



Pump up your Pop-ups with Arcade Expressions

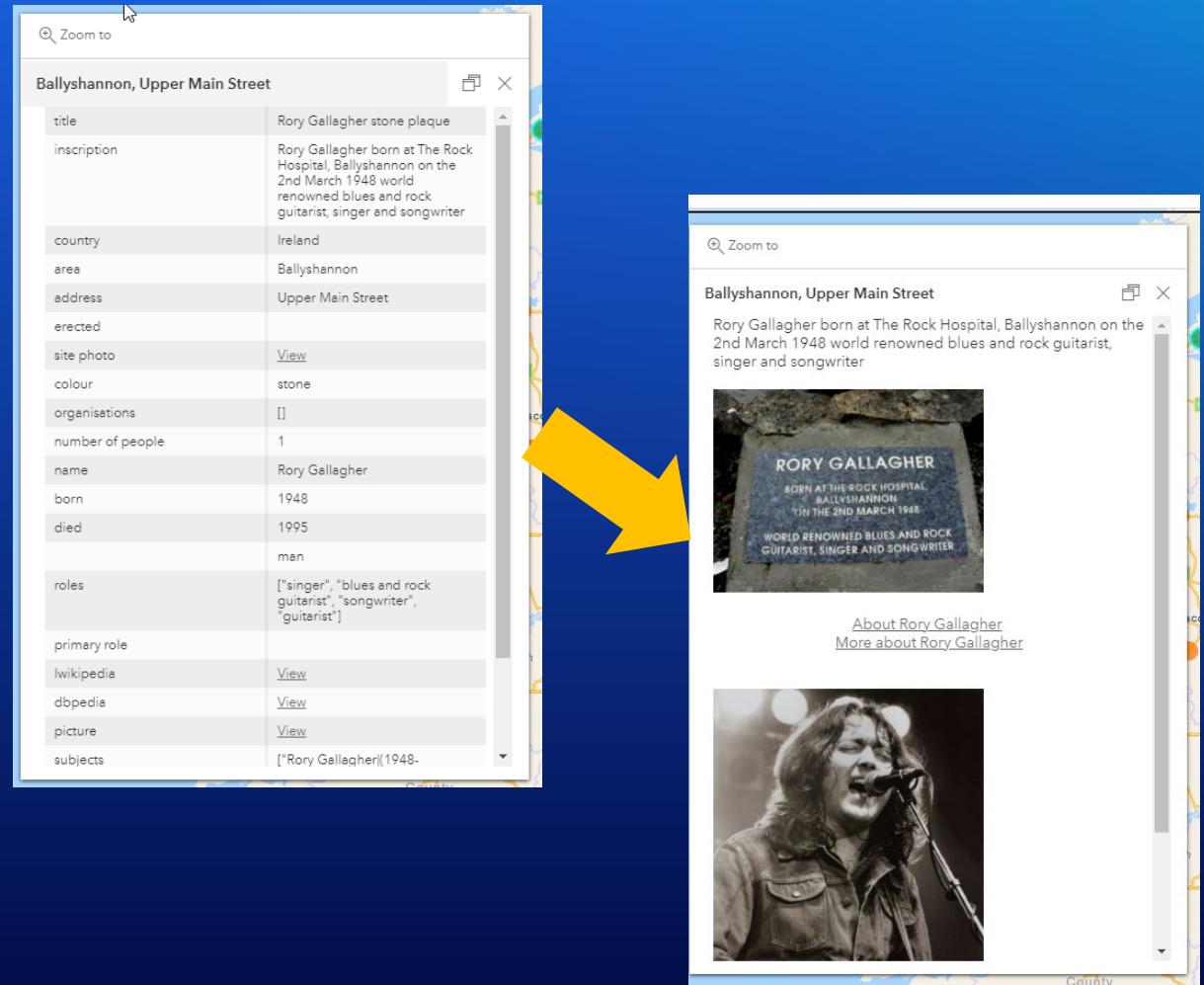
Beth Romero – Product Engineer

Paul Barker – Product Engineer

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Make the most of you pop-up

- **Highlight what's most important**
 - **Make it readable**
 - **Mix and match different types of content**
 - **Style with color**



What is Arcade?

