



# Mastering Adobe Commerce Frontend : Build Optimized, User-Centric e-commerce Sites with Tailored Theme Design and Enhanced Interactivity /

Winkler, Jakub,  
author

Monografia

A comprehensive guide to Adobe Commerce storefront development covering theme creation, customization, JavaScript usage, and optimization techniques for optimal customer satisfaction Key Features Learn techniques for customizing templates and layouts for an optimal user experience Use the command-line interface for efficient and streamlined theme development and deployment Implement best practices for using JavaScript and frontend optimization techniques for improved performance and customer satisfaction Purchase of the print or Kindle book includes a free PDF eBook Book Description Navigating the frontend realm of the Adobe Commerce platform can often feel like a labyrinth, given its multifaceted systems and intricate layering. This book demystifies Adobe Commerce frontend development, guiding you through its paths with clarity and precision. You'll learn how to set up your local environment, paving the way for a smooth development experience and navigate the platform's theming ecosystem, exploring layout XML systems and the power of templates. As you progress through the book, you'll leverage an array of JavaScript libraries and frameworks that Adobe Commerce boasts of, with special emphasis on RequireJS, jQuery, Knockout.JS, and UI Components. Additionally, you'll gain an understanding of the intricacies of Adobe Commerce CMS, explore frontend-related configurations in the admin panel, unlock the secrets of frontend optimization, and explore the HYVA to enrich user experiences. Practical exercises provided in the book will enable you to create top-notch Adobe Commerce sites that are functional, optimized, user-centric, and a step ahead in the ever-evolving frontend landscape. What you will learn Set up your own Dockerized environment in the Adobe Commerce platform Customize page structure using Layout XML, templates, and a fallback system Build and personalize system emails to match website themes Work with various JavaScript frameworks and libraries in the project Create and manage content using the Adobe Commerce CMS system Discover how HYVA was a game changer for many frontend developers Validate your solutions with the practical examples provided Who this book is for The book is ideal for storefront developers proficient in frontend technologies such as HTML, CSS, and JavaScript, aiming to broaden their knowledge of Adobe Commerce and Magento Open Source applications. If you've encountered challenges with frontend development for Adobe Commerce and struggled to find solutions online, this book is tailored to assist you

**Título:** Mastering Adobe Commerce Frontend Build Optimized, User-Centric e-commerce Sites with Tailored Theme Design and Enhanced Interactivity Jakub Winkler

