The Digital Droog

A Guide to Technical Writing

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Intro

Welcome to English 381, Professional Writing and Technical Communications II. This is a booklet made by other students, like yourself, in the same program you are participating in. No doubt you will have to create a version of this yourself. Included you will find information on what Extensible Markup Language (XML), Darwin Information Typing Architecture (DITA), Single Source Documentation, and MadCap Flare are. While this guide may answer a number of your questions it also offers references to further resources where you may better find what you are looking for. Priscilla Robot, here, will guide you along your journey. Good luck!

What is XML?

XML stands Extensible Markup Language. It is a metalanguage; it manipulates tags in other markup languages. It is a subset of Standard Generalized Markup Language (SGML). It is the international standard for defining markup, as decided by the International Organization for Standardization. A markup language defines the identity or function of a tag.

What does XML do?

XML has many different uses. The language is mainly used in software publishing and information storage. It is also used for information identification and structure, because it allows for nesting. For example, although both XML and Hypertext Markup Language (HTML) are subsets of SGML, they deal with different components of data. HTML deals with appearance, typeface, presentation, and organization. It is used primarily for the creation of websites. XML deals with content, especially tagging text that is a warning, price, etc. The language helps manage work-flow, large-scale Web content through data exchange and publishing.

Why use XML?

XML is the lightweight, easy to use, less cumbersome version of SGML. SGML has many optional features that weighed it down and made it difficult to use. XML removes these, making it a particularly simple to use. Additionally, it lets for more flexibility on the users' part, as it allows them to define their own tags. Despite this freedom, there are a couple common schemas most companies or developers will use, such as DITA or DocBook. However, you should always be prepared for less common XML schemas, as not all companies will use the same ones.

Not all browsers can read XML, however t is currently the easiest and simplest way to markup language intended for complex publishing and documentation software. Much simpler than SGML, XML is by no means an easy language to pick up. It is far more unforgiving than HTML, with a number of precise rules or additional difficulties: tags are case sensitive end brackets are always necessary.

How is XML relevant to technical documentation?

All this makes it good for publishing documentation software, which is central technical writing. While uand entry-level technical writer will not be expected to have extensive knowledge on how to write software using XML, it is useful to understand.

Section 2: DITA

What is DITA?

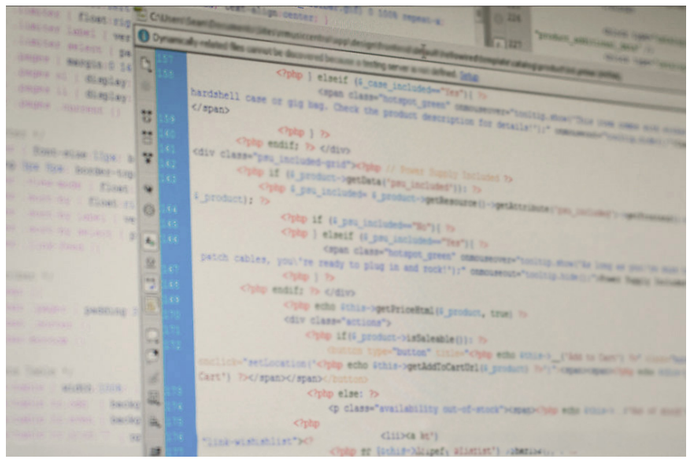
DITA (Darwin Information Typing Architecture) is an XML structure oriented around writing, designing, managing, and publishing information.

What is DITA's Purpose?

- Improve productivity
- Reduce repetition between products
- Improve ability to modify a document
- Control each individual writer's output
- Ease interchangeability among writers
- Increase consistency

Why use DITA?

DITA aids developers in the creation of easy to follow, concise and simplified products. It helps do this by eliminating redundancies, and focusing on the absolute necessities of a manual, all while incorporating an easy to use, fast methodology focusing around Document Type Definition (DTDs). This time-saving, production maximizing technology is growing in popularity and importance in the technical writing workplace.



What is the history of DITA?

DITA was originally developed by IBM to more effectively reuse content in product documentation. The product was later donated by IBM to OASIS (Organization for the Advancement of Structured Information Standards) in an effort to improve DITA and prepare it to be released to the public. DITA 1.0 in 2005, and DITA 1.1 in 2007. To this day, companies such as CISCO, NOKIA, ORACLE and IBM have adopted and continue to use DITA.

