

Building Location-Aware Applications for Various Use Cases

Courtney Yatteau

Russell Sands

```
<arcgis-map zoom="4" center="-118,34">
  <arcgis-search position="top-right" />
</arcgis-map>
```

```
view.goTo({
  center: [-126, 49]
})
.catch(function(error) {
  if (error.name != "AbortError")
    console.error(error);
})
```



Courtney Yatteau

Developer Advocate, Esri



[c_yatteau](https://twitter.com/c_yatteau)



[c_yatteau](https://www.youtube.com/c_yatteau)



[cyatteau](https://github.com/cyatteau)



[courneyyatteau](https://www.linkedin.com/in/courneyyatteau)



Russell Sands

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[russell-sands](https://github.com/russell-sands)



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Agenda



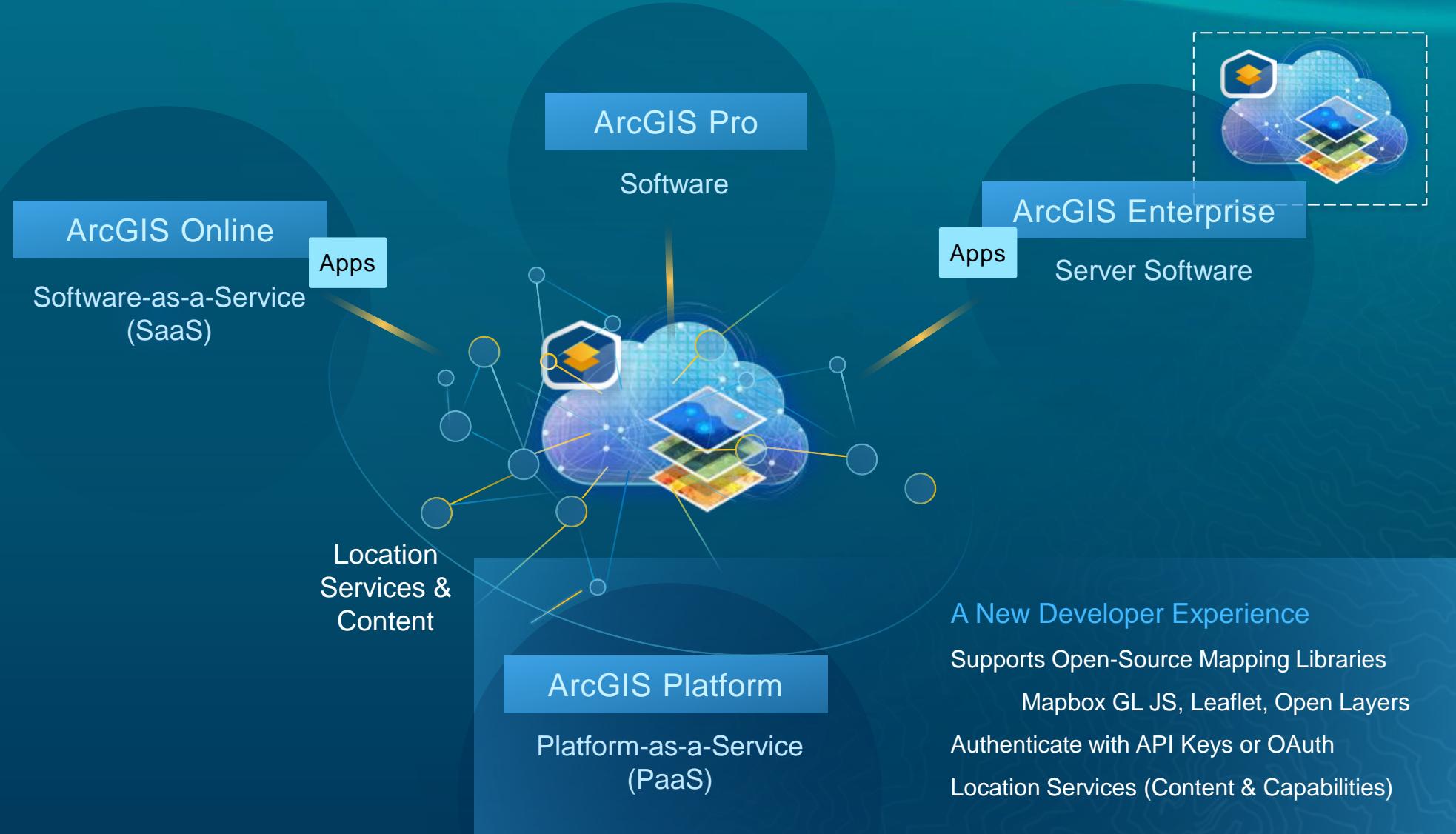
Topics & Demos

- ArcGIS Platform Overview
- Location Services
- Tech Stack Used
- Demos
- Wrap-up and Q&A

ArcGIS System



ArcGIS System



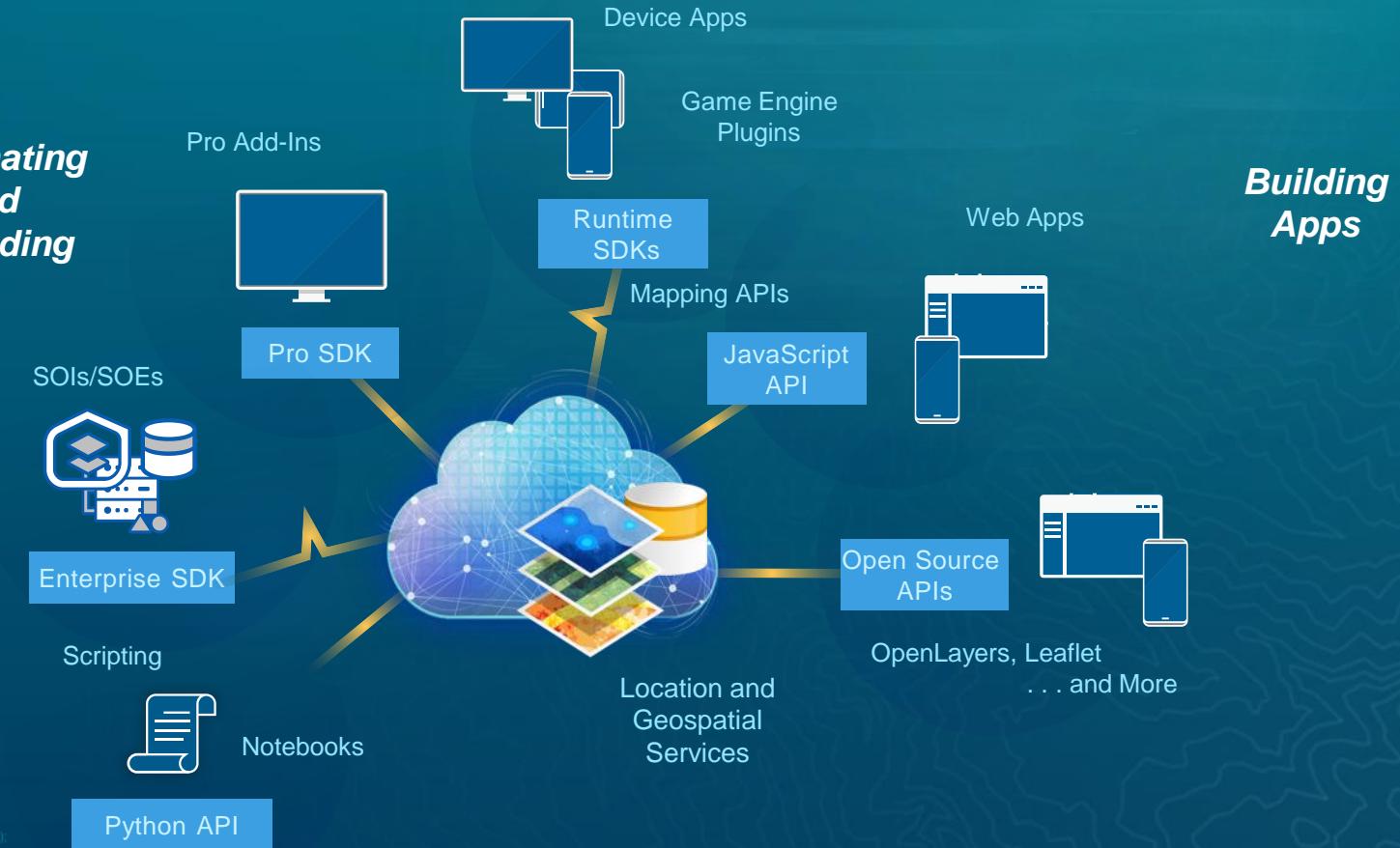
ArcGIS Developer Provides Extensive Capabilities