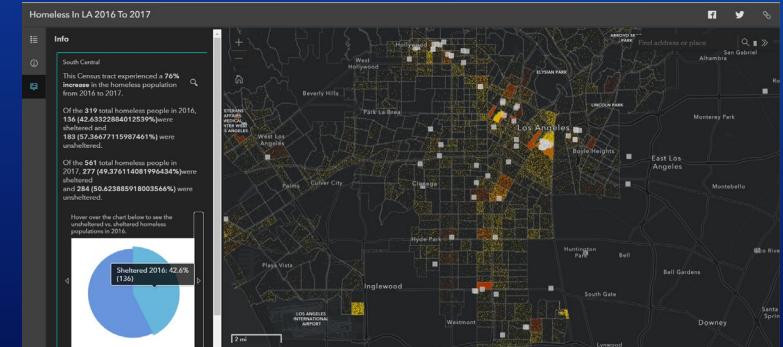
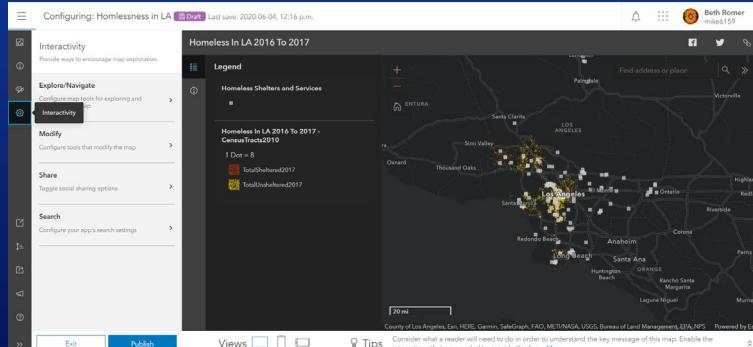
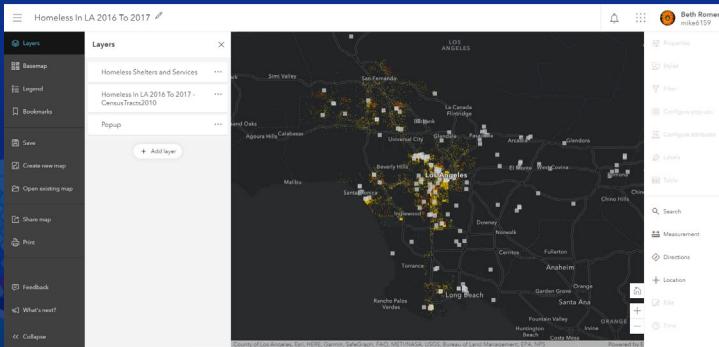
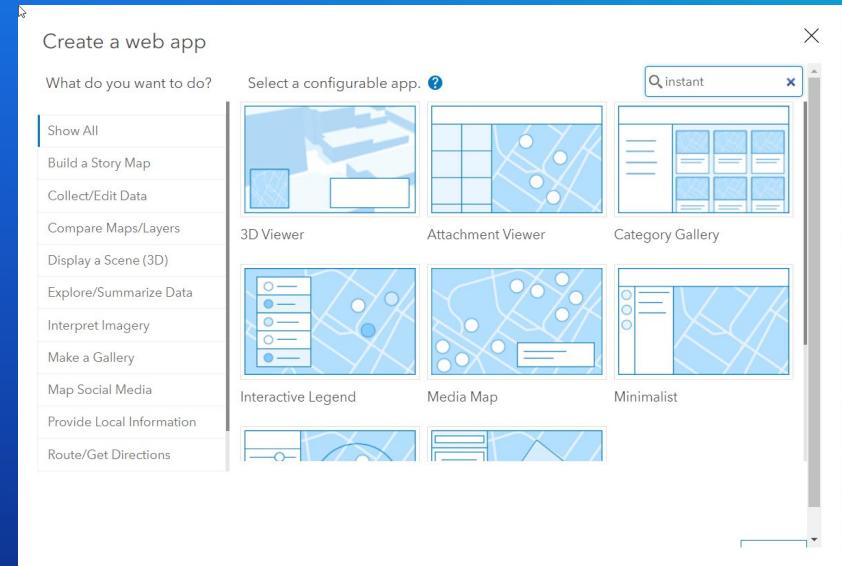
- Lightweight expression language
- Calculate new values on-the-fly
- Data-driven
 - Use attribute values to modify your map
 - Symbology, pop-ups, transparency, symbol rotation, labels, and more