**Edición:** First edition

**Editorial:** Birmingham, England Packt Publishing Ltd. [2024] 2024

**Descripción física:** 1 online resource (402 pages)

**Nota general:** Includes index

**Contenido:** Cover -- Title Page -- Copyright and Credits -- Contributors -- Table of Contents -- Preface -- Chapter 1: Setting Up the Local Environment -- Technical requirements -- Choosing the best operating system -- Installing the required applications and services -- Preparing the technology stack for AC -- Installing WSL 2 on Windows -- Virtualization with Docker -- Installing Docker and the Docker Compose plugin -- Installing Docker on Windows -- Installing Docker on macOS -- Installing Docker on Linux -- Wrapping things up -- Preparing a Docker manager -- What is Warden? -- Configuring DNS resolution -- SSL configuration -- Alternatives to a functional local environment -- Summary -- Chapter 2: Installing the Magento/Adobe Commerce Application -- Technical requirements -- Getting to know the platform -- Getting a copy of Adobe Commerce/Magento Open Source -- Creating an Adobe ID and getting Composer keys -- Installing Adobe Commerce - preparing Docker -- Installing Adobe Commerce using the CLI -- Installing sample data - let's get some products! -- Summary -- Practical exercises -- Chapter 3: Introduction to Adobe Commerce Theming -- Creating new themes -- Adding a new theme -- Caching system -- Cache types -- Working with cache -- Basic CLI commands -- Deploy commands -- Admin commands -- Indexing commands -- Setup commands -- Fallback system -- CSS file generation -- Grunt -- Summary -- Practical exercises -- Chapter 4: The Layout System -- Technical requirements -- Basic terms related to layout XML -- Introduction to layout XML files -- Layouts and pages -- The layout merging process -- Determining page layout -- Layout XML instructions -- Page configuration (layout handles) -- Blocks, containers, and updates -- Layout overrides -- Summary -- Practical exercises -- Chapter 5: Working with Templates -- Technical requirements What are templates, and how many templates are there? -- What are PHTML files? -- PHTML files - A double-edged sword? -- Template file locations -- Finding the template file -- Templates and blocks -- Working with template files -- Getting arguments from Layout XML files into blocks -- Summary -- Practical exercises -- Chapter 6: Styling an Adobe Commerce Theme -- Technical requirements -- Location and compilation of CSS files -- A quick introduction to LESS files -- Nested syntax -- Variables -- Mixins -- Modularity -- Functions and operations -- Compilation -- CSS compilation types -- Static content signing -- Server-side compilation -- Client-side compilation -- Working with themes -- Extending parent styles -- Overriding parent styles -- Summary -- Practical exercises -- Chapter 7: Customizing Emails -- Technical requirements -- Email customization process -- Installing the required tools to work with emails -- Email template structure -- Managing email templates in the Admin Panel -- Creating new email templates -- Conditional content rendering -- Customizing Email CSS -- Summary -- Practical exercises -- Chapter 8: Introduction to JavaScript Libraries and Frameworks -- Technical requirements -- Exploring the main JavaScript libraries/frameworks/modules embedded in the platform -- RequireJS -- Knockout JS -- jQuery -- Underscore JS -- The location of JavaScript resources -- The challenges associated with JavaScript libraries -- Summary -- Chapter 9: RequireJS and jQuery -- Technical requirements -- RequireJS and AC -- The shortest RequireJS course on the planet -- JavaScript initialization in template files -- Wrapping up -- jQuery -- Using jQuery inside your scripts -- jQuery UI and jQuery Widgets -- JavaScript customization -- Overriding a file -- Extending modules with mixins -- Summary -- Practical exercises Chapter 10: Knockout.js and UI Components -- Technical requirements -- Introduction to Knockout.js -- Using Knockout.js in Adobe Commerce -- Knockout.js bindings -- Creating UI components -- Working with private content -- Browser local storage -- Customer data sections -- Private content versions -- Private content versus blocks -- Summary -- Practical exercises -- Chapter 11: Commonly Used Libraries Bundled with Adobe Commerce -- Technical requirements -- Introduction to bundled libraries -- List of commonly used libraries -- Accordion widgets -- Tabs widget -- Prompt widget -- List of all the widgets embedded into the platform -- Summary -- Practical exercises -- Chapter 12: Storefront-Related Configuration in the Admin Panel -- Exploring the Design configuration section -- Scheduling theme changes -- The AC Content Staging feature -- Category-level customizations -- Category-related settings in the Admin Panel -- Category pages and layout XML -- Product-level customizations -- Product-related storefront configuration -- Product pages and layout XML -- Summary --

Practical exercises -- Chapter 13: Working with Magento CMS -- A quick introduction to Adobe Commerce CMS -- Creating and working with CMS blocks -- Adding new Blocks -- Displaying CMS blocks on the storefront -- Injecting CMS blocks via Layout XML -- Working with widgets -- Creating and working with CMS pages -- Adding new pages -- Working with CMS pages via Layout XML -- CMS directives -- Adobe Commerce Page Builder -- Page Builder templates -- Summary -- Practical exercises -- Chapter 14: Frontend Optimization Techniques -- Technical requirements -- An introduction to frontend optimization -- Google Lighthouse -- Google Core Web Vitals (CWVs) -- Google PageSpeed Insights (PSI) -- Indexes and asynchronous processing -- The minification, merging, and bundling of CSS, JS, and HTML CSS merging and minification -- JS merging, minification, and bundling -- Magepack -- Working with Magepack -- Fastly -- Summary -- Practical exercises -- Chapter 15: Common Tools that Help with Local Development -- Why are third-party tools important? -- ESLint - JavaScript coding standards -- Community tools for better development -- Mage2.TV Cache Cleaner -- Magento Chrome Toolbar -- Summary -- Index -- Other Books You May Enjoy

**ISBN:** 1-83763-738-5

**Materia Título preferido:** Adobe Commerce (Computer file)

**Materia:** Electronic commerce- Computer programs Web site development Web sites- Design

**Enlace a formato físico adicional:** 1-83763-707-5

---

### **Baratz Innovación Documental**

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- [informa@baratz.es](mailto:informa@baratz.es)