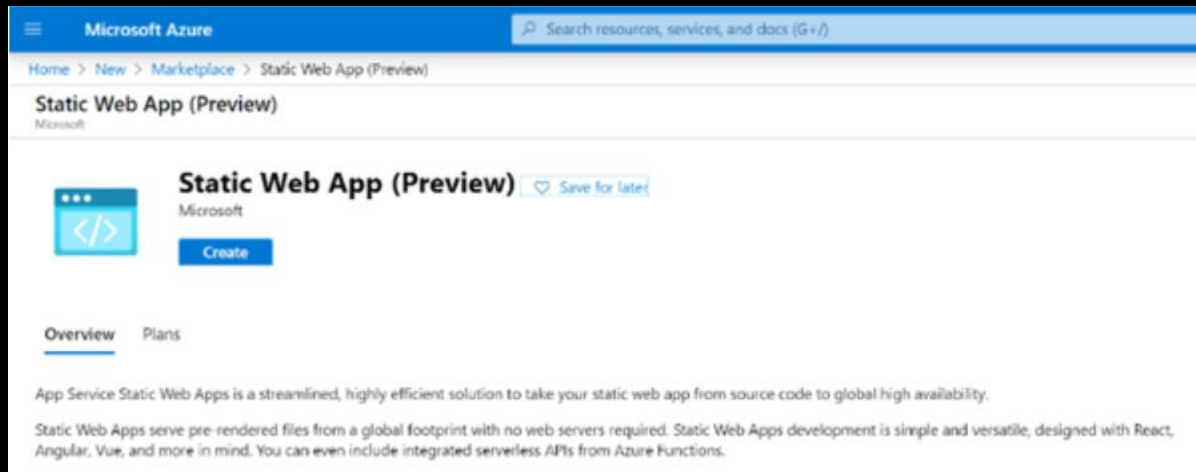


# Azure Stack Updates

- RedHat CloudForms.
- Azure Stack Hub Fleet Management.
- Azure Kubernetes Services.
- Azure Container Networking Interface.
- AMD GPUs on Azure Stack Hub.



# App Service Static Web App



The screenshot shows the Microsoft Azure Marketplace page for the 'Static Web App (Preview)' service. The page features a blue header with the 'Microsoft Azure' logo and a search bar. Below the header, a breadcrumb trail reads 'Home > New > Marketplace > Static Web App (Preview)'. The main content area displays the service name 'Static Web App (Preview)' with a 'Save for later' button. To the left of the title is a blue icon with a white code symbol. Below the title is the 'Microsoft' logo and a blue 'Create' button. Underneath, there are two tabs: 'Overview' (which is selected and underlined) and 'Plans'. The 'Overview' section contains two paragraphs of text describing the service as a streamlined solution for static web apps and highlighting its global footprint and support for various frameworks like React, Angular, and Vue.


Microsoft Azure

Search resources, services, and docs (G+J)

Home > New > Marketplace > Static Web App (Preview)

## Static Web App (Preview)

Microsoft

 **Static Web App (Preview)** [Save for later](#)

Microsoft

[Create](#)

[Overview](#) [Plans](#)

App Service Static Web Apps is a streamlined, highly efficient solution to take your static web app from source code to global high availability.

Static Web Apps serve pre-rendered files from a global footprint with no web servers required. Static Web Apps development is simple and versatile, designed with React, Angular, Vue, and more in mind. You can even include integrated serverless APIs from Azure Functions.



# Novedades para EDGE

- Collections + Pinterest + OneNote.
- Sidebar Search.
- Automatic Profile Switching.
- 3D View in DevTools.
- WebView 2 Preview SDK.

