

# Dofactory JS 6.0

*Getting Started*



by

Data & Object Factory, LLC

[www.dofactory.com](http://www.dofactory.com)

# 1. Getting Started

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## Introduction

Welcome to *Dofactory JS 6.0*, a unique JavaScript Design Pattern package for developers who want to learn about JavaScript Patterns and Pattern Architectures.

This document will get you started. It discusses

- 1) What's included in the package,
- 2) How to set it up, and
- 3) How to optimize your learning experience.

But first we ask that you review our simple license and copyright notice.

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## What's included

*Dofactory JS 6.0* consists of 9 chapters. They are:

1. Getting Started Guide (this document)
2. JavaScript & Pattern Essentials
3. Modern JavaScript Patterns
4. Classic JavaScript Patterns

5. Model View Patterns
6. jQuery Design Patterns
7. Architecture Patterns
8. JavaScript Patterns in Action
9. Becoming a JavaScript Rockstar

These chapters are available in two different formats:

1. A series of PDF documents.
2. A Visual Studio 2022 solution, running ASP.NET Core 6, with live JavaScript client code.

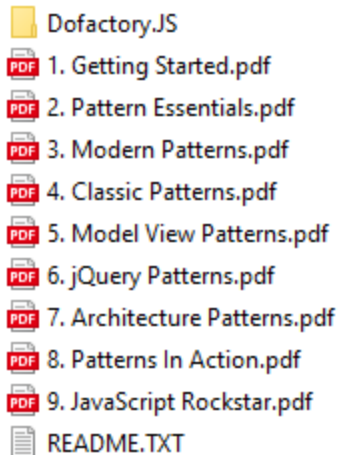
Please note that the contents of the PDF and Visual Studio solution are the same. There are no differences, except that you can experience the patterns live when running Visual Studio.

There are 9 PDF documents, one for each chapter. They have all the necessary information which includes discussions + code; and they can be read in order. The advantage of PDF is that the files are easily viewable, without the need to run Visual Studio. These documents are also printable.

The Visual Studio solution is a live web application which you can install on your computer. The advantage of this format is that 1) the entire system is available in a single, easy-to-navigate app, and 2) the JavaScript patterns and other code samples are live, meaning you can view and run the code.

## Setup

The zip file you downloaded contains everything you need: PDF documents, Visual Studio files, JavaScript sources, etc. Here is a screenshot of what's inside:



It has 9 chapters in PDF format, a readme.txt file, and a ‘Dofactory.JS’ folder which contains the Visual Studio solution.

Simply unzip the zip file in a directory on your local machine. You are now ready to go.

Next, we'll review the different ways to configure and experience the system.

## PDF Files

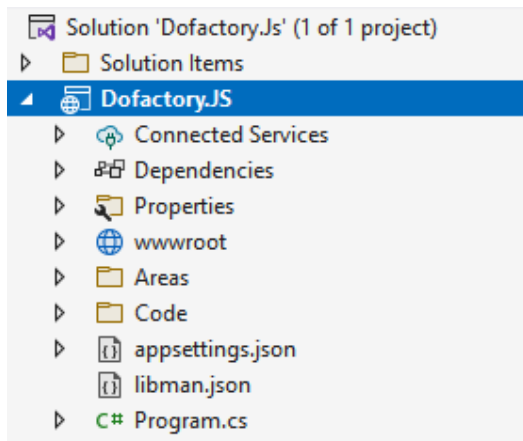
If you choose to use the PDF files, they are readily viewable with Adobe Reader.

## Visual Studio

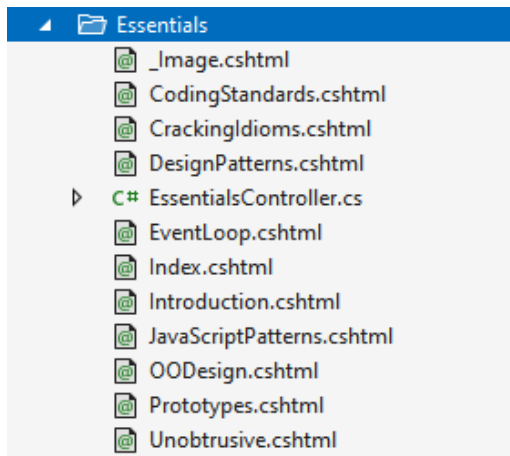
To run the Visual Studio solution, you'll need Visual Studio 2022 with .NET Core 6.0 or later. Any Visual Studio edition will work, i.e. Community, Professional, or Enterprise. If you don't have Visual Studio, you can download and install the *free* Community edition from Microsoft's website.

To open the app, double click the *Dofactory.JS.sln* file (from inside the '*Dofactory.JS Solution*' folder) and Visual Studio will open. Alternatively, open Visual Studio directly and you will see an ‘Open a Project or Solution’ button from where you can select that same file. Finally, you can also open the solution from inside a running instance of Visual Studio by selecting the File > Open Project/Solution menu.

When opening the solution, you will see a simple project structure with just 2 main folders: *Areas* and *Code*.



When opening one of the Areas you will find that all models, views, and controllers (MVC) are located in a single folder. Below is the 'Essentials' chapter.