APIs & SDKs for Extending and Automating ArcGIS
. . . and Creating New Apps

- High Performance
- Rich Data-Driven Visualization
- Sophisticated Analysis
- Premium Developer Experience
- Flexible Deployment



Automating and Extending



Bringing Powerful Spatial Tools and Location Services to All Developers

ArcGIS Platform | A Location Platform-as-a-Service

Developer Experience

Mapping APIs
Open-Source Mapping Libraries
Developer Resources

Location Services

Content &
Capabilities



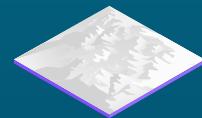
Business Model

Consumption-Based

*An intuitive developer experience
for accessing and using ArcGIS Platform*

ArcGIS Platform | Collection of Location Services

Extensive Content and Powerful Capabilities



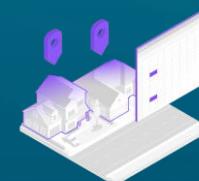
Basemaps



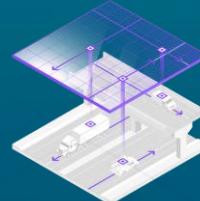
Data Hosting



Data Visualization



Geocoding &
Search



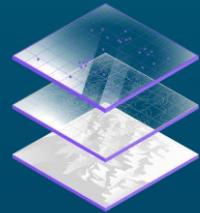
Routing &
Directions



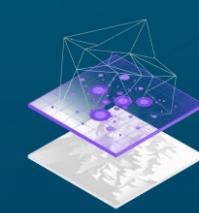
Places



Demographic
Data



Data Layers



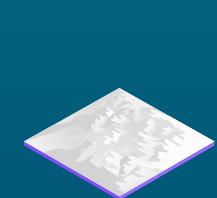
Spatial Analytics



ArcGIS Platform | Collection of Location Services

Extensive Content and Powerful Capabilities

Deployment Options



Basemaps



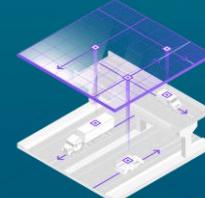
Data Hosting



Data Visualization



Geocoding &
Search



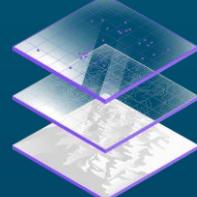
Routing &
Directions



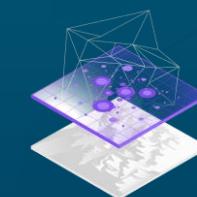
Places



Demographic
Data



Data Layers



Spatial Analytics

Web

Mobile

Desktop



Online
& Offline

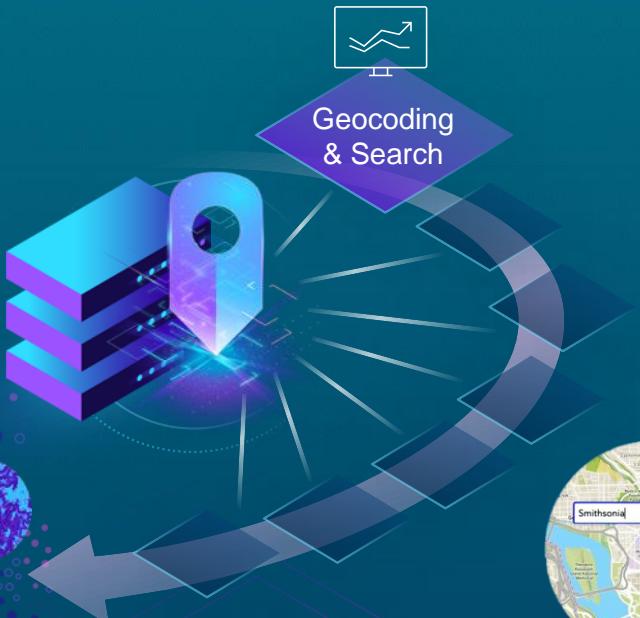
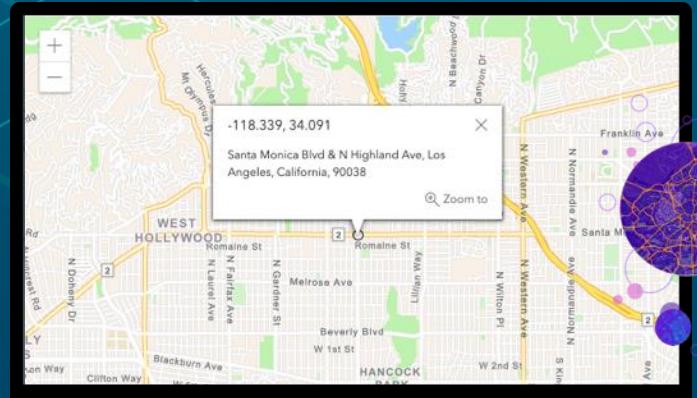
System-to-System

