



An open source template
for scholarly journals to develop mobile applications

Final Report

Thomas Dodson, *Coordinator*
Harvard Library Office for Scholarly Communication

Reinhard Engels, *Digital Software Engineer*
Harvard Library Office for Scholarly Communication

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Project Summary

The goal of the Yāna project is to provide a light-weight, modular, open source template within which publishers can develop their own mobile applications for open access journals.

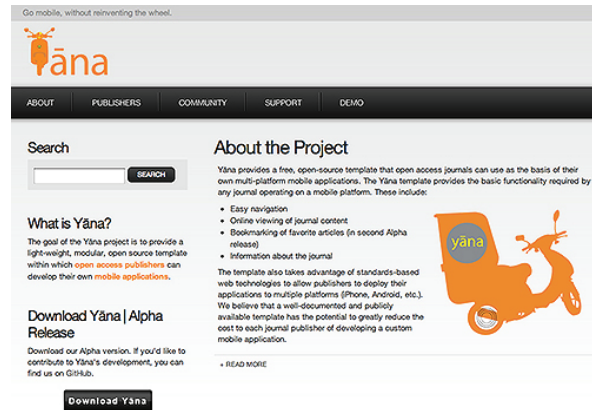
Accomplishments

In developing Yāna, our goal was to produce an open source template for open-access publishers that included the functionality required by any journal operating on a mobile platform. We believe that we have achieved that goal.

The alpha release of the the Yāna template provides access to the journal's current issue and its archives. Additional functionality includes: searching of content, information about the journal, and a section for announcements or blog posts.

Yāna was designed for use by publishers with limited programming experience. Still, it is important that publishers be able to customize the application. By modifying a single configuration file, the publisher can link Yāna to a specific journal's content, replace the default icons, and even delete or add new sections to the application's main menu. Photoshop files of the default icons are also provided so that the publisher can easily change the icon colors to better reflect the branding of the journal. The default background can also be easily swapped with another.

The Yāna template is also designed to be multi-platform, so publishers do not need to build one application for Apple's iPhone, for example, and another for Google's Android.



After configuring Yāna, the publisher possesses a functioning web application for her journal. She can then use PhoneGap (open source software) to convert the web app to a native application for a variety of devices.

In order to document Yāna and to foster a user community, we developed and launched a website for the project at: <http://osc.hul.harvard.edu/yana>. The framework is available for download from the site, and links are provided to three demo implementations: a generic academic journal, an arts & letters journal, and an institutional repository.

Challenges

We were unable to provide a "favorites" feature in the first alpha release of the template, but expect to include this in the next release.

We also found it necessary to delay the implementation of PDF viewing within the application. Presently, the user accesses PDF documents by means of the mobile device's web browser.

We did not have time to undertake usability testing with publishers prior to release of our first alpha.

Budget

Our budget consisted of salaries for the project manager and developer and funds for a contract designer. We utilized the \$13,000 budgeted for the initial development of Yāna.

Publicity & Promotion

One of the functions of our website is to provide information about the template to potential users. Matthew Cockerill, managing director of the open access publisher BioMed Central, expressed interest in the project early on, and we contacted him recently to inform him of the alpha release.

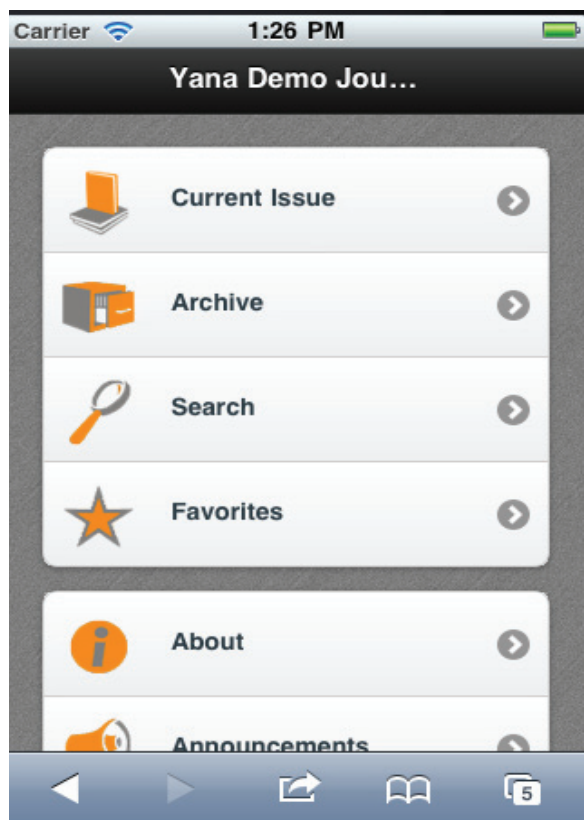
Thomas Dodson has also presented on Yāna at New England's THATCamp and at a meeting of local publishers interested in mobile applications. We will also be presenting at Harvard's ABCD Mobile group on November 18.

We have already completed and posted a two-part screencast demonstrating how to install Yāna and configure it as a web application.

Next Steps

We are currently developing two key areas of functionality: favorites and the viewing of PDF documents within the application (i.e., without use of a mobile browser).

Over the next few weeks, we will be expanding the documentation currently available on the project website. Documentation will include additional videos demonstrating how to configure and customize the template.



We also plan to release a mobile application for the DASH institutional repository built using the template. Thomas Dodson will use Yāna to develop and launch a mobile application for the journal *Printer's Devil Review*. We will also continue to work with Biomed Central and reach out to other open access journals.

As publishers begin to adopt Yāna, we expect that they will identify bugs and request additional functionality. Although we expect that the growth of the template will ultimately depend on a community of developers not directly associated with the project, we are prepared to develop at least one additional area of functionality. We will solicit feedback from our users to determine what new function (if any) is most needed. ■