# EDGE: Sidebar Search

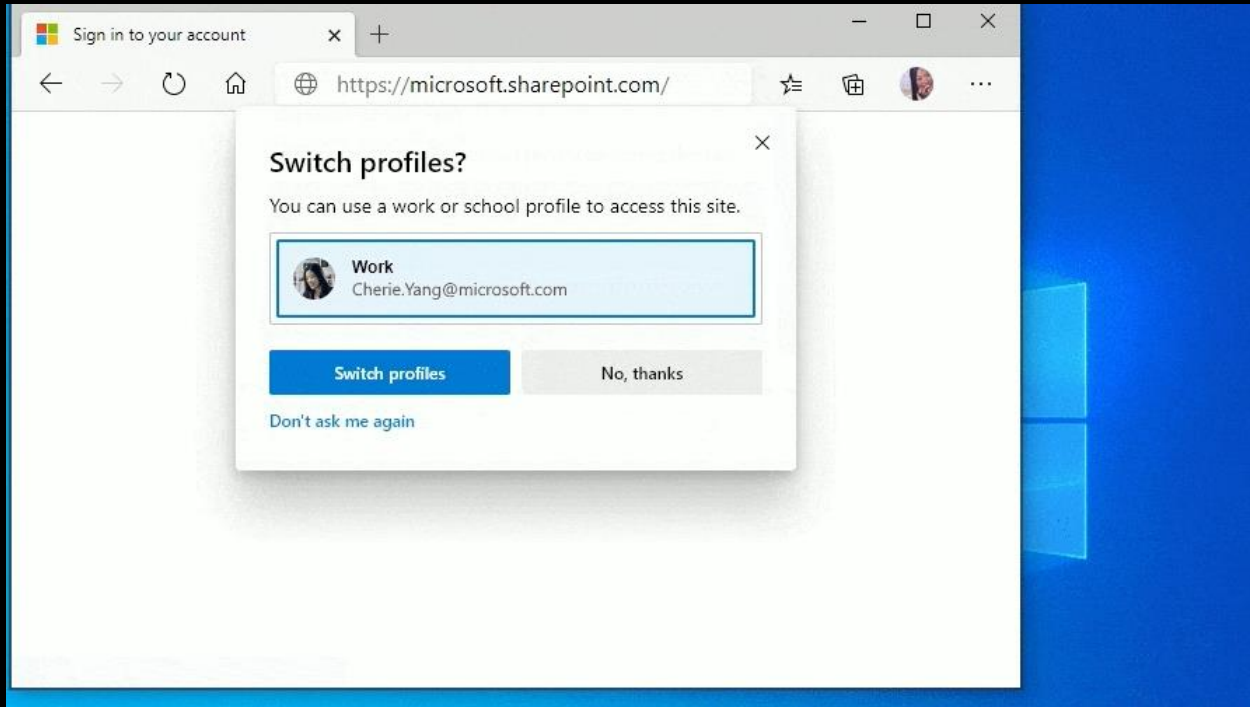
The screenshot shows a web browser window displaying a recipe page for "Squash & Quinoa" on the website "farmtotablecooking.com". The browser's address bar shows the URL "https://www.farmtotablecooking.com". The page features a navigation menu with links for "Home", "About", "Blog", and "Contact". The main title "Squash & Quinoa" is prominently displayed, accompanied by a green circular icon. Below the title, the recipe details are listed: "45 min - prep time", "35 min - cook time", and "4 servings". A large image of a bowl filled with sliced squash and tomatoes is shown on the left side of the page. On the right side, the "Ingredients" section lists the following items:

- 1/2 cup of grape tomatoes, chopped
- 1/2 cup of green beans, chopped
- 3 cups of quinoa
- 4 broccoli florets, chopped
- 1/2 onion, chopped
- 1/2 cup of rice
- 1/2 yellow summer squash, chopped