Indoors
& Outdoors

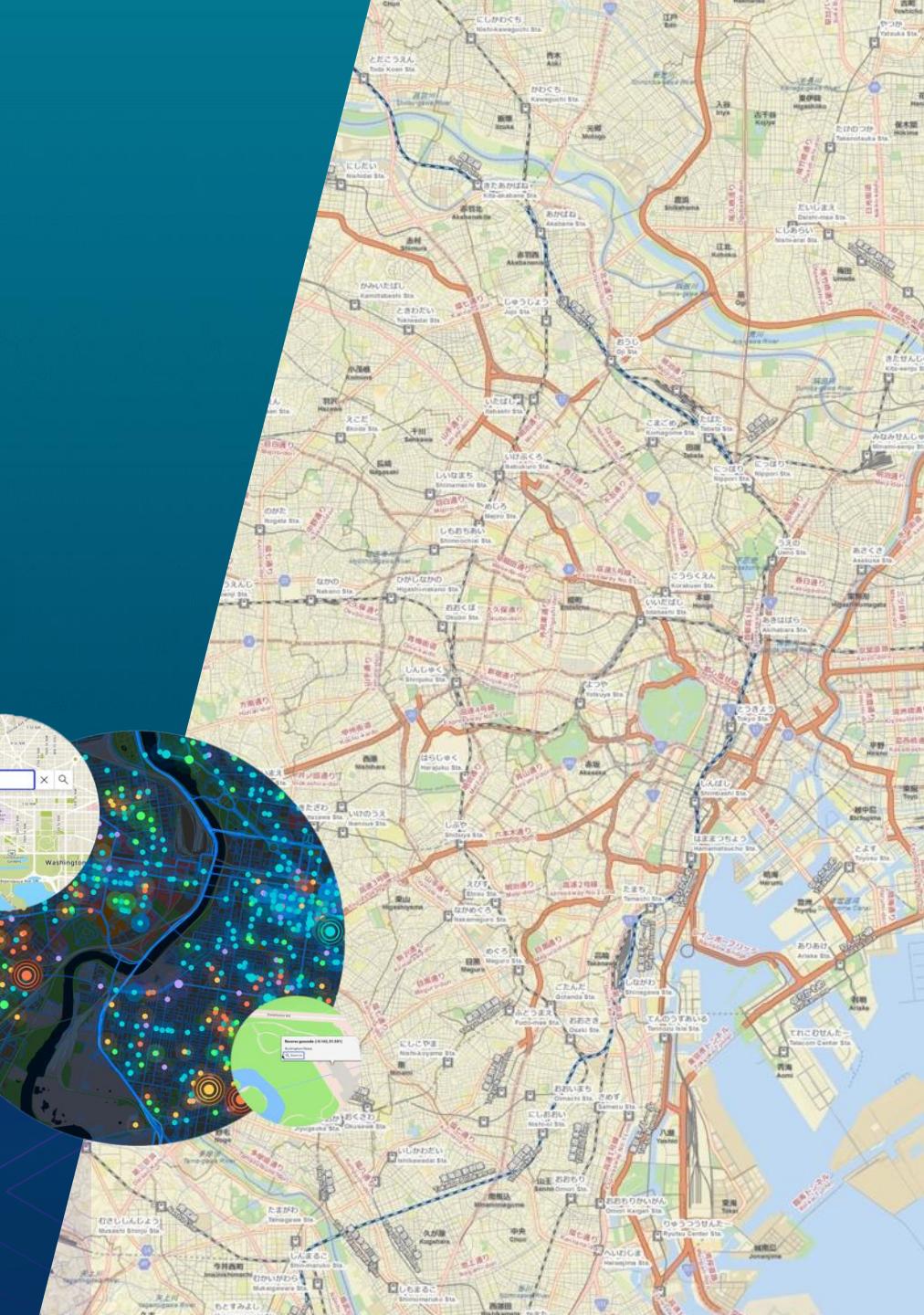
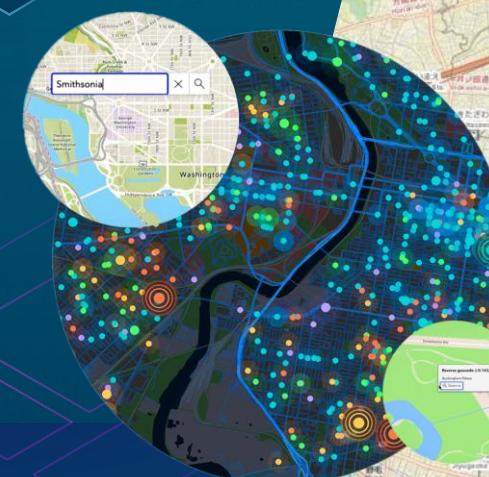
Location Services | Geocoding & Search

Find Addresses and Points of Interest

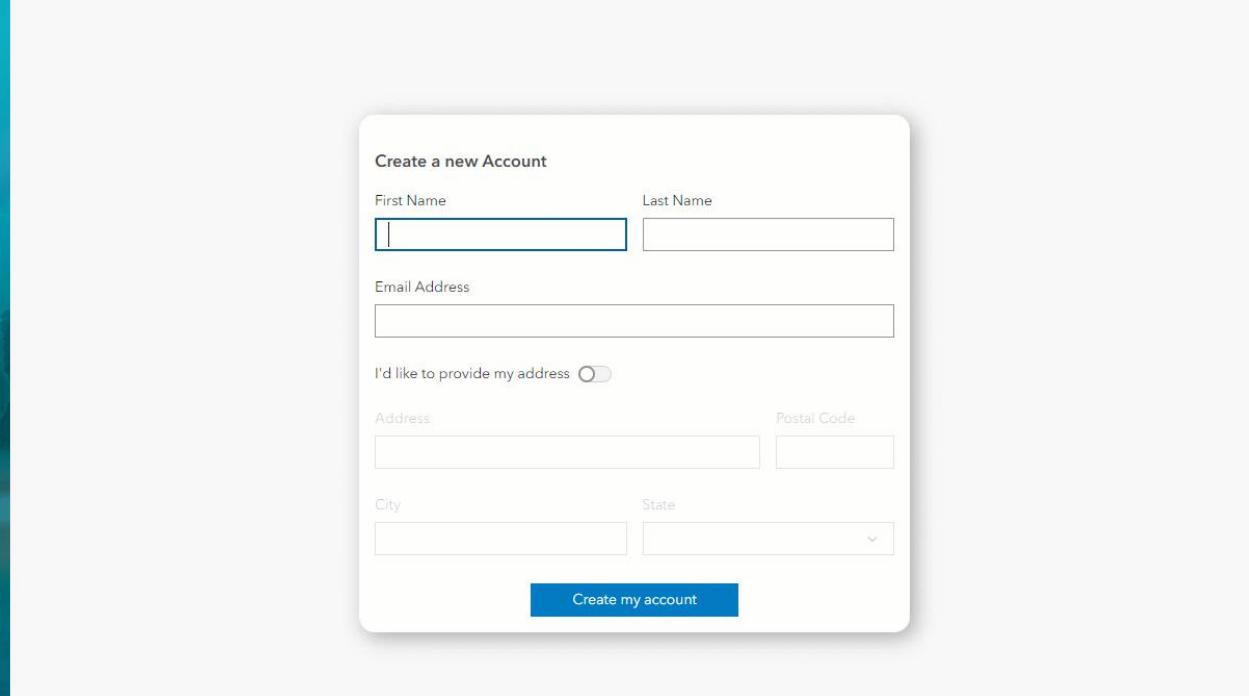
- Multiple Authoritative Sources
- Support for Local Languages and Address Formats
- POI Search



Global
Coverage



```
    queryParameters =  
        queryParameters().apply {  
            where = "price > 200"  
        }  
    viewModelScope.launch {
```



Create an Account Demo

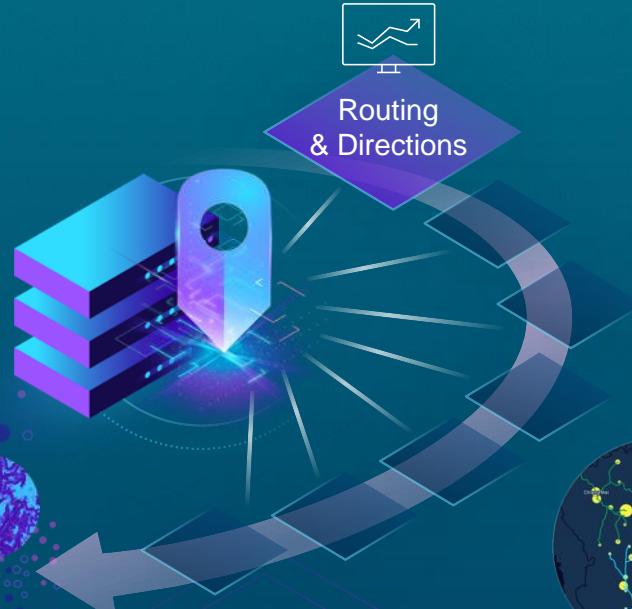
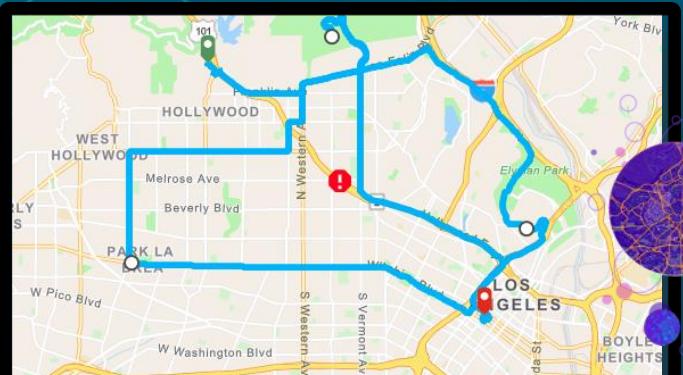
Russell Sands

