arXiv-NG Public Repositories

As part of the arXiv-NG project, we've committed to doing as much of our new development as possible in public repositories. This reflects not only arXiv's commitment to open source software and open access in general, but also the desire to facilitate collaborative work on the arXiv code base with close partners. We've decided to release all of our new code under the MIT license.

With evolvability and collaboration in mind, we're moving from a monolithic web application architecture to a more distributed service-based architecture. Giving each service (or cluster of related services) a separate code repository helps to reinforce the overall architecture, allowing the various parts of the arXiv system to evolve as independently as possible.

The list of public repositories below is subject to considerable change as the project proceeds. Most of these projects are in the early phases of development, so you can expect quite a bit of churn as we iterate toward stable versions.

arXiv-NG public repositories:

https://github.com/cul-it/arxiv-base
Provides the base runtime for arXiv web services, base templates and global static assets, and a very small collection of widely-used utilities.

https://github.com/cul-it/arxiv-zero
A demonstration project that showcases some of the major architectural patterns used in arXiv-NG.

https://github.com/cul-it/arxiv-search
The arXiv-NG search system, which includes the indexing process, public user interfaces, and a new API.

https://github.com/cul-it/arxiv-submission-core
Introduces a new prototype submission architecture, and a new submission API under development with close partners.

https://github.com/cul-it/arxiv-submission-ui
New submission user interface.

https://github.com/cul-it/arxiv-auth
Accounts and authorization components and services.

https://github.com/cul-it/arxiv-filemanager
File management service; supports the submission system.

https://github.com/cul-it/arxiv-compiler
TeX compilation service; supports the submission system.

https://github.com/cul-it/arxiv-references
Prototype reference extraction service for NG. For more information, see https://blogs.cornell.edu/arxiv/2017/09/27/development-update-reference-extraction-linking/

https://github.com/cul-it/arxiv-fulltext
Internal plain text extract service. Used by various moderation tools.