

UCOL – Iowa City UNESCO City of Literature Mobile Application Research & Development

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Abstract

Iowa City was designated one of only four Cities of Literature worldwide by UNESCO. To take advantage of our rich local literary history, an interdisciplinary research team collaborated to develop a digital library featuring important Iowa City authors and locations. The UCOL (UNESCO City of Literature) digital library consists of a mobile application for the general public (referred to internally as “City of Lit”) and a set of web-based interfaces for researchers and content creators. This paper reports our experience from a pilot study in which undergraduate students learned to conduct scholarly research and create content for the digital collection. We also outline the implementation and development of the digital library, its framework, and the client-side mobile application.

Introduction

In conjunction with Iowa City’s designation as a UNESCO “City of Literature,” an interdisciplinary team of faculty, graduate, and undergraduate student scholars and researchers at The University of Iowa formed the “The University of Iowa UCOL Mobile App Development Team” (referred to internally as UCOL). UCOL is committed to engaged, interdisciplinary digital scholarship. The team launched its first-phase product in Fall 2010: “City of Lit,” an app for Apple mobile devices¹ (Figure 1). The app draws on the wealth of Iowa City’s writing history to present biographies, annotated texts, famous literary landmarks in Iowa City, and audio/video recordings of interviews and readings.

¹ University of Iowa, UCOL “City of Lit” iPhone App. accessed June 2011, <http://itunes.apple.com/us/app/the-iowa-city-unesco-city/id396516495>.

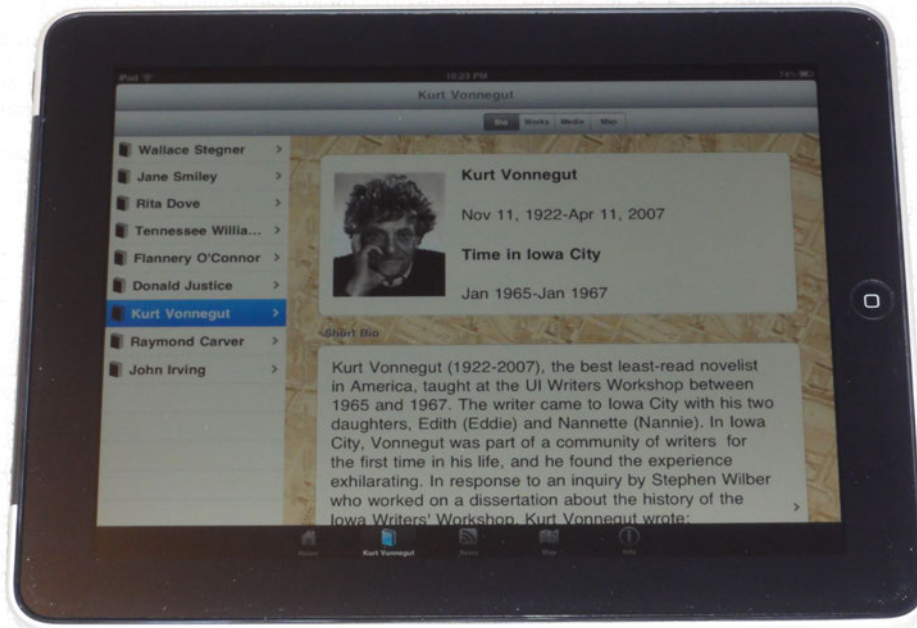


Figure 1. City of Lit.

“City of Lit” promotes a thoughtful redefinition of community and text. Intergenerational, multi-organizational participants work collectively to create multimedia hypertext documents that include traditional text, photos, graphics, audio, and video to be included in the iPhone app and other mobile device platforms in the near future. The project encourages undergraduate and graduate research, with an emphasis on interdisciplinary and collaborative practice, while recognizing the unique potential of mobile devices for public scholarship and civic engagement. The UCOL project provides opportunities for researchers, teachers, and students to experience the interdisciplinary research processes and develop innovative approaches for research and learning.

The following section briefly describes the background of the UCOL project. We then present the implementation and development process of the UCOL digital library, the functionality of the “City of Lit” app, and the potential contributions to the scholarly community. Finally, we discuss our observations from one semester of training undergraduate students in content research and creation.

Note: For larger, higher quality versions of the figures reproduced here, please refer to the *Supplementary Data* section accompanying this article online at <http://jdhcs.uchicago.edu>

Motivation

Home of the Iowa Writers’ Workshop and designated in 2008 as the only UNESCO “City of Literature” in the Americas,² Iowa City has a long and proud history as a community of writers. The Iowa Writers’ Workshop has graduated thousands of writers and has drawn luminaries to Iowa City

² UNESCO, *City of Literature*, accessed June 2011, http://portal.unesco.org/culture/en/ev.php-URL_ID=36908&URL_DO=DO_TOPIC&URL_SECTION=201.html.

since 1936. The city itself contains a wealth of information, both published and archival, on many of these important literary figures.³

We hope to help a broad range of users to discover and access this literary history. We have begun development of a digital library and provided a user-friendly mobile application for the general public to access the collection, and plan to continue expanding the library and make the app accessible on a variety of platforms. The project brings together community partners, faculty, and students at The University of Iowa to research, gather, record, and produce multimedia texts about local writers. Our research team is made up of The University of Iowa faculty and students from the Intermedia Program in the School of Art and Art History, the School of Library and Information Science, the Computer Science and English departments, and the Virtual Writing University staff.