These so-called '*flat-areas*' are a feature of the *Dofactory .NET* platform which makes navigating .NET Core solutions super simple. To learn more, see our *Dofactory .NET* products that are available on [www.dofactory.com](http://www.dofactory.com).

The focus in the Visual Studio solution is on the .cshtml pages with their client-side JavaScript. There is no significant server-side code other than several controllers with


action methods to get the application to run. This document will not further discuss the server-side because the focus of this package is on client-side JavaScript.

Below is a screenshot of the running solution:

Dofactory JS
Dofactory JS version 6.0

Home

## Welcome



Welcome to Dofactory JS, a JavaScript Design Pattern Framework for web developers. These pages discuss and showcase *live versions* of the JavaScript Patterns, jQuery Patterns, and numerous other code samples.

The same information is also available in a set of PDF-formatted Pattern Guides. Shortcuts to all Pattern Guides are listed to the right. Click the links to open them.

Below is a list of sections in this course. It is recommended that you go through the sections in sequential order. Click on the title or *Let's go* button to enter a section.

- [Getting Started Guide](#)
- [Pattern Essentials Guide](#)
- [Modern Patterns Guide](#)
- [Classic Patterns Guide](#)
- [Model View Patterns Guide](#)
- [jQuery Patterns Guide](#)
- [Architecture Patterns Guide](#)
- [Patterns in Action Guide](#)
- [JavaScript Rockstar Guide](#)

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➔ [JavaScript & Pattern Essentials](#)

This section presents an introduction to Design Patterns as well as essential JavaScript topics which will provide a solid foundation before we embark on our journey to JavaScript + jQuery Design Patterns.

Let's go

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➔ [Modern JavaScript Design Patterns](#)

In recent years, numerous Modern Design Patterns have evolved allowing JavaScript developers to

Let's go

The links at the top right open the .pdf documents in case you need them. At the bottom are 9 links that open each chapter with live Visual Studio pages.

Navigation is made easy with bread-crumbs at the top, and previous/next links at the bottom of each page, like so:

< [Module](#)

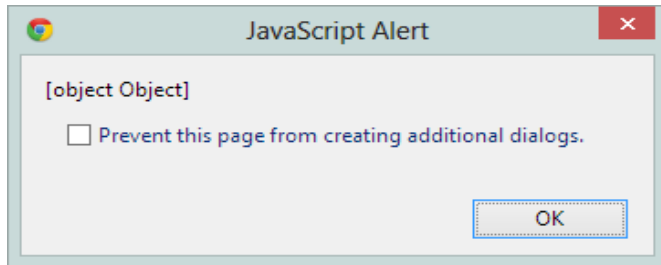
[Invocation](#) >

## Tips

Here are a couple of tips that will improve your learning experience.

Whichever format you choose, PDF or Visual Studio, we suggest that you create a shortcut (icon or menu) to this source so that it is quickly available as a reference during your JavaScript programming sessions.

The JavaScript code in the app provides feedback through several *alert* boxes. After a couple alert messages, some browsers will offer not to allow any further messages or dialogs, something like this:



It is best to ignore the checkbox or else you won't be able to receive feedback from other JavaScript code examples on the page.

## Learning about Patterns

To learn about JavaScript Design Patterns requires that you are familiar with JavaScript. In case you need a refresher, we have a JavaScript tutorial on our website: [www.dofactory.com](http://www.dofactory.com).

You are currently reading Chapter 1. The subsequent chapters are numbered 2 to 9, and it is suggested that you go through these sequentially, as each chapter builds on the previous ones.

Chapter 2 is about JavaScript & Pattern Essentials. It presents a number of topics that are essential to address before you're ready to move on to JavaScript and jQuery Design Patterns. Topics include Intro to Design Patterns, OO Design, Prototypes, the Event loop, and JavaScript Idioms (mini patterns).

The next 5 chapters numbered 3 to 7, each presents a large category of Patterns: Modern Patterns, Classic Patterns, Model View Patterns, jQuery Patterns, and Architecture Patterns. These are the 'meat' of this package.



Chapter 8, Patterns in Action, includes several sample apps that demonstrate the patterns presented in a more comprehensive, real-world setting. To run these, you need the Visual Studio solution, although discussions and source code are also available in the PDF document.

Finally, Chapter 9 is a bonus chapter with 37 tips on becoming a JavaScript 'Rockstar'.

The focus throughout this course is on the code. Developers learn best by reading and exploring code written by expert JavaScript developers. This package includes many code samples which are listed throughout the PDF documents and Visual Studio application pages. You're sure to find many nuggets that you can use in your own work; we encourage you to do so!

### 3<sup>rd</sup> Party sources

The following open-source libraries are used, and included, in this package:

- Bootstrap
- jQuery
- Underscore.js
- Knockout
- Jasmine
- Flot
- Backbone.js
- Backbone.faux.server.js

They are located in the \wwwroot\lib folder.

### Summary

*Dofactory JS 6.0* is a unique package that captures and presents JavaScript design patterns and pattern architectures with numerous code samples and sample applications.

We hope you will be able to use these patterns and practices in your own work and build applications that are robust, elegant, and successful.