How does DITA work?

DITA is not actually a tool on its own, but rather a structure supported by a variety of tools such as DITA XML, Apache FOP, and DITAweb. It follows a specific set of rules put in place by the implementation of DTDs and a schema. The purpose of the DTDs is to establish and administer guidelines that a DITA concept has to adhere to. DITA works in a three step process beginning with developing content in DITA *topics*. You use maps to organize your topics and manage which deliverables each topic goes to. Those maps are processed into DITA output formats to generate the final deliverables.

What are Topics?

A topic is the basic unit of information in DITA. It features a title, as well as concise content that explains a single task. The main topic types that will make consistent appearances in technical documents are *concepts*, *references*, and *tasks*.

What are Concepts?

A concept is the introduction of an idea to the reader. Its intention is to answer and questions about fundamental information like what the product, task, or interface is. Concepts commonly include a body-level element, within a rudimentary topic structure, with examples and sections. The concept's body is generally enclosed in a <conbody> element which contains a paragraph of text with optional subsections or example sections.

What are References?

References are a type of topic which specializes in holding information such as lists, charts, and commands in a programming language. These are intended to eliminate the need for a reader to look up information. The top-level element for a reference topic is the <reference> element. The <refbody> also provides for a limitless number of subdivisions in the form of examples, property lists, sections and syntax sections. All of these ease the reader through the writing without forcing the reader to do extraneous research on the subject.

What are Tasks?

Tasks are topics that provide step by step instructions explaining what to do in a particular order. They are the primary building blocks in providing procedural information. These task topics include sections that describe prerequisites, expected results, and context. The <task> element is the top-level element for the general task topic. This consists of a taskbody with optional alternative titles, a short abstract, related links and a prolog.

Section 3: Single Source Documentation

What is Single Source Documentation?

Single source documentation is a style of documentation which begins with one single document and ends with multiple different publishable forms of documents by systematically making changes to the content. When working on a project, it is likely that you will need to create content in several forms of documentation, such as

- Printed Manuals
- Websites
- PDF Files
- Pamphlets
- CD ROMS

What are the benefits of single source documentation?

Single source documentation can benefit both creators and users, in a number of ways. As all the information is coming from a single source, it will be consistent, accurate, and each form of documentation will sync together. This allows users to access the information far more effectively and trust that they are getting the correct information. A creator benefits from constantly having all their information in one location. Once they localize all their data, they can easily create, edit, and update the different forms of documentation.

What are the challenges of single source documentation?

Before a creator can use all this localized information, they have to first put it in the database. It takes a considerable amount of time up front to sort and classify all the information in one place. The structure and location of how the information is stored is critical, to insure that the process is as simple and easy as possible. With that understood, it is difficult to determine when using single source documentation is worth the amount, front-loaded work necessary.

When is single source documentation helpful?

If your project requires a number of different documentational forms, various types media platforms, the same information in a variety of forms, or a large amount of material that is repeated throughout your project then single source documentation could help. These criteria are by no means absolute. Use of single-source heavily depends on the type of project at hand.

How is single source documentation used?

There are a number of different single source documentation programs. Each serves as a basis for you to generate your content and then expand it into various formats. Adobe FrameMaker was previously used as the industry standard for single source documenting. Now companies are using MadCap Flare due to its ease of use and organizational benefits.

Section 4: MadCap Flare

What is MadCap Flare?

MadCap Flare is a piece of single-source publishing software which is capable of delivering content in many different formats. The main difference between Flare and Word is that in Flare you can work on a single document and instead of manipulating multiple files and making changes to each of those. As such, any changes in content, including formatting, are consistent across the board. Flare can take in Microsoft Word and Adobe PDF documents and it uses markup languages to organize the information into topics to mix and match with needs. Some of those languages you can use include:

- XML
- XHTML
- CSS

Why is Flare different?

Flare prides itself on being able to take input from many different places and formats to create one single source. MadCap describes Flare's flexibility in that all Flare files are boiled down to XHTML, XML or CSS documents, thus they can be opened in any editor, including Notepad. Any type of content file can be copied into Flare and used immediately.

This essentially means that Flare can both take input and give output compatible with a large variety of software including competitive single-source publishers. Some of these products which Flare can work with include but are not limited to

- Arbortext
- Author-It
- Camtasia
- Captivate
- Confluence
- Doc-To-Help
- FrameMaker
- Help & Manual
- InDesign
- MS Word
- SnagIt

How long has Flare been around?

