




REQUIREMENTS



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About the Tutorial

RequireJS is a JavaScript library and file loader which manages the dependencies between JavaScript files and in modular programming. It also helps to improve the speed and quality of the code.

This tutorial is intended to make you comfortable in getting started with RequireJS and its various functions.

Audience

This tutorial is designed for software programmers who aim to learn the basics of RequireJS and its programming concepts in simple and easy ways. This tutorial will walk you through the different components of RequireJS with suitable examples.

Prerequisites

Before proceeding with this tutorial, you should have a basic understanding of HTML, CSS, JavaScript, Document Object Model (DOM) and any text editor. As we are going to develop a web based application using RequireJS, it will be good if you have an understanding on how internet and web based applications work.

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1. RequireJS – Overview

RequireJS is a JavaScript library and file loader which manages the dependencies between JavaScript files and in modular programming. It also helps to improve the speed and quality of the code.

RequireJS was developed by David Mark and its initial version v1.0.0 was released in 2009. It is an open source and version 2.3.3 is its recent stable release.

Why use RequireJS?

- It is an open source JavaScript library under the MIT license.
- It provides asynchronous module loading.
- It has the ability to load nested dependencies.
- If you have many small files, then don't need to worry about keeping track of dependencies order.
- It provides support for plugins and loads more than one JavaScript files.

Features of RequireJS

- It manages the dependencies between JavaScript files and improves the speed and quality of the code.
- It combines and minifies the modules into one script for an optimized experience.
- It reduces code complexity in large applications.
- It gathers different JavaScript files from different modules at the time of compilation.
- It allows for easy debugging as it loads the files from plain script tags.

2. RequireJS – Environment Setup

In this chapter, we will understand how to set up the environment for RequireJS. For this, you need to download the latest version of RequireJS library. You can download either the [minified version](#) or the [detailed version](#).

After downloading, we need to include the **require.js** file in your libs folder and the structure of your project should be as shown below:

```
projectname/  
|--index.html  
|--libs/  
    |--main.js  
    |--require.js  
    |--helper/  
        |--util.js
```

We need to define an html file as **index.html** where RequireJS is loaded as shown below.

```
<html>  
<head>  
<script data-main="libs/main" src="libs/require.js"></script>  
</head>  
<body>  
  <h1> RequireJS Sample Page </h1>  
</body>  
</html>
```

Note that only **require.js** with a RequireJS call is included in the script tag to load the script.

RequireJS in Node

There are two ways to get the Node adapter.

- **npm:** You can install the latest release of requirejs from the command prompt as shown below:

```
npm install requirejs
```

- Download **r.js:** You can download the **r.js** file from the [download](#) page and source from **r.js** [repository](#) page.

End of ebook preview

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