 *Calcite Components*
 *ArcGIS REST JS*

Location Services | Routing & Directions

Increase Efficiency

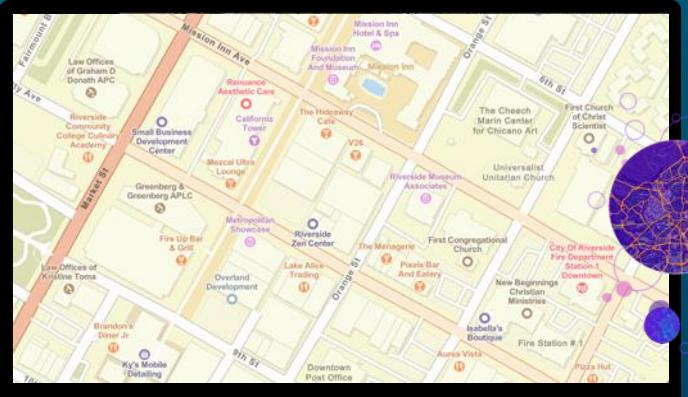
- Point-to-Point
- Multiple Vehicles
- Optimized Routes



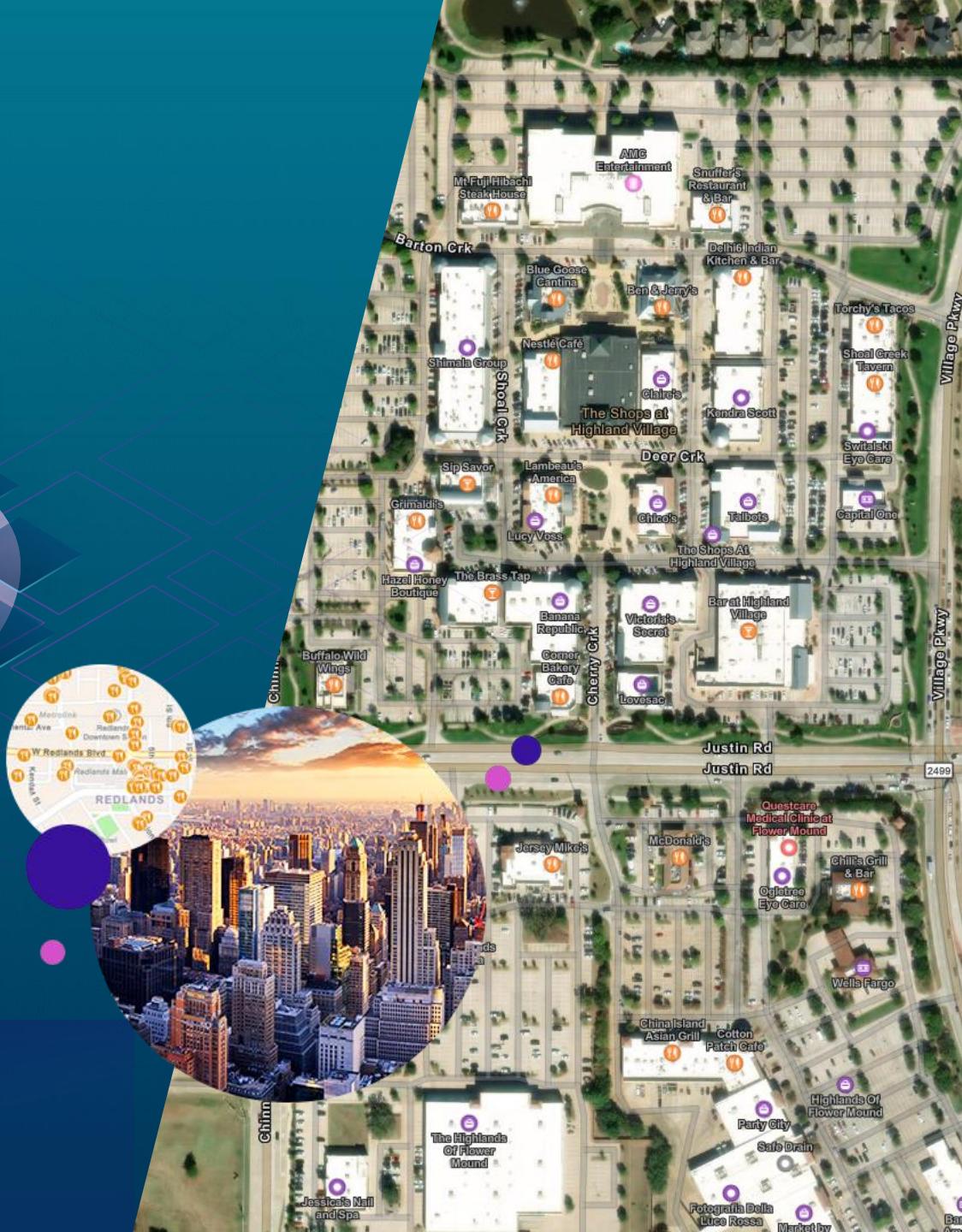
ArcGIS Platform | Places

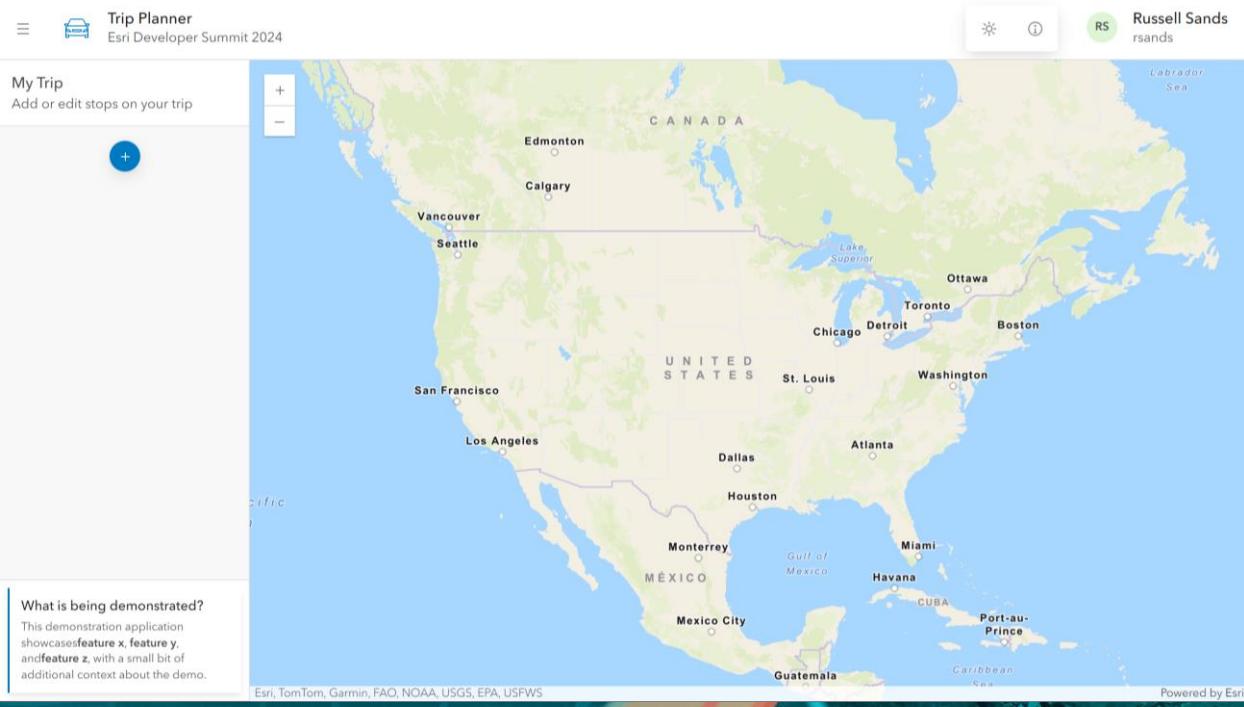
Explore Points of Interest

- 50+ Million POIs Worldwide
- 1,000+ Categories
- Dozens of Attributes
- Context On Demand