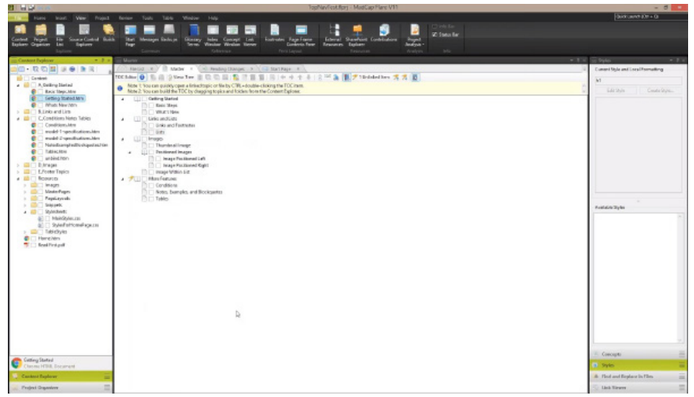
The program was released in its earliest version in March, 2006 and the second version shortly after in October, 2006. For some perspective, Flare is currently in its eleventh version nearly ten years later. Flare is the first program made by the MadCap team who were “let go” from the RoboHelp project, under the control of Macromedia at the time. The original creator of RoboHelp, Bjorn Backland, was also laid off and got the team together again to form MadCap. They chose to name their product “Flare” because it is a symbol for requesting help. This is the message Mike Hamilton, MadCap’s Vice President of Product Management, and Bjorn Backland wanted to spread, that Flare is the help technical writers and publishers have sought for a long time.

What does Flare look like?

On the opposite page is a screenshot taken from one of the many webinars MadCap provides for free. This webinar in particular, taught by Daniel Ferguson, a certified Flare trainer, is about tips and tricks to help. While this webinar is important in learning your way around Flare, this is not for beginners. There are other resources available which teach the fundamental basics.

The interface opens to a window with a ribbon and three adjustable windows. On the left you see the content explorer, sometimes known as the project organizer. Here you explore local files and paths for your document. In the center is the single source product document, where the topics are edited and organized. The column on the right is where the other services can be found.

MadCap Flare looks a like this while working on a project:



Are there resources to learn how to use Flare?

There are quite a few places that have online seminars or one-on-one training sessions that users can take advantage of in order to further their understanding of Flare. These sessions, including those sponsored by MadCap, cost money to attend. However, everyone has access to a completely free form of these training sessions on MadCap’s YouTube Channel. There are things called “Webinars” which is a play on the word seminar. They are like an online classroom with a speaker/teacher giving an online presentation that tend to be about the length of a single college class.

When you first download the Flare, MadCap sends a number of helpful emails with links to some of the above applications as well as their MadBlog where other users post useful tips, case studies that companies have completed on how Flare has helped, and a handful of PDFs that walk you through Flare. MadCap realized that their product requires time and assistance to adjust to, and thus they have a vast amount of resources their clients can acess.

What is accessibility?

Accessibility refers to the ability of people with disabilities to access, understand, use, and navigate a technical program, manual, web page, or product with the same ease as any other person. There are a variety of websites intended to raise awareness as well as provide guidance in the

development of disability accessible computer programs and websites. In particular, Section 508 is an amended part of the Rehabilitation act which passed in 1998 that requires federal agencies to make developing, using, acquiring, and maintaining electronic information and products accessible for people with disabilities. Similarly, WCAG (Web Content Accessibility Guidelines) was created to promote and aid in the development of disability accessible web pages.

Universal design is a principle intended to create a more user friendly and accessible world for people with or without disabilities. For example, it provides a text alternative for non-text content. This can involve braille for the blind, speech for the deaf, symbols or even just simpler language. DO.IT (Disabilities, Opportunities, Internetworking, and Technology) is a powerhouse when it comes to creating universally usable websites, instructions, software, multimedia, career centers, computer labs, and much more.

Does Flare support accessibility?

Flare is a big proponent of accessibility, even going so far as to put out a 26 page accessibility guide to aid users in understanding and developing their projects and making it accessible to all their consumers. They ensure that their standards meet any laws stating accessibility as a requirement. Flare has also built in warnings that alert the writer when their work isn't as accessible as it could be.

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