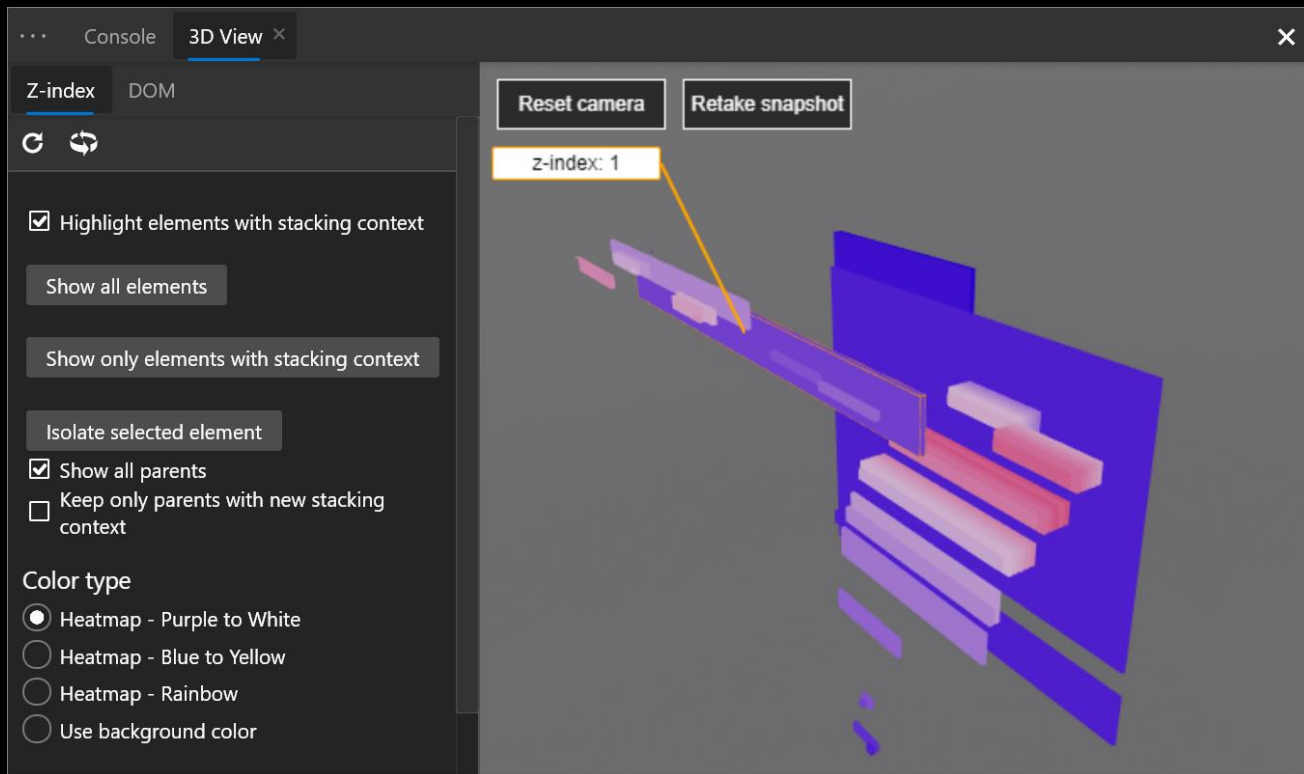
Below the ingredients, the "Directions" section begins with the instruction: "Preheat oven to 425 degrees F." The browser's taskbar at the bottom shows the Windows logo, a search bar with the text "Type here to search", and several application icons including File Explorer, Mail, and Edge. The system tray on the right includes icons for network, volume, and notification.



# EDGE: Automatic Profile Switching



# EDGE: 3D View in DevTools

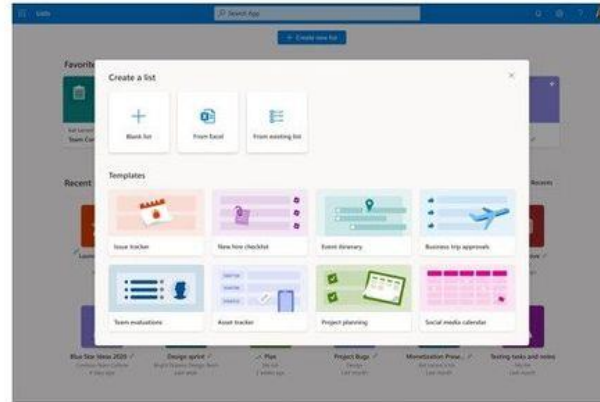




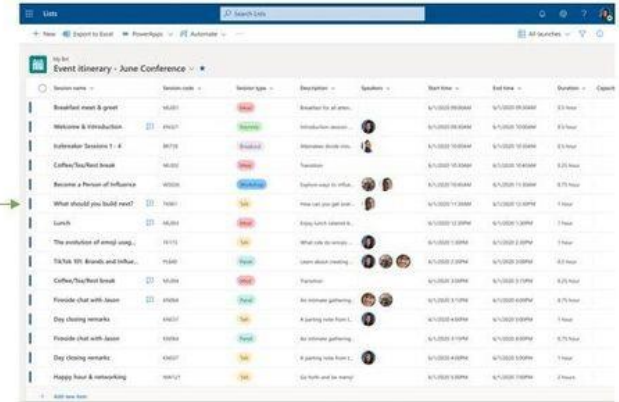
# Novedades para Microsoft 365

- Microsoft Lists.
- Microsoft Fluid Framework.