The image shows two screenshots of the ArcGIS interface. The top screenshot is the 'Predominant Age of Veterans' editor window. It displays an 'Expression' code block with a yellow arrow pointing to the 'Test' tab. The code calculates the predominant age group for veterans based on several age categories. The bottom screenshot shows a map of Hillsborough County, Florida, where census tracts are colored according to the predominant age group of veterans. A pop-up window for 'Census Tract 115.09 in Hillsborough County, Florida' provides details: 'The predominant age range of veterans in this area is 55-74' and includes a bar chart showing the 'Count of veterans by age range'.

```
1 var vet18_34 = $feature["B21001_008E"] + $feature["B21001_026E"]
2 var vet35_54 = $feature["B21001_011E"] + $feature["B21001_029E"]
3 var vet55_64 = $feature["B21001_014E"] + $feature["B21001_032E"]
4 var vet65_74 = $feature["B21001_017E"] + $feature["B21001_035E"]
5 var vet75plus = $feature["B21001_020E"] + $feature["B21001_038E"]
6
7 var vets18_54 = vet18_34 + vet35_54
8 var vets55_74 = vet55_64 + vet65_74
9
10 // The fields from which to calculate predominance
11 // The expression will return the alias of the predominant field
12
13 var fields = [
14   { value: vets18_54, alias: "Veterans Age 18-54" },
15   { value: vets55_74, alias: "Veterans Age 55-74" },
16   { value: vet75plus, alias: "Veterans Age 75+" }
17 ];
18
19 // Returns the predominant category as the alias
20 // defined in the variable name. If there is a tie
21
```

Apps complete the user experience

- Easy and quick to configure
- Present map information and tools in meaningful ways
- Leverage capabilities in the map



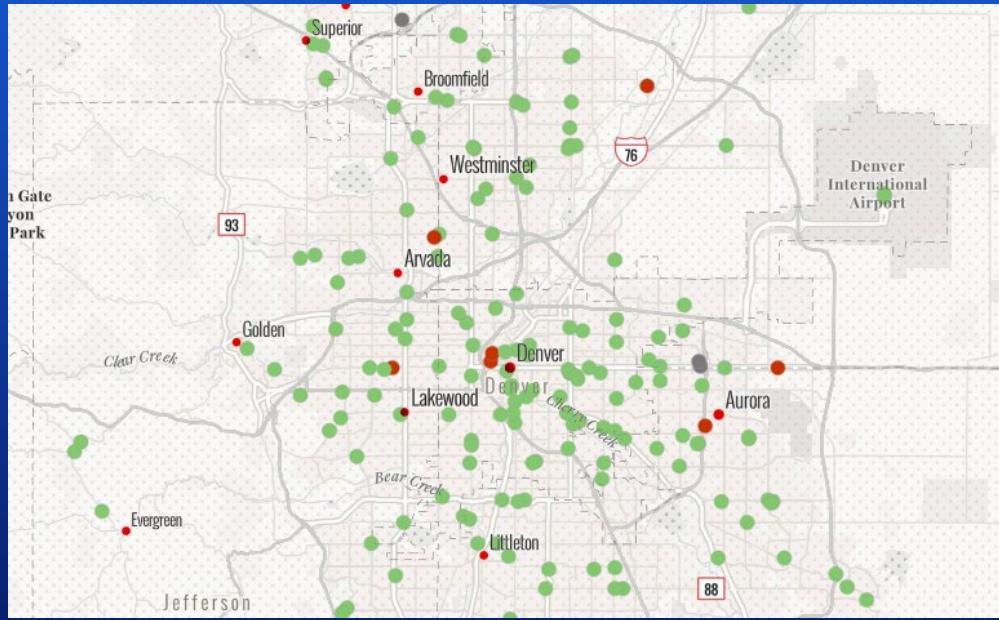
Map
Scene
Group

App template

Configured application

Ways to use Arcade to make your pop-up awesome

- **Custom field values**
 - Calculate new values on-the-fly
 - Don't have to own the data
 - Simple or complex
- **Feature Sets – access data from other layers in the map**
 - Geometry functions
 - Access data values
- **Use within pop-up HTML to control:**
 - Colors

