

# Beginning JavaScript in ArcGIS

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# Beginning JavaScript in ArcGIS

- Setting up your Dev Environment
  - REST API
    - <http://resources.arcgis.com/en/help/arcgis-rest-api/index.html#//02r3000000tq000000>
  - Code Editors
    - Notepad++
    - Aptana Studio 2
    - Brackets
    - <https://codenvy.com>
  - ArcGIS API for javascript
    - <https://developers.arcgis.com/javascript/>



# Beginning JavaScript in ArcGIS

## Why Dojo?

[https://developers.arcgis.com/javascript/jshelp/why\\_dojo.html](https://developers.arcgis.com/javascript/jshelp/why_dojo.html)

- There are several reasons that Dojo was chosen as the foundation for the ArcGIS API for JavaScript: the dojo build system
- an easy to use class based inheritance system
- AMD module loader for managing code in large applications
- vector graphics abstraction via dojox/gfx to simplify drawing graphics using SVG, Canvas or VML
- dojo and dijit are both fully accessible
- dojo fully supports internationalization



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1. Set up a Codenvy account <http://codenvy.com>
2. Clone the Git Repository  
<https://github.com/IEAGIS/ArcGIS-JavaScript>
3. Name the project 'ArcGIS-JavaScript'
4. Select 'JavaScript' as the project type



# Beginning JavaScript in ArcGIS

- Building a simple application
  - Build a minimal HTML5 document

```
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8"/>
    <meta name="viewport" content="initial-scale=1, maximum-scale=1, user-scalable=no"/>
    <title></title>
  </head>
</html>
```



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- Include the ArcGIS Javascript API

```
<link rel="stylesheet" href="http://js.arcgis.com/3.11/esri/css/esri.css">  
<script src="http://js.arcgis.com/3.11/"></script>
```



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- Load specific modules

```
require(["esri/map",  
        "dojo/domReady!"],  
function(Map) {  
    map = new Map("mapDiv", {  
        logo:false,  
        basemap: "national-geographic",  
        center: [-92.541, 34.70],  
        zoom: 8  
    });  
});
```



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## – Ready the DOM

- **dojo/domReady!** is an AMD loaded plugin that will wait until the DOM has finished loading before returning.
- This ensures all of your HTML DOM Nodes have been loaded and are ready to be manipulated via Dojo





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## – Ready the DOM

```
require(["dojo/domReady!"],
```

```
function(){
```

```
// will not be called until DOM is ready
```

```
});
```



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## – Ready the DOM

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- Find Task

Search a map service exposed by the ArcGIS Server REST API based on a string value. The search can be conducted on a single field of a single layer, on many fields of a layer, or on many fields of many layers.

- Identify Task

Performs an identify operation on the layers of a map service resource exposed by the ArcGIS Server REST API.

- Query Task

Executes a query operation on a layer resource of a map service exposed by the ArcGIS Server REST API.



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- Find Task
  - Set up findParameters
  - Execute your findTask
  - Show your results



# Beginning JavaScript in ArcGIS

- Identify Task
  - Set up identifyParameters
  - Execute your identifyTask
  - Show your results



# Beginning JavaScript in ArcGIS

- Query Task
  - Set up your Query
  - Execute your queryTask
  - Show your results



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- Dojo Dijit themes

<http://dojotoolkit.org/reference-guide/1.10/dijit/themes.html#dijit-themes>

- Use Dojo Dijit themes for a consistent look and feel to dojo widgets
- *claro.css*, *tundra.css*, *nihilo.css*, or *soria.css*
- *Dijit theme tester*

<http://download.dojotoolkit.org/release-1.9.3/dojo-release-1.9.3/dijit/themes/themeTester.html?theme=nihilo>