# Microsoft Lists

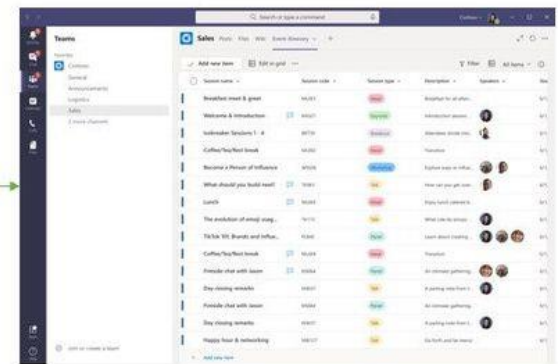
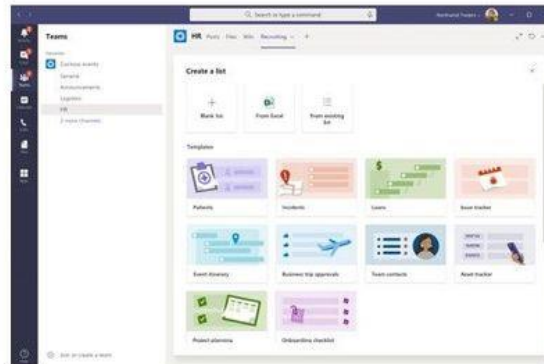


Create a list **from the Lists app in Microsoft 365** or directly from **within Microsoft Teams**