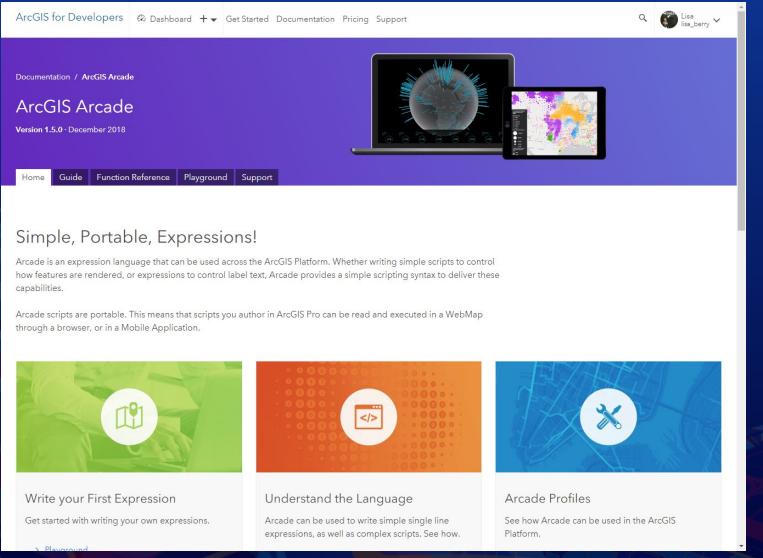


Demos

Resources for Arcade

<http://esriurl.com/ArcadeResources>

Documentation



ArcGIS for Developers | Dashboard | Get Started | Documentation | Pricing | Support

Documentation / ArcGIS Arcade

ArcGIS Arcade

Version 1.5.0 - December 2018

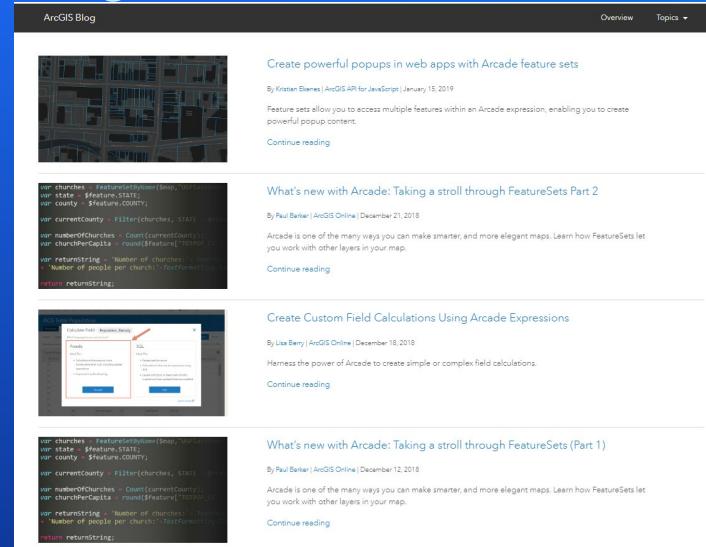
Simple, Portable, Expressions!

Arcade is an expression language that can be used across the ArcGIS Platform. Whether writing simple scripts to control how features are rendered, or expressions to control label text, Arcade provides a simple scripting syntax to deliver these capabilities.

Arcade scripts are portable. This means that scripts you author in ArcGIS Pro can be read and executed in a WebMap through a browser, or in a Mobile Application.

