CERTIFICATION EXAM GUIDE

ArcGIS API for JavaScript
19-001

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CONTENTS

EXAM CATALOG PAGE – EAJS19-001

Title:

ArcGIS API for JavaScript 19-001 Specialty

Language:

English

Duration (hours, minutes):

1 hour

Price:

$150

DESCRIPTION

The ArcGIS API for JavaScript Specialty exam tests the candidate's experience developing and deploying apps for JavaScript. Qualified candidates should demonstrate proficiency using the API for mapping, visualization, handling asynchronous events, and integrating with other ArcGIS platform components. Specialty exam candidates must already hold an Esri certification.

QUALIFICATIONS
A qualified candidate should be able to perform the following tasks:

- Implement the different kinds of renderer

- Explain options for visualizing features using visual variables

- Change renderers

- Configure pop-ups

- Symbology

- Usage of Basic Widgets like LayerList/BasemapGallery/Print etc.

- How to access Portal/ArcGIS Online items through JavaScript API

- Detect changes in the state of a View

- Query for data based on attributes and or geometry

- Differentiate between querying a layer and a LayerView

- Reorder operational layers – setting index

- Programmatic navigation (e.g. bookmarking an extent inside of an application (go to))

- How to troubleshoot issues with loading modules

- How to add operational layers

- Add data from a Map Service.

- Add data from a Feature Service.

- Add data from an Image Service.

- Authenticate a user through Portal or ArcGIS Online

- Navigate the JSAPI Documentation to independently solve a development task

- Access and edit secured data

- Add and configure ArcGIS JSAPI widgets (ootb) to mapping application

- Assign properties to widgets

- Place widgets using the View.UI

- Search Widget

- Handle events

- Retrieve mouse clicks on the map and perform an action with the point

- Explain what different events can trigger based off the map components.

- Promises from 4.x

- Asynchronous call backs

- Understand how the different Tasks work and understand the underlying concept of these tasks (i.e. using GeometryService)

- Describe the difference between 2D and 3D mapping functionalities

A qualified candidate should be familiar with the following:

- 4.x API

- ArcGIS Online or ArcGIS Enterprise

- ArcGIS Services Directory

- Text editor

- Web browser

A qualified candidate should NOT be expected to perform the following tasks:

- Familiarity of using OAuth etc. using ArcGIS API for JavaScript.

- Use of SketchViewModel

- Perform a search using multiple search sources

- How to access secure resources/Esri Resource Proxy.

- Object oriented code with TypeScript

SKILLS MEASURED

The following list will familiarize candidates with the exam sections to help guide exam preparation. The relative weight of each section is provided to illustrate the approximate size of each section. Candidates should review this list and assess their knowledge of each skill. Specific preparation resources are available to assist with refreshing in areas where any knowledge gaps are found.

Data Visualization

- Visualize map data using rederers and symbology
- Label features in a map
- Visualize client-side data
- Troubleshoot display issues

ArcGIS Resources

- Add items from ArcGIS Online/Enterprise to a web application
- Retrieve or filter based on attribute data, or geometry
- Troubleshoot ArcGIS Resources using the Services Directory

API Patterns

- Recognize and respond to events
- Implement the usage of JavaScript API promises
- Use cascading loadable dependencies

View

- Navigate a view in 2D and 3D
- Implement widgets (e.g. pop-ups)
- Use different layer types on a view

PREPARATION RESOURCES

The following training resources are available to help you prepare for your exam but are not required. Please utilize this list of preparation resources with the list of "skills measured" topics so you can identify appropriate training options for any possible knowledge gaps.

Please note that completing the recommended training courses does not guarantee that you will achieve the requirements for a specific certification exam.

DATA VISUALIZATION

Web Course: Basics of JavaScript Web Apps

ARCGIS RESOURCES

Instructor-led: Introduction to Web Development Using ArcGIS API for JavaScript
Developers Tutorial: Display a web map
Developers Tutorials: Display point, line, and polygon graphics
Developers Tutorial: Add layers to a map
Developers Tutorial: JavaScript API: Style Feature Layers
Developers Tutorial: JavaScript API: Query a Feature Layer
Developers Tutorial: JavaScript API: Access Services with OAuth 2.0

API PATTERNS

Video from 2018 User Conference: ArcGIS API for JavaScript: An Introduction

VIEW

Training Seminar: Building 3D Web Apps with ArcGIS API for JavaScript
Developers Tutorial: JavaScript API Configure Pop-ups
Developers Tutorial: Search for an address
Developers Tutorial: JavaScript API: Add Layers to a 3D Scene

BOOKS AND ADDITIONAL SOURCES

Esri ArcGIS for Developers: API for JavaScript Guide