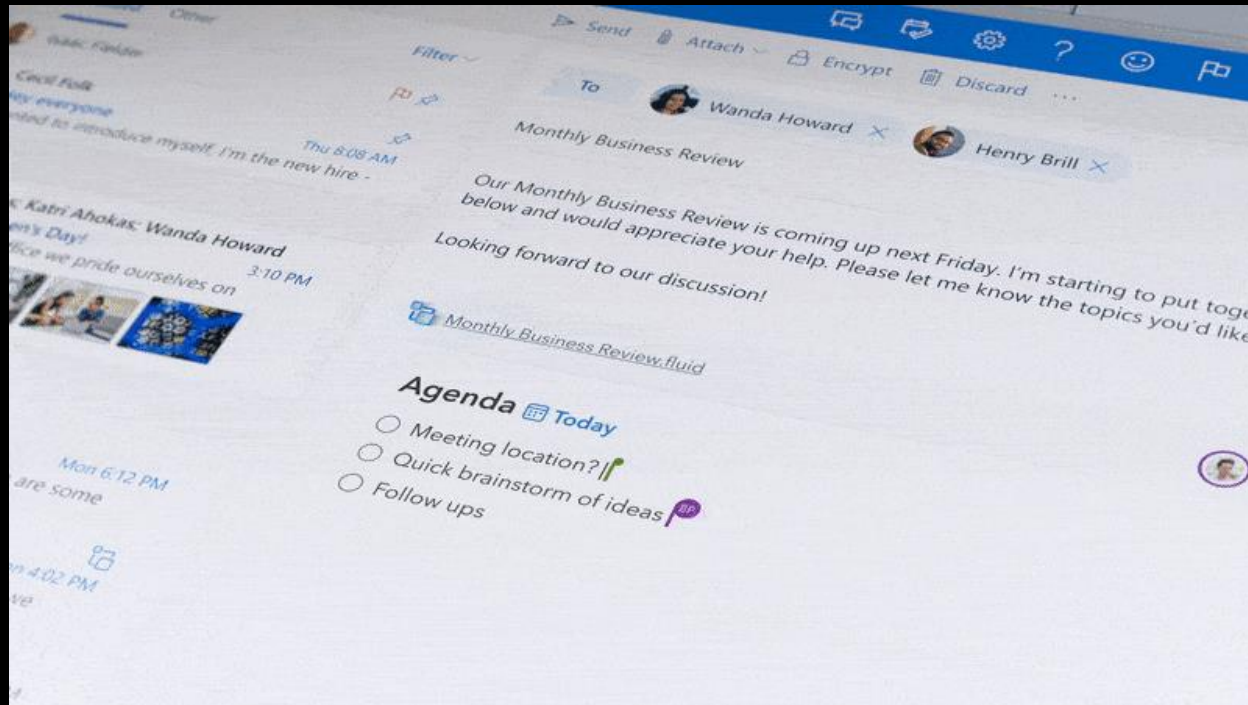


Use the list **in SharePoint** or continue **within Microsoft Teams**

<https://fluidpreview.office.net/>



# Microsoft Fluid Framework



<https://fluidpreview.office.net/>

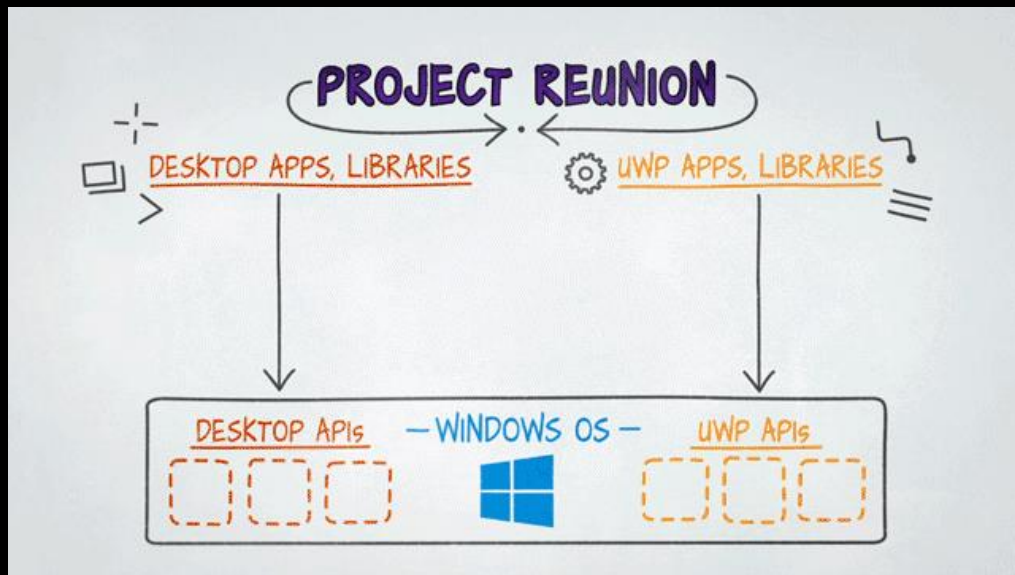


# Novedades para Windows

- WinUI 3 Preview.
- Project Reunion.
- Linux GUI Apps.
- WSL GPU Compute.
- Windows Terminal + Preview.
- PowerToys.

