
XQuery for Digital Humanists

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Introduction

This half-day tutorial introduces digital humanists at any level of experience to XQuery, a mature, high-level programming language used in many DH projects because it is purpose-built for analyzing, manipulating, and publishing data stored in the XML-based data formats that many DH projects use, e.g., TEI, EAD, MODS, METS. Prominent XQuery-based projects include [Carl Maria von Weber Gesamtausgabe](#), [Foreign Relations of the United States](#) and [Syriaca.org](#).

Led by two experts who each have a decade of experience using and teaching XQuery and who have co-authored *XQuery for Humanists* (forthcoming, Texas A&M University Press), this half-day tutorial introduces the key concepts underlying the XQuery language and the kinds of analysis that it makes possible. The focus will be on exploring TEI-encoded editions with simple XQuery expressions.

Using a free and easy to install XQuery learning environment, participants (who must bring their own laptops) will gain hands-on experience writing queries against open datasets, including a TEI-encoded documentary edition, *Foreign Relations of the United States*. Participants will gain a basic foundation in the language and be introduced to community resources for further study.

This half-day workshop will cover the basics of XQuery, providing participants with sufficient hands-on experience to start exploring their own scholarly editions and metadata with XQuery. We presuppose that participants will have come with a basic understanding of XML and TEI.

Brief outline

- I. Introduction: XQuery for the Digital Humanities
- II. Setting up an XQuery environment
- III. Finding data with XPath
- IV. Writing FLWOR expressions
- V. Exploring XQuery Full-Text

Each section (except the introduction) will include hands-on exercises.

Target audience:

Students, scholars, and practitioners who use or are interested in using digital methods in their humanities work in academic departments, libraries, "alt-ac" fields, or their private capacity; no previous programming experience required; some experience XML or an XML-based format (TEI, EAD, MODS, METS) useful but not required. Participants will work with a common dataset provided by the tutorial leaders, but they may bring their own datasets for practice during the lab and consultation period.

Tutorial leaders

Clifford B. Anderson is Associate University Librarian for Research and Learning at Vanderbilt University in Nashville, Tennessee. He has a M.Div. from Harvard Divinity School and a Th.M. and Ph.D. from Princeton Theological Seminary. He also holds a M.S. in Library and Information Science from the Pratt Institute in New York City. Cliff started working with XQuery in 2006 before the first official version of the language was released. In 2014, he served as the project leader of the NEH-funded [XQuery Summer Institute](#) at Vanderbilt University. He has also taught sessions on XQuery for iterations of Laura Mandel's [Programming for Humanists](#) course at Texas A&M and leads the weekly [XQuery working group](#) at Vanderbilt University for digital humanists

Joseph C. Wicentowski is the Digital History Advisor in the Office of the Historian at the U.S. Department of State. He received his Ph.D. from Harvard University in modern East Asian history. He started using XQuery in 2007 to analyze and publish the Office of the Historian's [TEI-encoded publications and datasets](#). For more on the project, see Wicentowski (2011). All code and data from the project are freely available on [GitHub](#). He recognized XQuery's potential to empower students, scholars, and practitioners to take control of their own data and build their own applications. But he knew that without resources geared toward people with a humanities background, others would struggle

as he first did. He began writing about XQuery in various digital humanities forums, contributing to the XQuery Wikibook online textbook, and giving workshops at the TEI@Oxford and Digital Humanities@Oxford Summer School programs. Joe regularly speaks and writes in the fields of history, documentary editing, and open government. He also actively participates in TEI, XQuery, and digital humanities communities, and fosters discussion about XQuery on Twitter at [@XQuery](#).

Bibliography

Wicentowski, J. (2011) "history.state.gov: A case study of Digital Humanities in Government," *Journal of the Chicago Colloquium on Digital Humanities and Computer Science*, vol. 1 no. 3 , <https://letterpress.uchicago.edu/index.php/jdhcs/article/view/80>.