



How We Built It: IoT Viewers

John Gibson

*2021 ESRI
DEVELOPER SUMMIT*

Agenda

- Bootstrapping a new app using the `@arcgis/cli`
- Scaffolding an application with the Esri Design System
- Integrating ArcGIS API for JavaScript widgets into a React app
- Building a custom history lines visualization
- Designing modular components for handling a variety of symbol types
- Building React wrappers for integrating Web Components

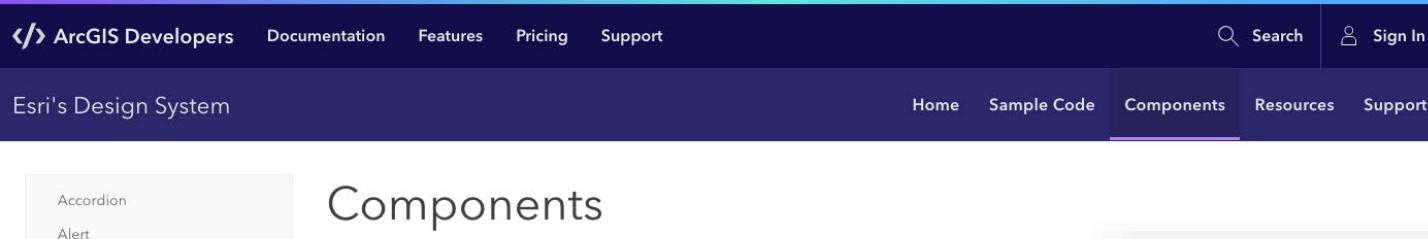
Tech Stack

- **React**
- **TypeScript**
- **ArcGIS API for JavaScript**
- **@arcgis/cli**
- **@esri/arcgis-rest-auth, @esri/arcgis-rest-portal**

Esri's design system

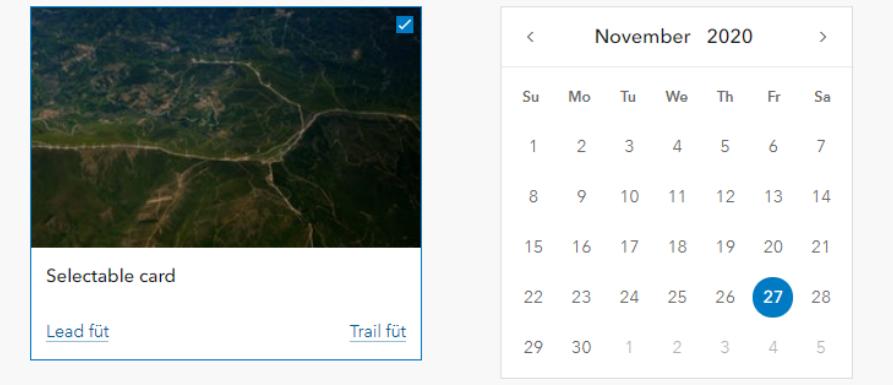
- Create beautiful, consistent apps faster
- Seamlessly integrate into ArcGIS ecosystem
- Design guidelines, UI components, icons

Developer site integration

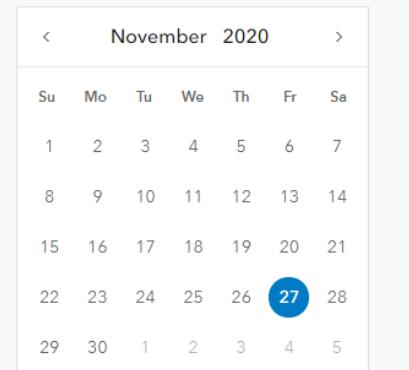


The screenshot shows the ArcGIS Developers website with the 'Components' tab selected in the top navigation bar. The main content area displays a grid of UI components including Accordions, Alerts, Avatar, Buttons, Card, Checkbox, Chip, Color picker, Combobox, Date picker, Dropdown, Icon, Inline Editable, Input, Label, Link, Loader, Modal, Notice, Pagination, Popover, Progress, Radio Button, Radio Button Group, Radio Group, Rating, and Selectable card. Each component is shown with a small preview image and a label below it.