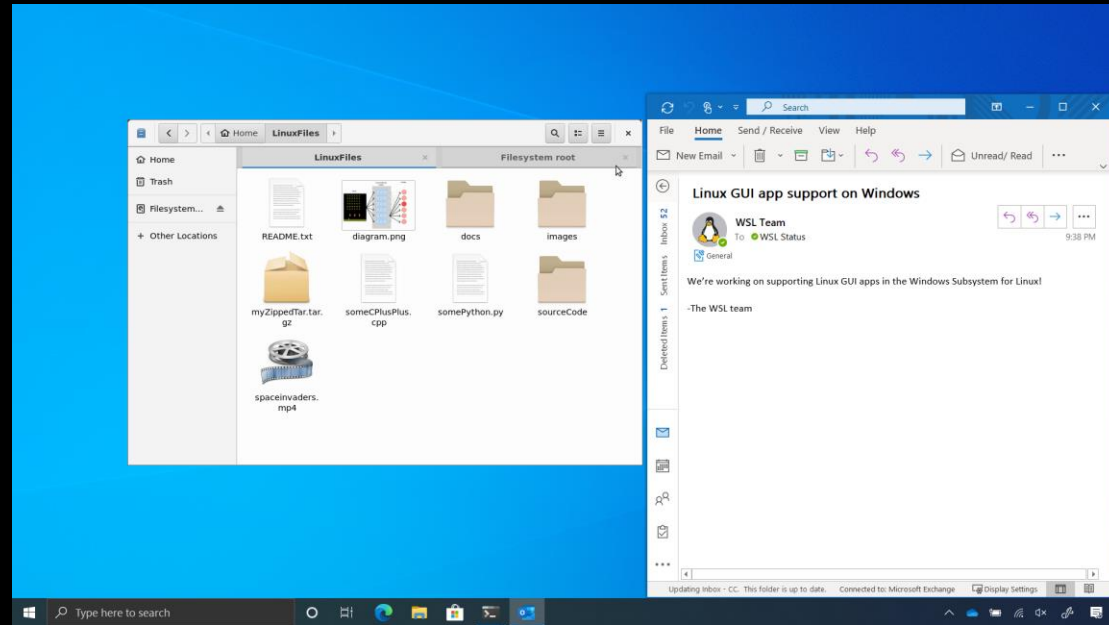
# Project Reunion

- APIs desacopladas del Sistema Operativo.
- Consta de dos componentes: WinUI 3 Preview 1 y WebView2
- GitHub Repo: <https://github.com/microsoft/ProjectReunion>



# Windows Subsystem for Linux (WSL)

- Linux GUI Apps.
- WSL GPU Compute.





# PowerToys



# ¡Links de Interés y Demos!

Open AI Azure Supercomputer	<a href="https://www.youtube.com/watch?v=7j38uJoB8fk">https://www.youtube.com/watch?v=7j38uJoB8fk</a>
Bot Framework Composer	<a href="https://dev.botframework.com/">https://dev.botframework.com/</a>
Interpret	<a href="https://github.com/interpretml/interpret">https://github.com/interpretml/interpret</a>
WhiteNoise differential privacy toolkit	<a href="https://github.com/opendifferentialprivacy/whitenoise-core">https://github.com/opendifferentialprivacy/whitenoise-core</a>
Azure Synapse Link	<a href="https://www.youtube.com/watch?v=yd8vynwA36A">https://www.youtube.com/watch?v=yd8vynwA36A</a>
Microsoft Cloud for Healthcare	<a href="https://www.microsoft.com/en-us/videooplayer/embed/RE4wqQv?autoplay=true">https://www.microsoft.com/en-us/videooplayer/embed/RE4wqQv?autoplay=true</a>
Visual Studio Codespaces	<a href="https://visualstudio.microsoft.com/services/visual-studio-codespaces/">https://visualstudio.microsoft.com/services/visual-studio-codespaces/</a>
Whats New	<a href="https://www.youtube.com/watch?v=zdf0bWGgPk">https://www.youtube.com/watch?v=zdf0bWGgPk</a>
Microsoft Lists	<a href="https://www.youtube.com/watch?v=U5E7N4l5FzA">https://www.youtube.com/watch?v=U5E7N4l5FzA</a>
Microsoft Lists	<a href="https://demobuilderwebcptxz.blob.core.windows.net/microsoft-lists-create-a-list/startdemo.html">https://demobuilderwebcptxz.blob.core.windows.net/microsoft-lists-create-a-list/startdemo.html</a>
Fluid Office	<a href="https://fluidpreview.office.net/">https://fluidpreview.office.net/</a>
Power Platform Pro Dev	<a href="https://mymbas.microsoft.com/sessions/084127bd-3dc7-4527-8b38-b1cf098817c8?source=sessions">https://mymbas.microsoft.com/sessions/084127bd-3dc7-4527-8b38-b1cf098817c8?source=sessions</a>
PowerToys Run	<a href="https://aka.ms/installpowertoys">https://aka.ms/installpowertoys</a>
Keyboard Manager PowerToy	<a href="https://github.com/microsoft/PowerToys/wiki/Keyboard-Manager">https://github.com/microsoft/PowerToys/wiki/Keyboard-Manager</a>
Windows Terminal	<a href="https://github.com/microsoft/terminal">https://github.com/microsoft/terminal</a>