Authoritative,
Comprehensive & Global





Trip Planning Demo

Russell Sands

Calcite Components, ArcGIS REST JS
</> ArcGIS Maps SDK for JavaScript, React

```
    filterParameters =  
        filterParameters().apply {  
            query = "price > 200"  
        }  
    viewModelScope.launch {
```

The screenshot shows a map of Palm Springs, California, with various service areas highlighted in different colors (orange, red, green). A callout box labeled "South Facility" indicates "Facility ID: 2". On the right, there are two panels: "Grocery Orders" and "South Facility".

Grocery Orders

Search Results
Palm Springs International Airport, Palm Springs, CA, USA
Palm Springs, CA, USA
Palm Springs, FL, USA
Palm Springs North, FL, USA
Palm Springs Intl Airport, Palm Springs, CA, USA
7890 E Tachevah Dr, Palm Springs, CA

South Facility

Service Areas
4567 E Palm Canyon Dr, Palm Springs, CA
2345 S Camino Real, Palm Springs, CA
6789 E Mesquite Ave, Palm Springs, CA
8910 S Calle Palo Fierro, Palm Springs, CA

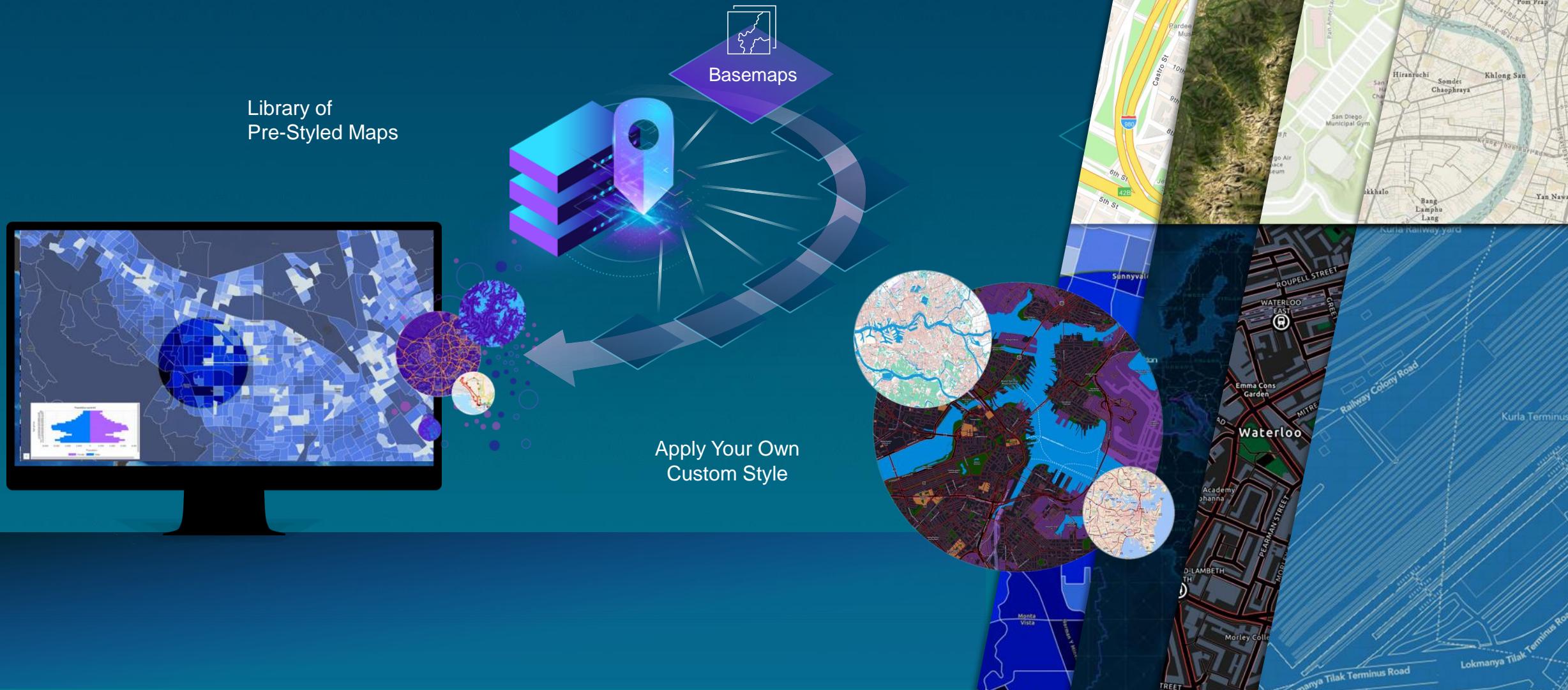
Grocery Delivery Demo

Courtney Yatteau

MapLibre GL JS, Calcite Components, ArcGIS REST JS

Location Services | Basemaps

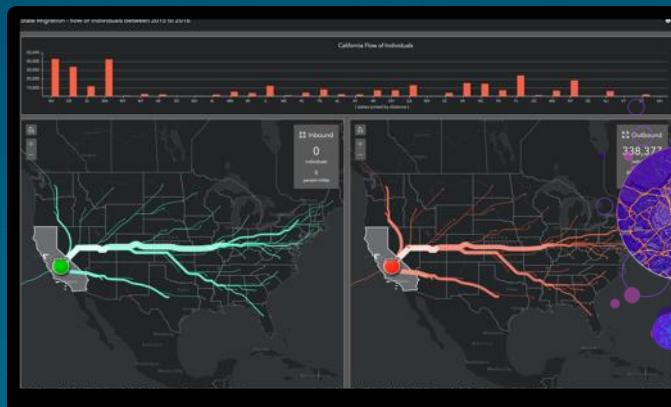
Ready-to-Use Authoritative Maps



Location Services | Data Hosting

Create Services From Your Data

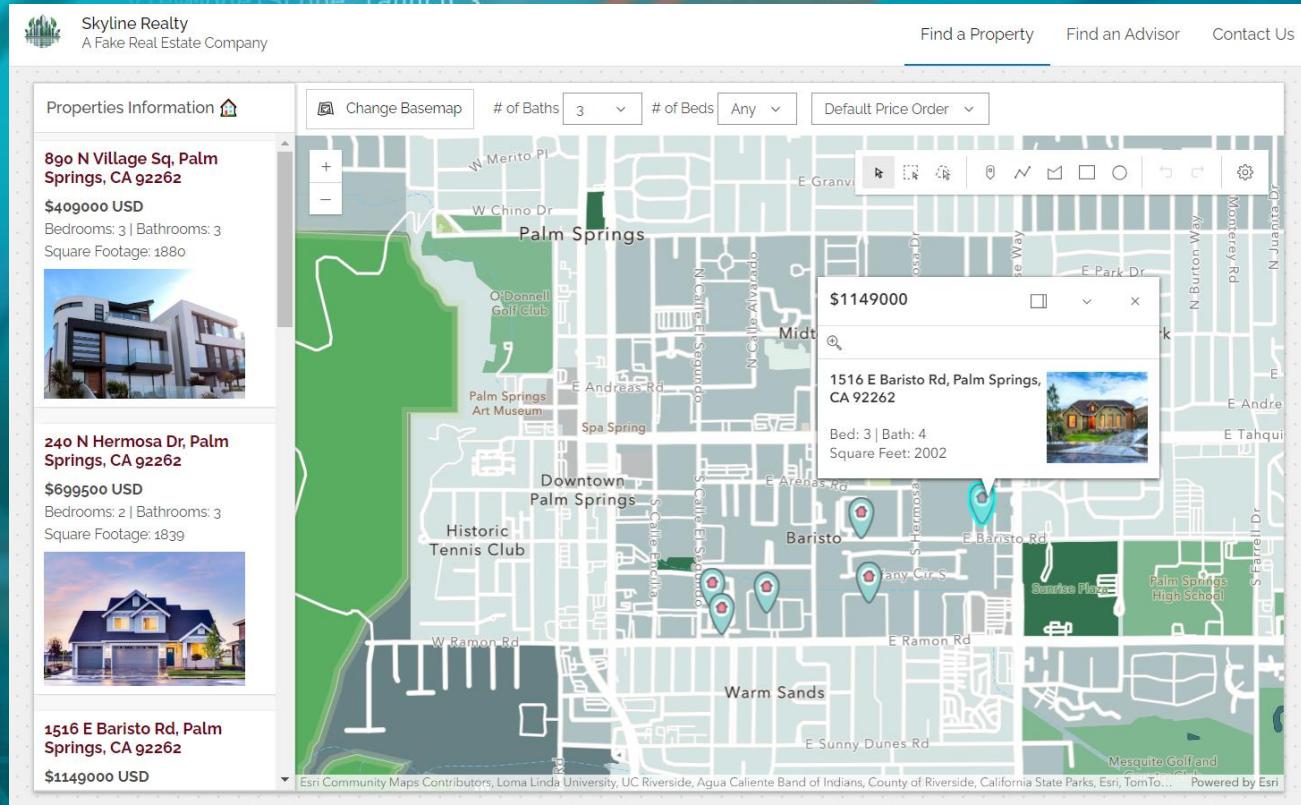
- Visualize, Edit & Analyze
- Secure, Scalable, Performant
