MediaWiki Report.

Subject: Installation, Development and Deployment.

Introduction

First things first, let's look at what the initial problem/challenge is that we're trying to solve or overcome. The problem identified is: the lifecycle of creating a book that is broken up into many phases. All of which have different user roles that contribute to each phase. This meaning there are people that need to communicate, collaborate on work, as well as writing, editing, structuring and styling without any form of centralized medium to work with.

The idea of Figbook is to bring the different phases of the lifecycle together, providing a medium that provides: concurrent writing, communication, structuring, styling, reporting, auditing and the ability to read, edit and comment on work.

Body

Now Media Wiki can provide our team with some of the needed features, like concurrent writing of a document, structuring and reading/viewing what is being done by someone else. This being the reason we started doing research on MediaWiki.

So why Media Wiki? We will be looking at a few categories namely: installation, development and deployment.

Installation

Why?
- Media Wiki can be installed on different operating systems such as Windows, Linux, Mac and Solaris on various different distributions of each.
- Using XAMPP to install it, makes the installation and configuration process a lot simpler.
- Even though the installation has a few requirements, such as needing a webserver, a database server and PHP to run the software. It will be to our benefit, because the technologies Media Wiki needs and supports, are ones we would have liked to use initially such as: Apache, PHP, (MySQL or PostgreSQL
- There are various add-ons to extend MediaWiki that can be installed, i.e. Scribunto and Visual editor.
- There are complete steps available on how to install and set up MediaWiki on the different operating systems.
- The minimum hardware requirements aren't much.

Why not?
- The installation process can be quite tedious and you will have to do some research just to be able to install the engine.
- It can become a time consuming effort to install MediaWiki.
- The end user needs an installation to use

Development and Deployment

Firstly what is an Extension?
Extensions lets you customize how MediaWiki looks and works.

Why?
- There are various existing extensions which are available for use, which might fit our need.
- We can create a new extension to fit our specific need.
- There's an extension distributor to help download popular/needed extensions.
- Extensions can be maintained and improved on.
- Extensions are PHP files.
- Future versions by other developer, tweaking being done to improve and clean-up the code to meet new coding conventions.

Why not?
- Not all extensions are guaranteed to be compatible with each other.
- Using insecure extensions are at own risk.
- Some Extensions are unmaintained.
- We need to make our extension available as open source.
- The extension must be compatible with all other extensions deployed on the Wikimedia cluster.

General workflow for deployment:
- If you haven't started working/coding, get a user experience design review first.
- Create a Labs account at: labsconsole:Special:UserLogin/signup.
- Submit the code you're working on to Gerrit, for reviews on quality,security, performance and internationalization.
- When the above mentioned is okay, file a task in Phabricator, to get a deployment window for the extension. This is managed by the Wikimedia Foundation Release Manager.

How to setup a new project:
1. Sign up for developer access.
2. Create an Extension:*My Extension* page in the extension namespace, this is done on mediawiki.org. (This is the documentation of the extension.)
3. Create a help extension page in the Help:Extension: namespace on mediawiki.org. (For end user documentation, cross link it with the above page.)
4. Request in Phabricator to track bugs and feature requests for the extension.
5. Request a new Gerrit repo, to store the source code for the extension.
6. Find an existing Labs project to join or request a new one to host a testing server with your extension deployed to it for testing and demonstrations.

Conclusion:

MediaWiki seems to be quite a good option when it comes to providing the functionality for collaborative writing which is needed by Figbook. I say this because of the customisability and availability of MediaWiki. The fact that we can use existing extensions and add to it or completely write one of our own, will definitely be advantageous to us. The deployment comes with a lot of support and promise to growth and optimisation as well as bug reporting in the development process.