Write your First Expression | Understand the Language | Arcade Profiles

Blogs about Arcade



ArcGIS Blog

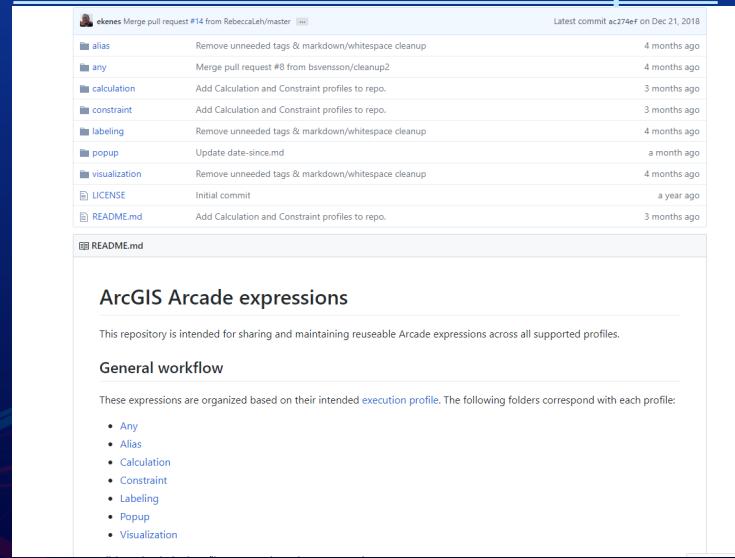
Create powerful popups in web apps with Arcade feature sets
By Kristen Barnes | ArcGIS API for JavaScript | January 15, 2019
Feature sets allow you to access multiple features within an Arcade expression, enabling you to create powerful popup content.
[Continue reading](#)

What's new with Arcade: Taking a stroll through FeatureSets Part 2
By Paul Barker | ArcGIS Online | December 21, 2018
Arcade is one of the many ways you can make smarter, and more elegant maps. Learn how FeatureSets let you work with other layers in your map.
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Create Custom Field Calculations Using Arcade Expressions
By Lisa Berry | ArcGIS Online | December 18, 2018
Harness the power of Arcade to create simple or complex field calculations.
[Continue reading](#)

What's new with Arcade: Taking a stroll through FeatureSets (Part 1)
By Paul Barker | ArcGIS Online | December 12, 2018
Arcade is one of the many ways you can make smarter, and more elegant maps. Learn how FeatureSets let you work with other layers in your map.
[Continue reading](#)

GitHub – Arcade Examples



ekenes Merge pull request #14 from RebekahLev/master [] Latest commit ac274ef on Dec 21, 2018

alias Remove unused tags & markdown/whitespace cleanup 4 months ago
any Merge pull request #8 from bsvenson/cleanup2 4 months ago
calculation Add Calculation and Constraint profiles to repo. 3 months ago
constraint Add Calculation and Constraint profiles to repo. 3 months ago
labeling Remove unused tags & markdown/whitespace cleanup 4 months ago
popup Update date-since.md a month ago
visualization Remove unused tags & markdown/whitespace cleanup 4 months ago
LICENSE Initial commit a year ago
README.md Add Calculation and Constraint profiles to repo. 3 months ago

ArcGIS Arcade expressions

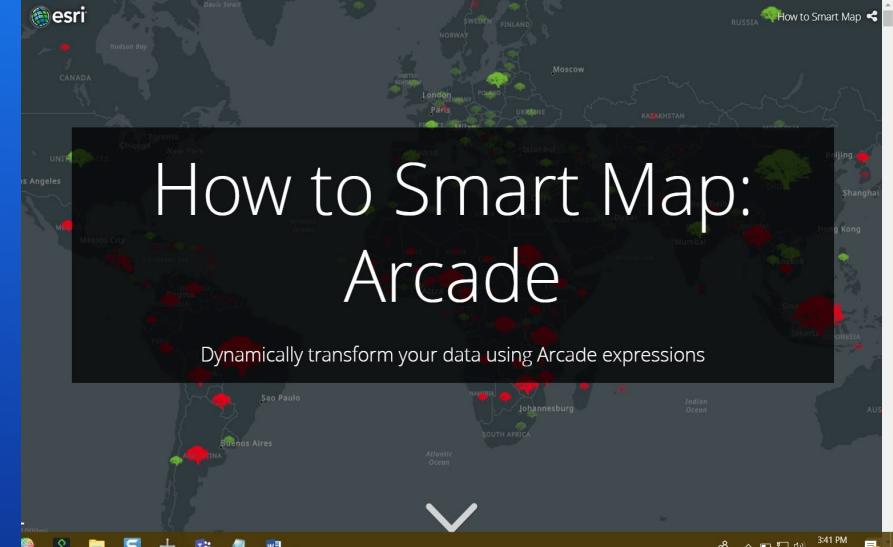
This repository is intended for sharing and maintaining reusable Arcade expressions across all supported profiles.