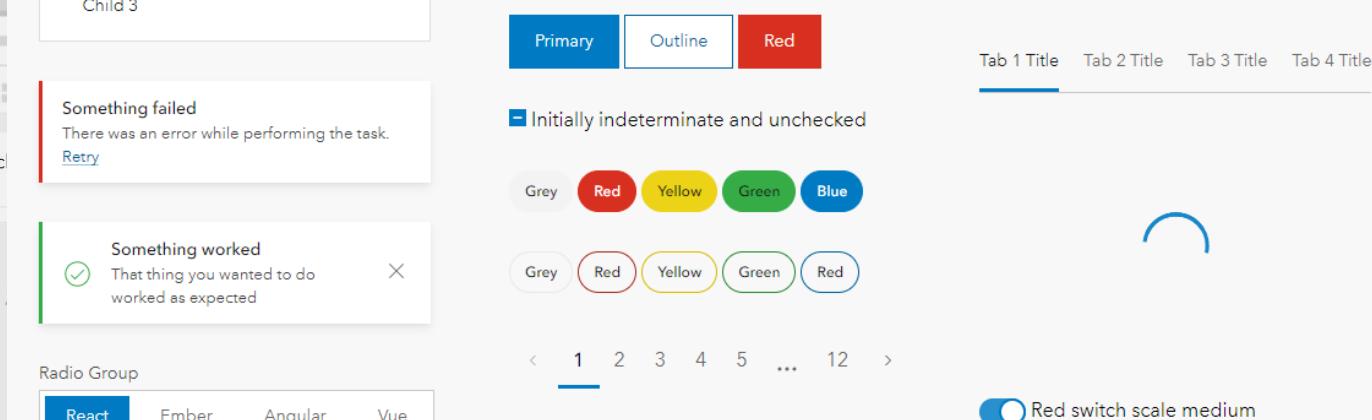
Responsive, accessible, web components



This screenshot shows a detailed view of the Accordion and Selectable card components. The Accordion component is shown with five items, each with a header and content area. The Selectable card component is shown with a satellite map of a landscape and a list of items: 'Selectable card', 'Lead füt', and 'Trail füt'. Below the card are three buttons: 'Primary' (blue), 'Outline' (white), and 'Red' (red).



This screenshot shows a calendar component for November 2020. The calendar grid shows dates from 1 to 30, with the 27th highlighted in blue. Below the calendar are four tabs labeled 'Tab 1 Title', 'Tab 2 Title', 'Tab 3 Title', and 'Tab 4 Title'.

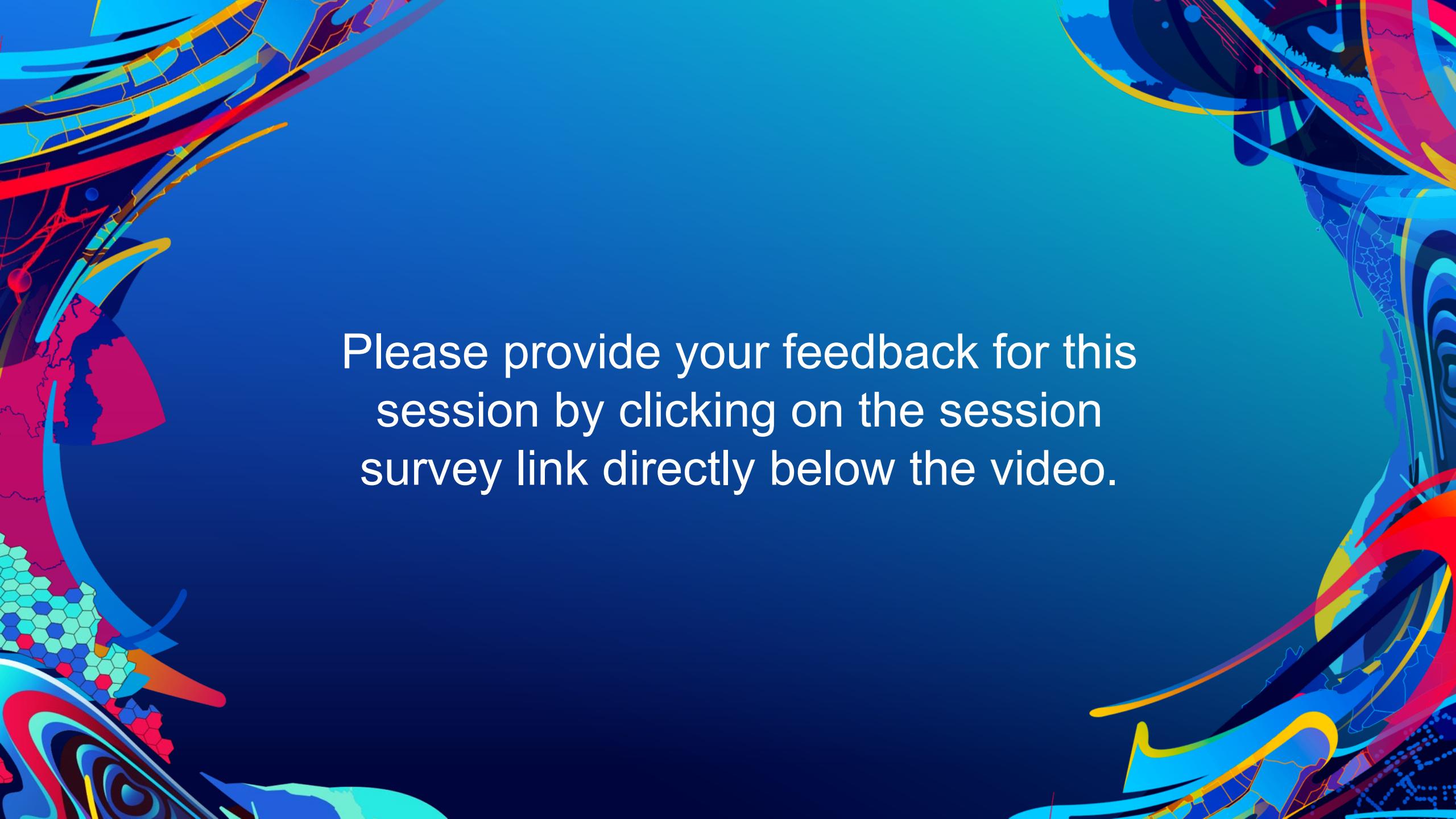


This screenshot shows several other UI components: a Radio Group with a list of items, a set of colored buttons (Grey, Red, Yellow, Green, Blue), a set of colored buttons with outlines (Grey, Red, Yellow, Green, Red), and a Pagination component with a page number 1 highlighted in blue.

Red switch scale medium



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