Using ESRI JavaScript API with React JS and Vue JS
To Build Modern Web Applications for GIS-related Tasks
About Me

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• Web development for the Library Data & Digital Services of University of Idaho
• Currently working on Inside Idaho Imagery Explorer and Idaho Rangeland Atlas web applications
• Majoring in Electrical Engineering & Computer Science (University of Idaho)
ESRI
JavaScript API
Overview

ESRI Developer API capabilities

Capability highlights

Display your data in 3D  
Work with basemaps  
Display and manipulate imagery  
Perform analysis  
Visualize data by size  
Visualize data by color  
Interact with subsurface data  
Create realistic scenes
Why Use JavaScript Frameworks?
<table>
<thead>
<tr>
<th>Development Tasks</th>
<th>Vanilla JavaScript</th>
<th>JavaScript Frameworks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write complex, efficient and easy to maintain User Interface</td>
<td>Difficult</td>
<td>Easy</td>
</tr>
<tr>
<td>Keep the User Interface synchronized with the state of the application</td>
<td>Difficult</td>
<td>Easy</td>
</tr>
<tr>
<td>Code faster and increase development velocity by following convention</td>
<td>Low velocity</td>
<td>High velocity</td>
</tr>
</tbody>
</table>
JavaScript Frameworks Trend
Using ESRI JavaScript API with Vue

Idaho Rangeland Atlas Web Application
Presenting Geographic Data with Web Components
Applying Raster Functions to Web Map
Creating Custom Widgets for Web Map
Using ESRI JavaScript API with React

Idaho Imagery Explorer Web Application
Creating Custom Widgets and Controls

- Search Widget
- Info Widget
- Layer Controls
Authentication and Security
Thank You

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References

- “ArcGIS API for JavaScript.” System Requirements | ArcGIS API for JavaScript 4.8, developers.arcgis.com/javascript/.
- “React – A JavaScript Library for Building User Interfaces.” – A JavaScript Library for Building User Interfaces, reactjs.org/.
- “Vue.js.” - Vue.js, vuejs.org/.
- “Angular Docs.” Angular Docs, angular.io/.