- Maintain Data Ownership



Real Estate Demo

Courtney Yatteau

 *ArcGIS Maps SDK for JavaScript,
Calcite Components*



Skyline Realty
A Fake Real Estate Company

Properties Information 

Change Basemap # of Baths 3 # of Beds Any Default Price Order

Find a Property Find an Advisor Contact Us

890 N Village Sq, Palm Springs, CA 92262
\$400000 USD
Bedrooms: 3 | Bathrooms: 3
Square Footage: 1880

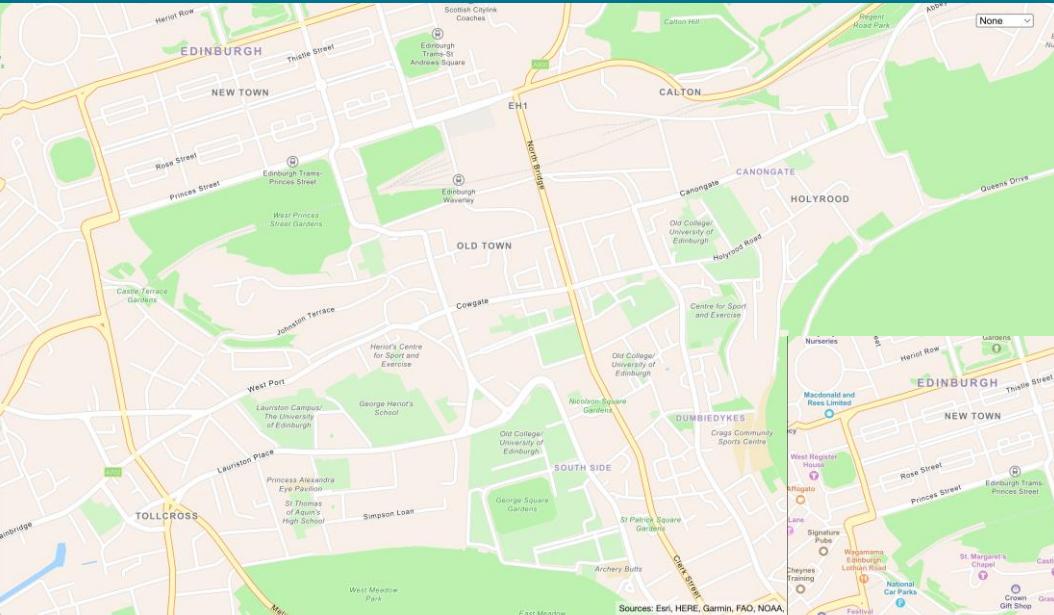

240 N Hermosa Dr, Palm Springs, CA 92262
\$699500 USD
Bedrooms: 2 | Bathrooms: 3
Square Footage: 1839


1516 E Baristo Rd, Palm Springs, CA 92262
\$1149000 USD
Bed: 3 | Bath: 4
Square Feet: 2002


Map showing the location of the properties in Palm Springs, California. The map includes labels for Merito Pl, W. Chino Dr, E. Granv., N. Calle Alvarado, Midt., E. Park Dr., N. Burton Way, Montebello Rd, N. Juana-Dy, E. Andre, E. Tahqui, S. Farrell Dr., S. Calle Encinal, W. Ramon Rd., E. Arenas Rd., S. Calle El Roble, Baristo, Hermosa, E. Baristo Rd., E. Sunny Dunes Rd., Mesquite Golf and Country Club, and Palm Springs High School. Other landmarks shown include the O'Donnell Golf Club, Palm Springs Art Museum, Spa Spring, Downtown Palm Springs, Historic Tennis Club, and Warm Sands.

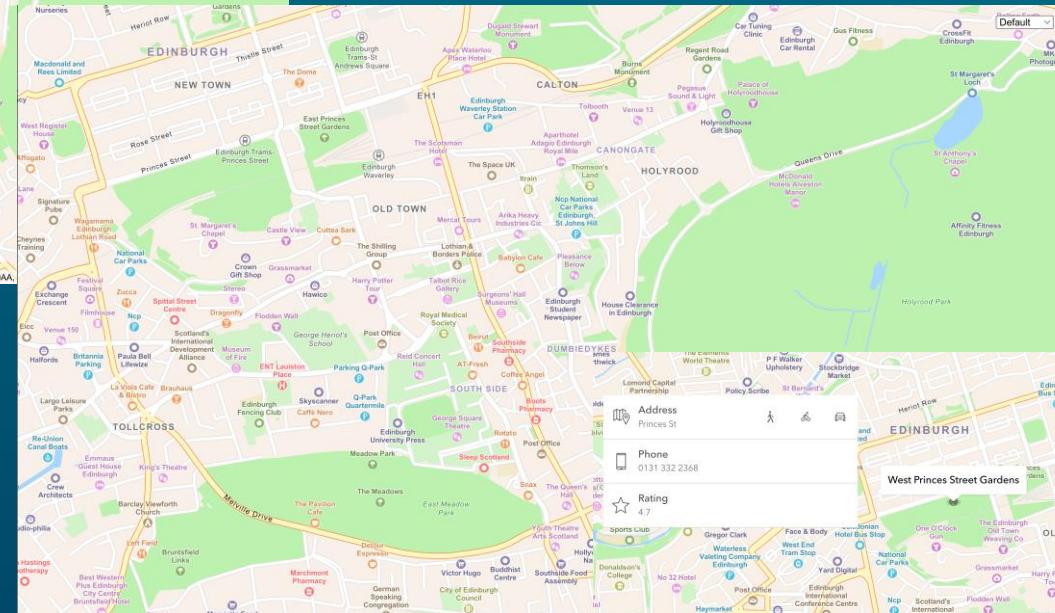
Esri Community Maps Contributors, Loma Linda University, UC Riverside, Agua Caliente Band of Indians, County of Riverside, California State Parks, Esri, TomTom... Powered by Esri

