

The
Pragmatic
Programmers

The Accessible Web

Creating
Content
for Everyone



Jeremy J. Sydik



Beta Book

Agile publishing for agile developers

The book you're reading is still under development. As an experiment, we're releasing this copy well before we normally would. That way you'll be able to get this content a couple of months before it's available in finished form, and we'll get feedback to make the book even better. The idea is that everyone wins!

Be warned. The book has not had a full technical edit, so it will contain errors. It has not been copyedited, so it will be full of typos. And there's been no effort spent doing layout, so you'll find bad page breaks, over-long lines, incorrect hyphenations, and all the other ugly things that you wouldn't expect to see in a finished book. We can't be held liable if you use this book to try to create a spiffy application and you somehow end up with a strangely shaped farm implement instead. Despite all this, we think you'll enjoy it!

Throughout this process you'll be able to download updated PDFs from <http://books.pragprog.com/titles/jsaccess/reorder>. When the book is finally ready, you'll get the final version (and subsequent updates) from the same address. In the meantime, we'd appreciate you sending us your feedback on this book at <http://books.pragprog.com/titles/jsaccess/errata>.

Thank you for taking part in this experiment.

► **Andy and Dave**

Extracted from:

The Accessible Web

Creating Content for Everyone

This PDF file contains pages extracted from The Accessible Web, published by the Pragmatic Bookshelf. For more information or to purchase a paperback or PDF copy, please visit <http://www.pragmaticprogrammer.com>.

Note: This extract contains some colored text (particularly in code listing). This is available only in online versions of the books. The printed versions are black and white. Pagination might vary between the online and printer versions; the content is otherwise identical.

Copyright © 2007 The Pragmatic Programmers, LLC.

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior consent of the publisher.

1

Making a Team Effort

Let every man be respected as an individual and no man idolized.

▶ Albert Einstein, ***The World As I See It***

Producing high quality online content requires a wide variety expertise in several domains working together. During project planning, it is important to tap this expertise from the beginning of the process. It looks like we'll need to assemble a team. The team should include representatives from each of the following groups:

- Project Primaries
- Content Creators
- Interface Designers
- Visual Identity
- Software Developers

There might be some overlap in responsibilities here (especially if you're part of a small team), and it will be important for these members to be aware of which role's perspective they are taking at a given time. I'm a big fan of keeping teams lightweight, so I would advise that this planning team preferably be small with no more than two delegates from each group unless specialized skills become needed. As these delegates should be a representative of their specialization and act as the line of communication between the planning team and the other members of their group, one primary and one backup would be even better. Backup members are important—for this team to work, each group needs to be represented and be able to provide input to the process. Lets take a closer look at each of these groups and find out what they need to bring to (and take from) the table.

Project Primaries

These are the people who are behind the project vision. They have developed an idea that is going to be made real through the activities of this team, and as such will need to take responsibility for leading the planning team.

Accessibility Requirements

The project primaries have the most abstract requirement for accessibility. They need to have a commitment to accessible design in their project vision and be ready to lead the other members of their team in making the same commitment. This means becoming informed about the higher level concepts of accessible design and understanding which needs are and aren't being fulfilled by the team's content design process. More than anything else, the primaries need to know where the other teams are having difficulties in designing accessibly in order to help find solutions to those difficulties.

Accessibility Responsibilities

To create an accessible final product, the project primary needs to listen to the needs of the other members and do what is necessary to make sure that those needs are met. If the content creators need a new tagging model implemented, the primary will need to verify that the software team makes the changes in a timely manner. If a dispute crops up between the interface design and the visual identity teams, the primary will need to make sure that negotiations are made and step in to push for agreement if necessary. It will also be necessary to make sure that the other members are on track for meeting the project's goals, as well as noticing when the wrong goals are being promoted (See the sidebar on the next page for more on this.)

Subject Matter Experts

The subject matter experts (SMEs) will be responsible for creating the content assets necessary to meet the goals of the project. These assets may take the form of text, illustration, or other media that is meant to be essential content of the site. This contrasts with the interface and visual identity folks, who will be generating similar assets for navigational or presentational purposes.

