



DESIGNING MAP INTERFACES: PATTERNS FOR BUILDING EFFECTIVE MAP APPS

By Michael Gaigg

Esri Press, 2023

173 pages

Paperback: \$44.99, ISBN 978-1-58948-725-3

Review by: Alex Shreffler, Andromeda Solutions

Designing Map Interfaces attempts to describe the basic tenants in map interface design, breaking down the design methodology into simple steps:

1. Selecting the right layout,
2. Interacting with the map,
3. Dealing with complex data,
4. Designing for mobile devices, and
5. Building single-purpose maps.

The first and last chapters also provide advice on getting started and avoiding common mistakes. All together, the book includes seven chapters of pragmatic consideration deservedly given to the creative map-app design process. The author proposes and affirms that the key to a great user interface (UI) is the marriage between the needs of the users and the requirements of the business, something they maintain can only be accomplished through the investigation of user/business needs, the identification of the design strategy, and the development of a visioned solution.

In the preface, the author gives specific instructions on how the reader should make use of the layout of the book, and primes them to look for colored highlights in the text that indicate references to a named UI pattern. While all of these patterns are listed on the author's *Design Patterns For Effective Maps UX* website, one advantage of buying

the book is that the reader has access to its useful pre-chapter commentaries and illustrations. These include the discussion of user types and personas in Chapter 2 (27) which describes five user personas (Expert, Analyst, Executive, Public, and Mobile), each with different needs that are addressed through four characteristics: attention, focus, GIS literacy, and scale. This schema is then repeatedly applied in order to describe the appropriate application layout and UI patterns for each persona based on those characteristics. As suggested in the subtitle of the book, patterns play a key role in understanding user preference and are presented as basic design principles and best practices. Each chapter begins with a breakdown of challenges unique to different aspects of map-centric design before diving into the particular patterns relevant to the chapter topic. In addition to providing best practices throughout the book, the author succeeds in warning about issues to consider when designing the web map interface and suggests alternative designs that avoid potential mistakes.

Speaking of improvement, there are a few points at which the book could be strengthened. The author chose not to use in-text citations and preferred to list all their references in a quasi-Chicago style format at the end of each chapter. Chapter-end references are listed with no ties back to the text, and endnote numbers are not used. This method does not follow typical conventions, and this may be confusing when trying to find the reference clearly in the text—for example, when a book reference appears at the end of Chapter 5 (131) and never mentions the name



© by the author(s). This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

of the resource or its author anywhere in the rest of the chapter. As textbook or reference material, a more careful approach to citation and reference should be expected. It is also noticeable that the material promotes Esri products numerous times, but rarely even mentions any other platforms. Although the content does reference proprietary solutions more often than not, the advice is transferable to any mapping platform, whether provided out-of-the-box or built from complete scratch.

The physical experience of the book is as pleasant as you would expect from an author this meticulously aware of the user experience. The cover creatively presents the title, author, and subtitle in an immersive prop, which instantly communicates the expected content. The book design leaves no room for clutter; only essential information and useful visuals are included. I have noticed that when I bend the book slightly, the color printed on the fly edge of the pattern pages provides a visual chapter indicator on

the page fore-edges, making it easy to find and reference a particular chapter in seconds. It may or may not be intentional, but it is a useful physical UX/UI affordance in a book about digital UX patterns.

This type of work contributes to the larger body of knowledge by fully describing the niche considerations for web map design that present challenges completely different than those usually encountered in either web design or traditional cartography. It will serve web-mapmakers, new and experienced alike, in its ease of reference, simple visual pattern illustrations, specific case-use examples, and clear “what-why-when-how” framework. Anyone who cares about the design of attractive and efficient web maps will appreciate *Designing Map Interfaces* as a timeless reference tool to keep on the shelf and share with others. It is worth keeping around just to flip through on occasion to refresh and inspire a creative, map-oriented mind.



Finding a specific discussion or pattern set is made easier by flexing the page stack.