No Places

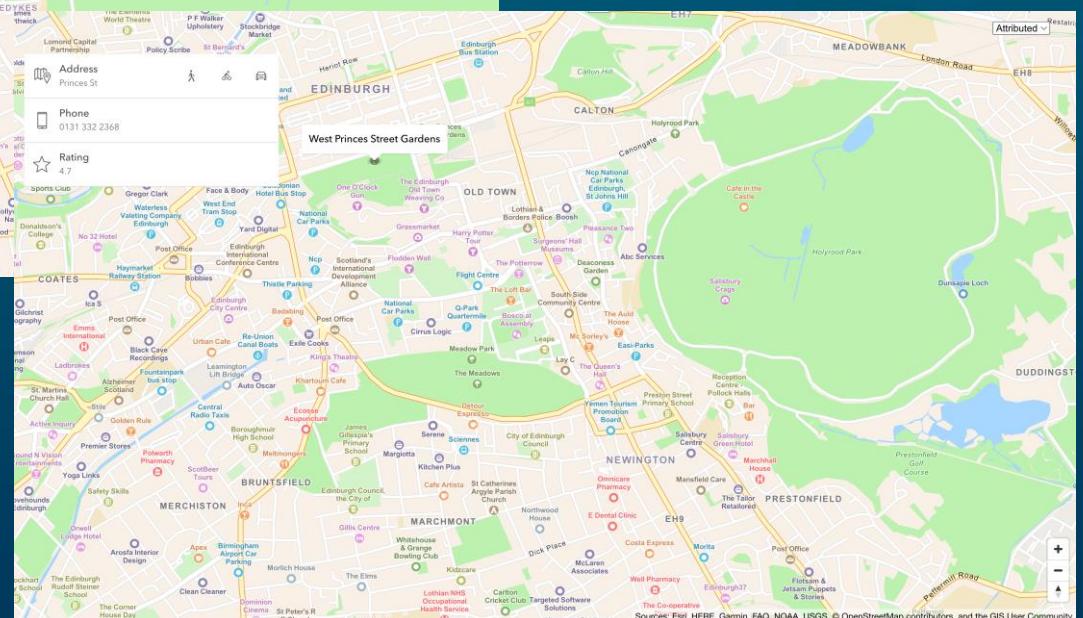


Location Services | Basemaps Places Options for Developers

With Cartographic Places



With Attributed Places



Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community

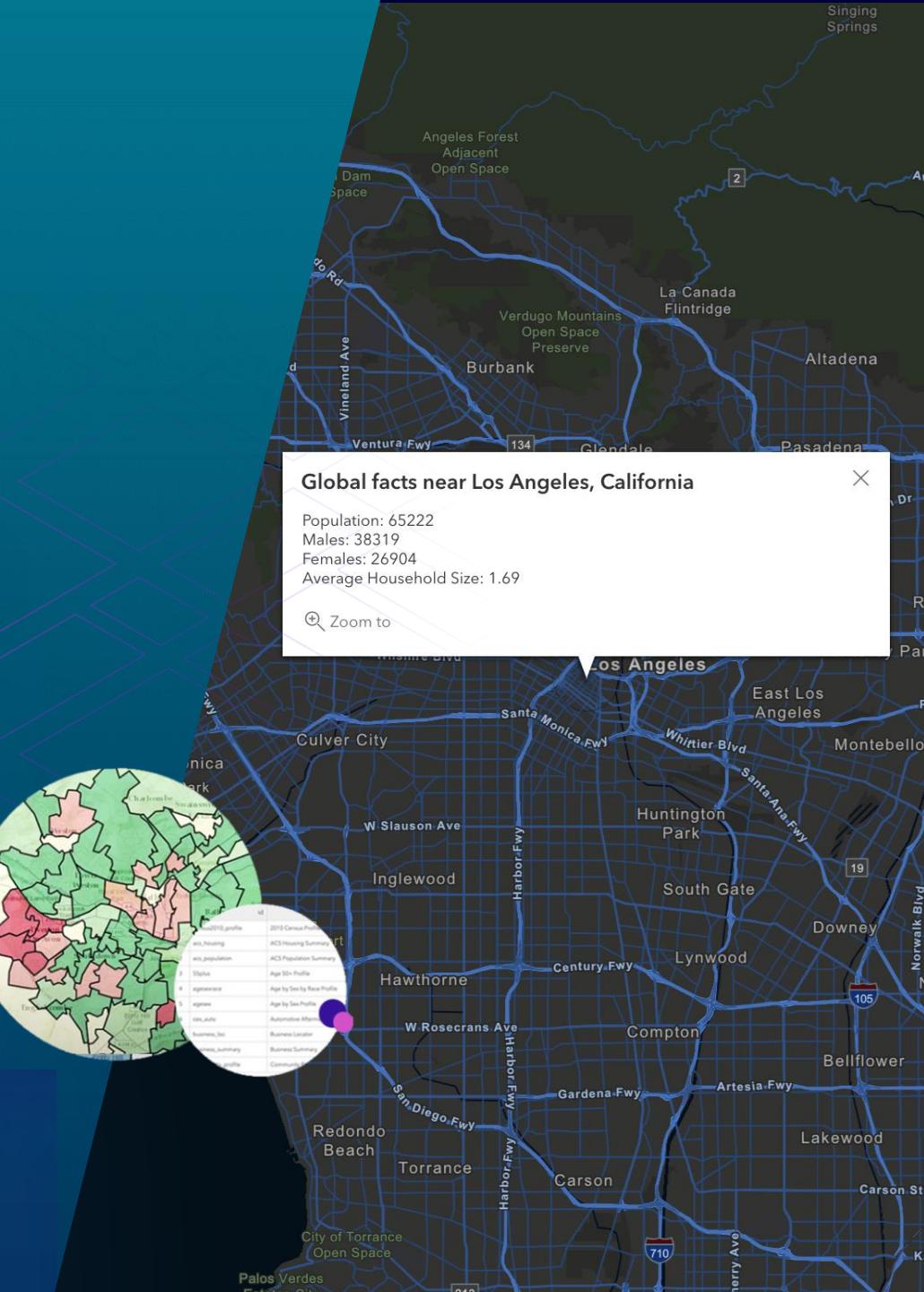
Location Services | Demographic Data

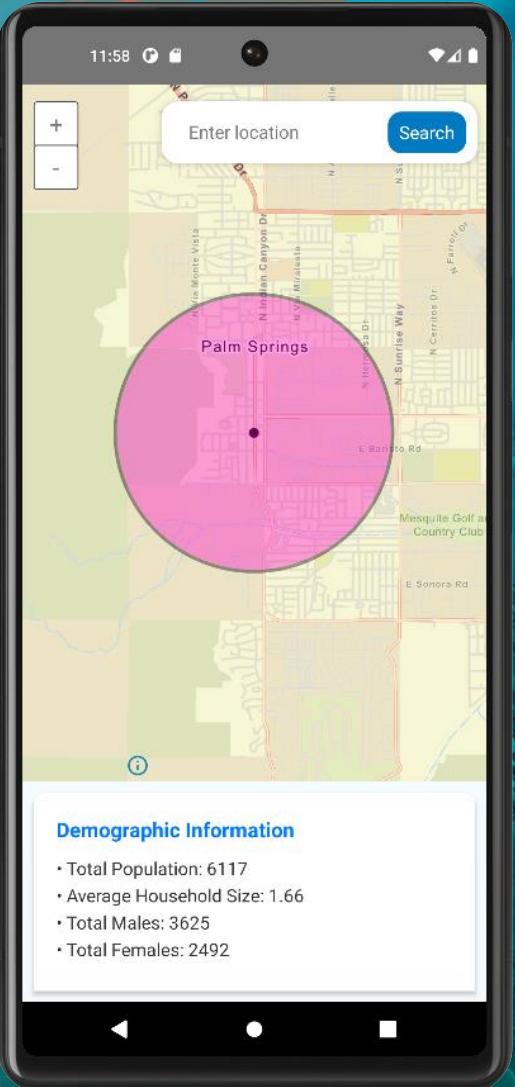
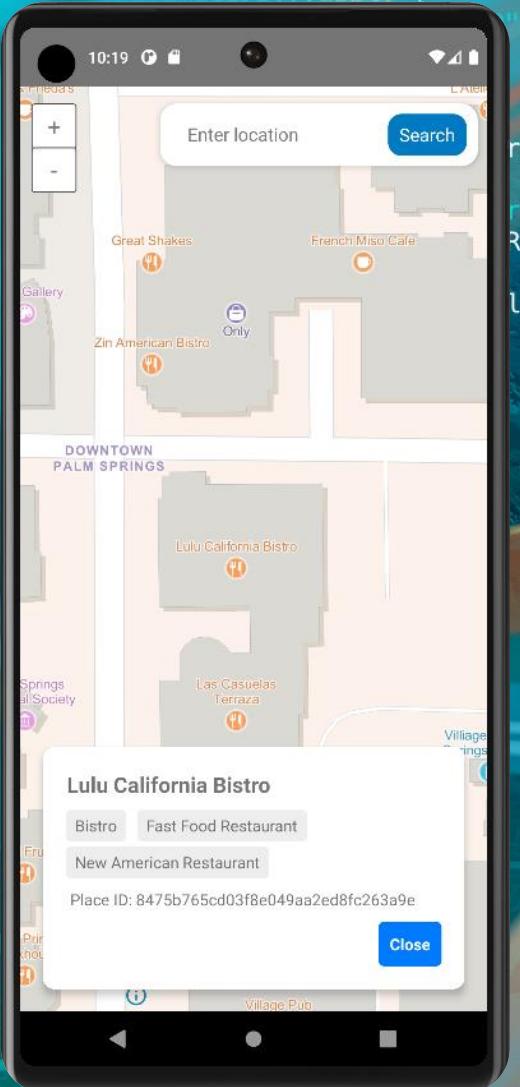
GeoEnrich Your Data

- Thousands of Variables
- Data Enrichment
- Reports and Infographics



Authoritative,
Comprehensive & Global





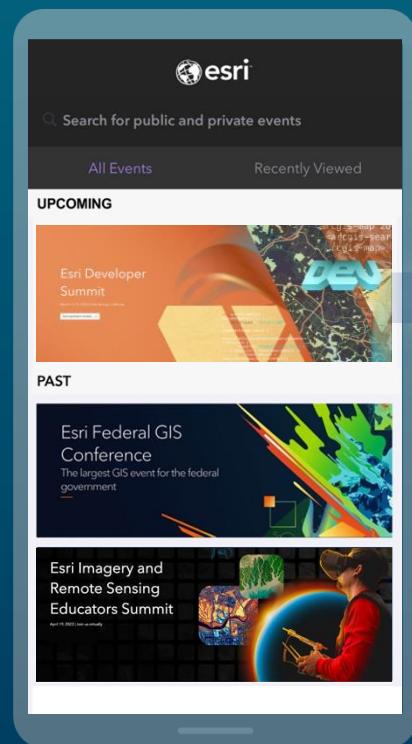
React Native Demo

Courtney Yatteau

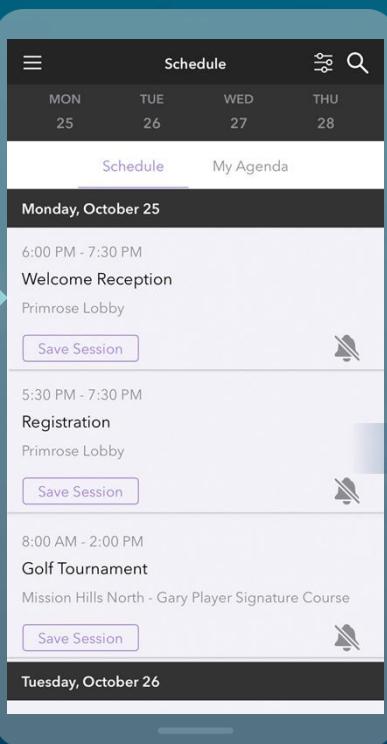
 *MapLibre GL SDK for React Native,*
 *ArcGIS REST APIs, React Native*

Please Share Your Feedback in the App

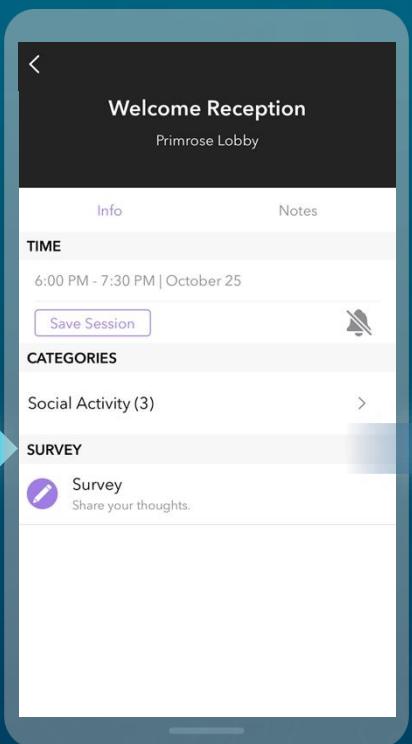
Download the Esri Events app and find your event



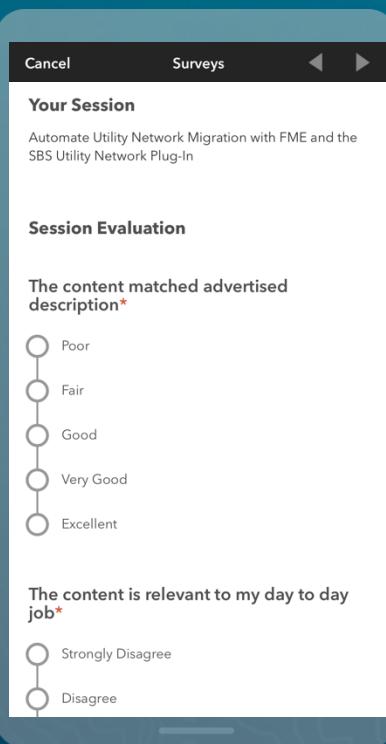
Select the session you attended



Scroll down to "Survey"



Log in to access the survey



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github.com/Esri



github.com/EsriDevEvents



links.esri.com/EsriDevCommunity

```
<arcgis-map zoom="4" center="-118,34" />  
  
view.goTo({  
  center: [-126, 49]  
})  
.catch(function(error) {  
  if (error.name != "AbortError")  
    console.error(error);  
});
```

```
// show the compass and pass the  
mapRotation state data  
Compass(rotation = mapRotation);  
    // reset the ComposableMapView's  
rotation to point north using the  
mapViewModel  
    mapViewModel.setViewpointRotation(0.0)  
}
```



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OF
WHERE®

```
const layerList = new LayerList()  
view: view  
});  
  
// Add widget to the top right corner  
// of the view  
view.ui.add(layerList, "top-right")  
  
<arcgis-map zoom="4" center="-116,34"
```