Accessibility Requirements

The SMEs will need for the interface designers to generate one or more interfaces to their content that ensure a clear and accessible path for the audience. The graphic designers will need to provide a complimentary set of formats for the content tag set that enhance the user experience without violating the separation of content and layout. In both cases, there will need to be a common determination of media standards that all three of these groups will adhere to. The infrastructure

Beware the Resume Builder

I think that some of my favorite needs assessments for web content look something like this:

- XML/XSL
- AJAX/Web 2.0
- Flash/Breeze
- LAMP
- JSP/Velocity/Struts
- Buzzword Compliance (Yes, I've seen it—and I'd rather not talk about it.)
- Fuzzy Pink Bunnies

I'd like to say I haven't seen any of these in a project content plan before, but sadly I've seen all of them but the bunnies (which is unfortunate—the bunnies at least have the potential to add some humor to the content). Note that I'm not arguing for or against any of the technologies above, but when I see technologies floating freely without connection to a content need, I get a little tense. The first thing that I suspect is that a Resume Builder has reared his ugly ladder-climbing head. These are the people who always seem to find a way to justify that the current project is "just the right fit" for whichever technology happened to most recently give the most hits on their favorite career search sites. As much as I'd like to recommend a not-so-friendly burying of the hatchet, this is the time to take the high road and drive planning focus back toward delivering a principled content plan. Once we have that, it will help to clearly determine what the *real* technology needs of the project are. If the Resume Builder continues to refuse to focus on the project goals, it may be time to find someone else for your planning team that is better able to represent the needs and capabilities of their specialty to the project.

developers will need to respond to tagging designs in a timely manner as well as provide appropriate interfaces for content acquisition.

Accessibility Responsibilities

The SMEs will need to make the nature of their content clearly understood such that formal tagging and media standards can be designed and implemented to fit their needs. If these needs change, they will need to provide suggestions about how to meet these new requirements. With respect to media assets, the content experts need to provide proper descriptions for these assets that will be used to generate alternative representations through the use of `alt` and `longdesc` attributes, captions, or transcripts.

User Interface Designers

The user interface designers create the content layouts necessary to ensure a consistent and reliable way for the end-user to interact with the content. For accessible designs, this may involve a number of alternative interfaces, targeted toward different populations, that provide multiple access paths while retaining a common navigational feel.

Accessibility Requirements

The interface designers will need to work closely with the subject matter experts and the graphic designers to set media standards that properly convey the nature of the content without causing damage to the user interface. Infrastructure developers will be called upon to provide the back end hooks and scripts necessary to make the user interface work and ensure that it can be modified to meet specific user needs. Interface and graphic designers will need to work closely in the development of alternate interfaces to retain a consistent user experience. To accomplish this, the interface designers will need consistently standardized stylesheets from the graphic designers that take into account the content tagging structure that is designed in collaboration with the subject matter experts.

Accessibility Responsibilities

The interface designer will need to be deeply aware of user interface and accessibility best practices in order to ensure positive results in the final design. This can be achieved through alternate interfaces, but the default interface *must* be accessible. In creating these interfaces, the designer needs to keep in mind the vision as it is presented by the project primary and subject matter experts and ensure that end-users

are presented the content in a way that is true to that vision in each interface developed.

Graphic Designers

Sometimes, in the world of accessibility, graphic designers get a bum rap. While it's true that layout graphics hinder some users with visual or cognitive impairments, many other users who are not disabled benefit from well designed visual formatting as well. Great graphic designers rise to this challenge by working within the constraints and freedoms provided by the online environment to create flexible visual formats that enhance the content for a wide variety of users that benefit from them. They also understand that not everyone can make use of these formats and design their layouts such that they politely step aside for the users that cannot or do not wish to use them.

Accessibility Requirements

The graphic designers will need documentation about the interface design to help them to understand what the limitations of a given interface are and how that might impact their design or create the need for an alternate design. Along with the subject matter experts and the interface designers, the graphic designers will make contributions to and follow the project media standards, such that they can design according to them. Infrastructure developers will need to provide the means by which graphic designers can store stylesheet templates and media along with any appropriate metadata.

Accessibility Responsibilities

The graphic designers are usually the ones informed about any existing visual identity standards that need to be addressed and will need to make sure to meet those in an accessible manner. If the existing standards conflict with accessibility principles, the graphic designers, possibly with the project leads, will need to work with the keepers of the central visual identity in order to find an alternate presentation that ensures accessibility compliance.² The graphic designer will be need to create appropriate styles for the project's content tagging and

2. This isn't necessarily as bad as it sounds. Often the central visual identity people know that there is a need for accessibility and may already have a working group to discuss this issue with. If the project team has come up with a good solution to a problem on the overall identity front, that group may be very receptive to incorporating the update into the identity standards or at least in suggesting further revisions toward that end.

document them in a shared stylesheet. Any ancillary formatting assets will need to come with all of the information needed to create appropriate alt attributes (in many cases, if a design element requires longdesc, something has gone wrong. It may be that the item is actually carrying information that needs to be conveyed by the subject matter experts in the primary content).