# ¡Gracias!

Resumen del Build 2020

**Pablo Ariel Di Loreto**

Service Manager | Algeiba Dev

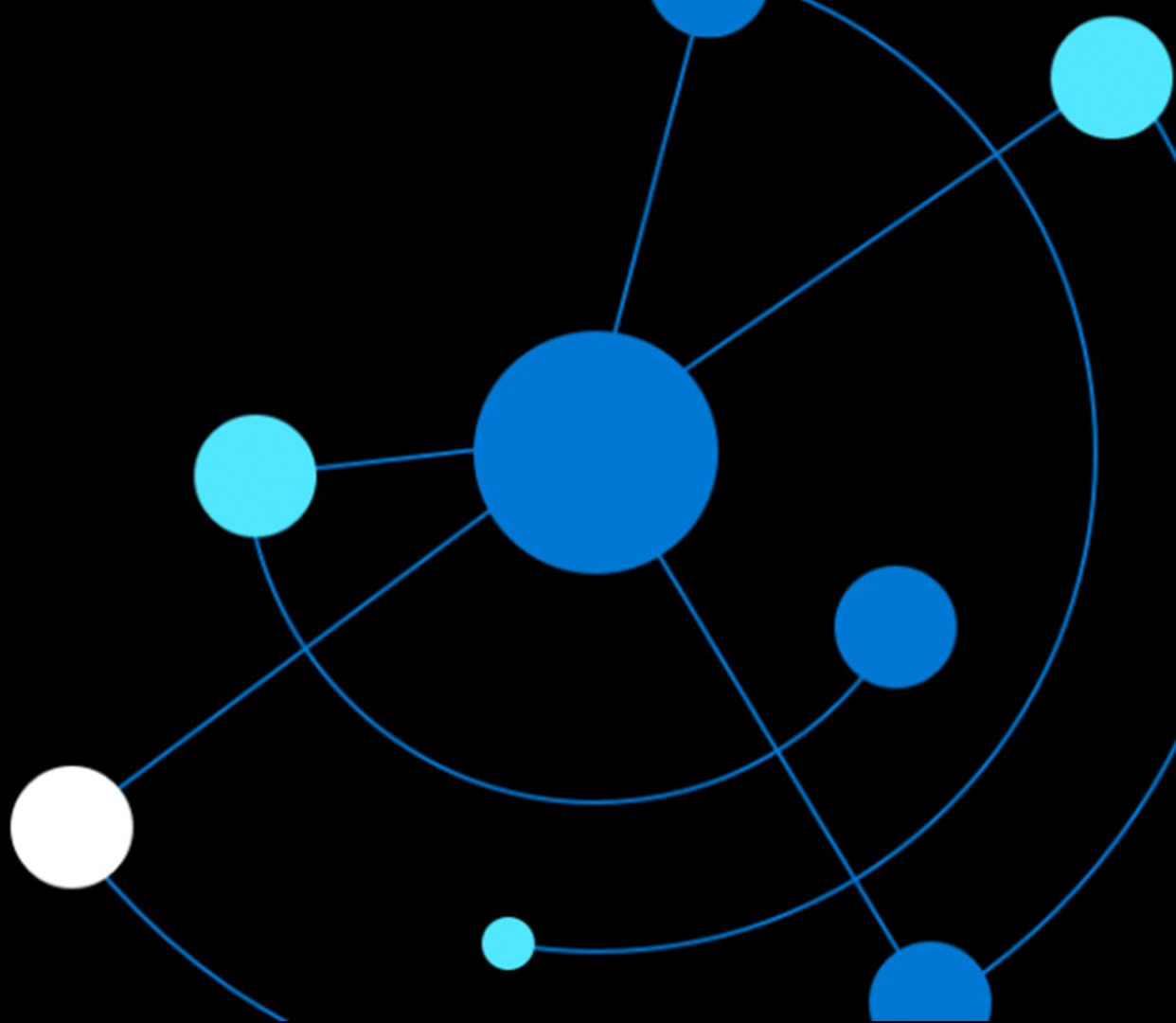
@PabloDiLoreto

**Fernando Sonego**

Software Architect | Algeiba Dev

@FernandoSonego

algeiba 



# Q&A



Consiga su Badge Digital: <https://aka.ms/atcl1>

Calendario de próximos eventos online? <https://aka.ms/mavtd1>

**Microsoft Developer Newsletter: <https://aka.ms/xlSource>**