General workflow

These expressions are organized based on their intended execution profile. The following folders correspond with each profile:

- Any
- Alias
- Calculation
- Constraint
- Labeling
- Popup
- Visualization

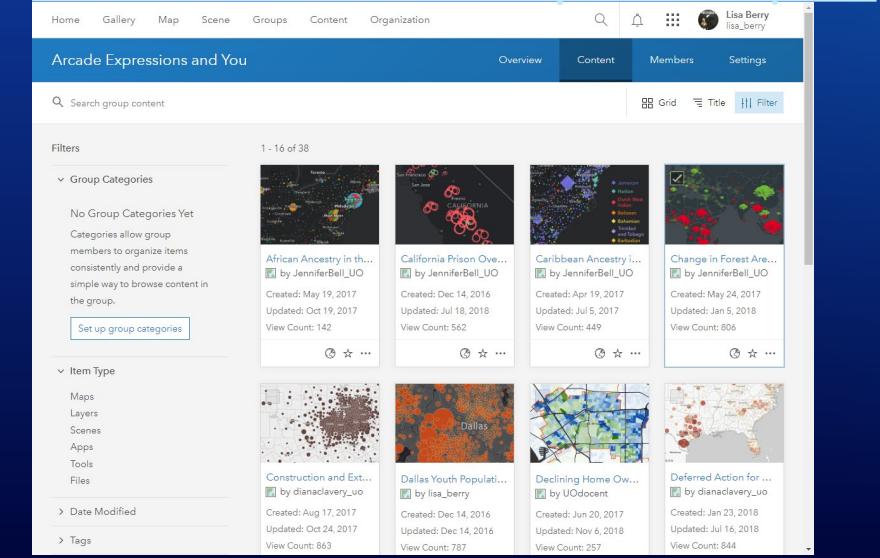
Story Map Tutorial



How to Smart Map: Arcade

Dynamically transform your data using Arcade expressions

ArcGIS Online Group: Examples



Home | Gallery | Map | Scene | Groups | Content | Organization

Arcade Expressions and You

Overview | Content | Members | Settings

Search group content

Filters

- Group Categories
- No Group Categories Yet
- Categories allow group members to organize items consistently and provide a simple way to browse content in the group.
- [Set up group categories](#)

1 - 16 of 38

African Ancestry in the US | California Prison Overpopulation | Caribbean Ancestry in the US | Change in Forest Area

African Ancestry in the US by JenniferBell_UO
Created: May 19, 2017
Updated: Oct 19, 2017
View Count: 142

California Prison Overpopulation by JenniferBell_UO
Created: Dec 14, 2016
Updated: Jul 18, 2018
View Count: 562

Caribbean Ancestry in the US by JenniferBell_UO
Created: Apr 19, 2017
Updated: Jul 5, 2017
View Count: 449

Change in Forest Area by JenniferBell_UO
Created: May 24, 2017
Updated: May 24, 2018
View Count: 806

Construction and Extent by dianaclavery_uo
Created: Aug 17, 2017
Updated: Oct 24, 2017
View Count: 863

Dallas Youth Population by dianaclavery_uo
Created: Jun 20, 2017
Updated: Dec 14, 2016
View Count: 787

Declining Home Ownership by dianaclavery_uo
Created: Jun 20, 2017
Updated: Nov 6, 2018
View Count: 257

Deferred Action for... by dianaclavery_uo
Created: Jan 23, 2018
Updated: Jul 16, 2018
View Count: 844