Infrastructure Developers

Here we find the database administrators, programmers, and workflow designers that build the tools and frameworks necessary to get the content, design and interface to the audience and make the connection between them and the realized vision of the project primaries. Without the developers, the content couldn't get into the world (the developers should always remember, however, that without everyone else, there is nothing to send out there in the first place). The developers also provide the tools to help everyone else get things done.

Accessibility Requirements

The content designers need to let the developers know what they want in a manner that allows for changes to be made consistently and appropriately to the databases, templates, and frameworks that they are responsible for. If workflow tools are requested from developers, they need feedback about how well the tools work, where they could work better, and how changes could be made for greater functionality. The other groups will need to provide information about their expectations of the final product such that the developers can build appropriate tests.

Accessibility Responsibilities

The infrastructure developer will need to meet the needs of other groups in a timely fashion. In part, this involves helping the rest of the group understand what solutions are available to them and what it will take to implement them. The infrastructure should follow good development practices and be well tested. If an appropriate content management environment is being used, access to tools for creating and storing content and metadata should be provided. If alternative textual output for media is being stored, developers will need to make sure that tools exist to extract this information. Results of any output testing systems being used should be made available to the content and design teams.

Keeping the Team Together

You've got a team together and are working on making this content a reality. Now you need to make sure that this team stays together (I'm looking at you, project leaders). Some suggestions:

- *Meet Regularly* There will certainly be plenty of sit-down planning meetings, particularly early on in the project. Most of the time, however, I would encourage frequent stand-up meetings to pass along information and updates. Making these meetings stand-up encourages that people keep things short and to the point reducing the need for a meeting to discover why nothing is getting done. In a team that represents diverse expertise, make sure that everyone is available for the meetings or has a backup who will keep the entire team in the loop.
- *Keep a Project Wiki* With a team that brings together different expertise, it is important to be able to know what kinds of things the team is working on and share information. A wiki is an easy way to provide a central point to share this information.³
- *Have an “off-site”* Try to gather the team for periodic non-working lunches where everyone can get to know one another. This goes a long way toward creating a respectful collaboration.

Selling Accessibility to the Team

It is possible that you might be the only accessibility advocate on your team. How do you convince others that accessibility should be a core objective if you're not the project lead? Try to be positive in the way you present accessibility—using the danger of a lawsuit is only going to put the team on edge and inspire defensiveness. Consider some of the reasons for accessibility mentioned in Chapter 1, *Why Be Accessible?*, on page 13. If these ideas are already complimentary to the core objectives of your team, present them as such. If that isn't clear, make an argument for increasing the served audience or doing the right thing. If it comes down to it, point out the legal requirements—just try not to be accusatory about it.

3. If your organization uses a tool like Lotus Notes that allows the creation of a shared project database and everyone feels comfortable using it, feel free to use that instead. The idea is to have a shared space, not be buzzword compliant.

Pragmatic Starter Kit

Version Control. Unit Testing. Project Automation. Three great titles, one objective. To get you up to speed with the essentials for successful project development. Keep your source under control, your bugs in check, and your process repeatable with these three concise, readable books from The Pragmatic Bookshelf.

Visit Us Online

The Accessible Web's Home Page

<http://pragmaticprogrammer.com/titles/jsaccess>

Source code from this book, errata, and other resources. Come give us feedback, too!

Register for Updates

<http://pragmaticprogrammer.com/updates>

Be notified when updates and new books become available.

Join the Community

<http://pragmaticprogrammer.com/community>

Read our weblogs, join our online discussions, participate in our mailing list, interact with our wiki, and benefit from the experience of other Pragmatic Programmers.

New and Noteworthy

<http://pragmaticprogrammer.com/news>

Check out the latest pragmatic developments in the news.

Buy the Book

If you liked this PDF, perhaps you'd like to have a paper copy of the book. It's available for purchase at our store: pragmaticprogrammer.com/titles/jsaccess.

Contact Us

| | |
|-----------------------|--|
| Phone Orders: | 1-800-699-PROG (+1 919 847 3884) |
| Online Orders: | www.pragmaticprogrammer.com/catalog |
| Customer Service: | orders@pragmaticprogrammer.com |
| Non-English Versions: | translations@pragmaticprogrammer.com |
| Pragmatic Teaching: | academic@pragmaticprogrammer.com |
| Author Proposals: | proposals@pragmaticprogrammer.com |