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Presentation Title

Presenter Names

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Section Header

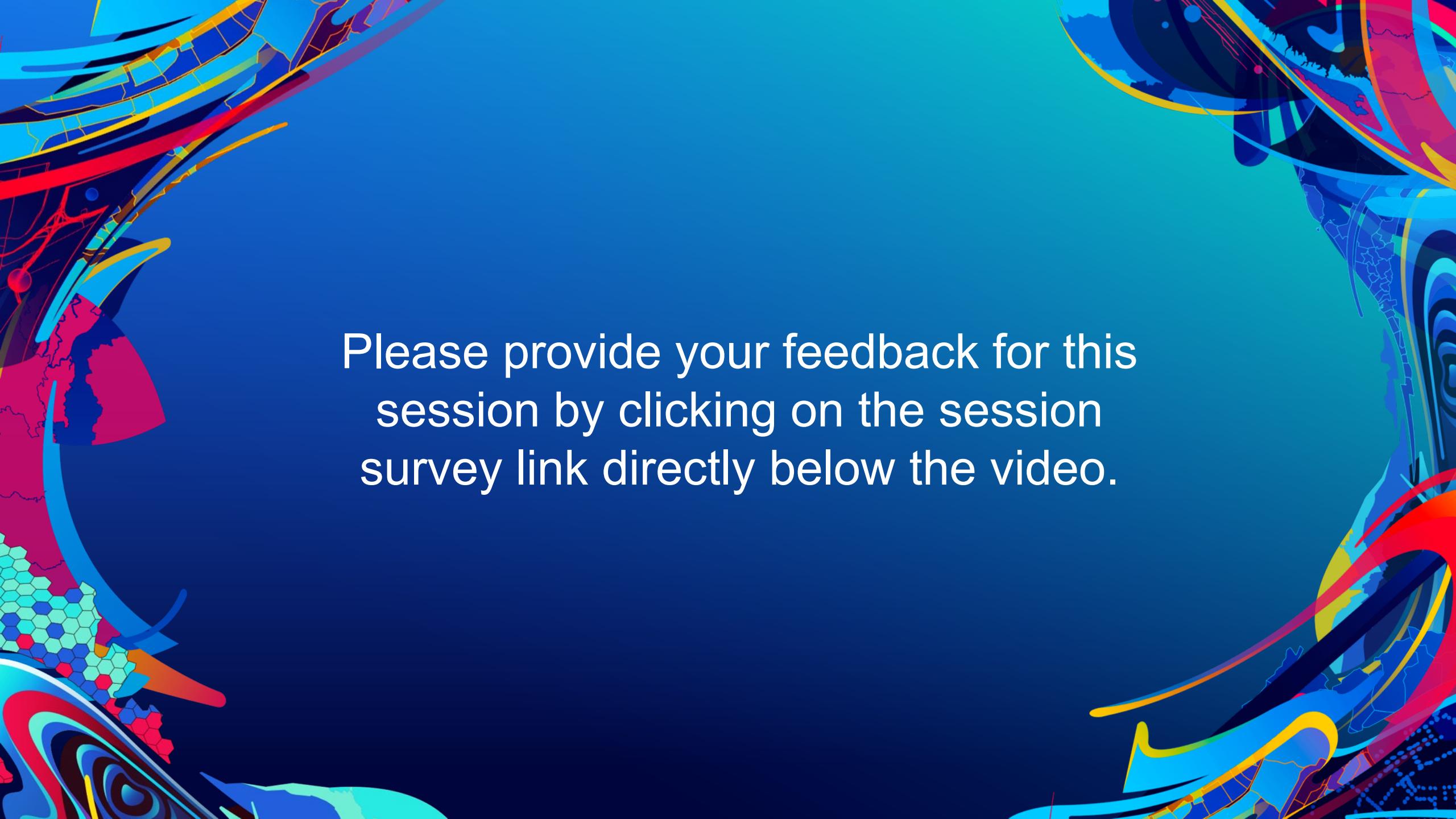
Section Subhead

Demo Title

Presenter(s)



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