Traditional humanities research is costly in terms of time and resources, and many modes of publication are not flexible enough to fully accommodate the anecdotal research UCOL uncovers and attract citizen scholars to contribute to the collection. As one example, how many people outside Iowa City know of the infamous Dave's Fox Head Tavern, a literary meeting place for generations of writers that has produced an untold number of anecdotes concerning local authors? By crowd-sourcing the research task (while experienced scholars serve as curators)—inviting students, writers, and community members to add their narratives and insight—we can produce a “folksonomy” that supplements current sources for literary research with New Media, including interviews, readings, maps, and personal histories.

Digital libraries have been used in classroom environments for many research purposes. Zhou and Stahl discuss how elementary and high school students use a digital library to study math within a collaborative platform where they can share information and ask each other questions.⁴ Yaron, on the other hand, focuses on collection content and how a digital library can help students see connections among different science disciplines.⁵ On the opposite side from the end-user experience of digital libraries, Nichols, Bainbridge, Downie, and Twidale examine technical complications encountered by Library and Information Science students constructing digital libraries with existing content.⁶ The digitization and curation of media content by information students for a university collection is discussed by Stewart.⁷

There are also precedents for students producing original digital content. However, the context is often a student website, as in a study done by Bos in which high school students contributed reviews

³ Wikipedia, *List of Iowa Writers' Workshop people*. Accessed June 2011, http://en.wikipedia.org/wiki/List_of_Iowa_Writers%27_Workshop_people#Notable_alumni.

⁴ Nan Zhou and Gerry Stahl, “Information Behavior of Small Groups: Implications for Design of Digital Libraries.” *Proceedings of Joint Conference on Digital Libraries* (2007): 183-184.

⁵ David J. Yaron, Jodi L. Davenport, Michael Karabinos, Gaea L. Leinhardt, Laura M. Bartolo, John J. Portman, Cathy S. Lowe, Donald R. Sadoway, W. Craig Carter, and Colin Ashe, “Cross-Disciplinary Molecular Science Education in Introductory Science Courses: An NSDL MatDL Collection.” *Proceedings of Joint Conference on Digital Libraries* (2008): 70-73.

⁶ David M. Nichols, David Bainbridge, J. Stephen Downie, and Michael B. Twidale, “Learning by Building Digital Libraries.” *Proceedings of Joint Conference on Digital Libraries* (2006): 185-186.

⁷ Quinn Stewart and David Todd, “Using University Collections in Digital Library Education.” *Proceedings of Joint Conference on Digital Libraries* (2009): 477.

of web resources about pollution to a school webpage,⁸ or a class wiki. According to Guth, these wikis tend to be either private or semi-private, with no or limited public access to the content.⁹ It is widely accepted that the perception of an audience and the feeling that assignments are an authentic means of production rather than contrived for the classroom motivates students to write more accurate, communicative work.^{10, 11, 12} With “City of Lit,” we hope to provide a platform for undergraduate researchers to create authentic, original content for a digital library that is intended for active and interactive public consumption, with opportunities to review each other’s work.

The Framework

An important part of the UCOL project is to construct a framework for content creators to build the content of the digital library. The goal of the framework, in addition to providing content to the mobile application, is to (1) allow content creators to easily work with the collection and (2) provide tools for editorial staff and researchers to moderate and maintain the collection.

The framework consists of a set of databases and web-based interfaces, a collection of web sites that hosts full-length original content for a selection of authors, and an application server to communicate between the database and the mobile application.

In the next section, we describe the database, the database model, and how the mobile application connects to the database.

The Databases

While there were existing digital archives for many of the featured authors, most of these materials were scattered around different sources. A centralized place to host the most pertinent collections is essential for the consistency of data and responsiveness of the interactive system to provide a satisfying user experience. This project utilizes three database servers configured slightly differently but with similar internal data schema. There is a Production Database Server for serving published material, a Development Server for internal testing and experimentation, and an intermediate Data Migration Server to protect data integrity and provide content moderation. The system architecture is shown in Figure 2.

⁸ N. Bos, “Student Publishing of Value-Added Contributions to a Digital Library.” *Annual Meeting of the American Educational Research Association* (1997).

⁹ S. Guth, “Wikis in Education: is Public Better?” *Proceedings of the 2007 International Symposium on Wikis* (2007): 61-68.

¹⁰ L. K. Berland and A. Forte, “When Students Speak, Who Listens?: Constructing Audience in Classroom Argumentation.” *Proceedings of the 9th International Conference of the Learning Science* (2010): 428-435.

¹¹ A. Forte and A. Bruckman, “From Wikipedia to the Classroom: Exploring Online Publication and Learning.” *Proceedings of the 7th International Conference On Learning Sciences* (2006): 182-188.

¹² S. Guth, “Wikis in education: is public better?”, 61-68.

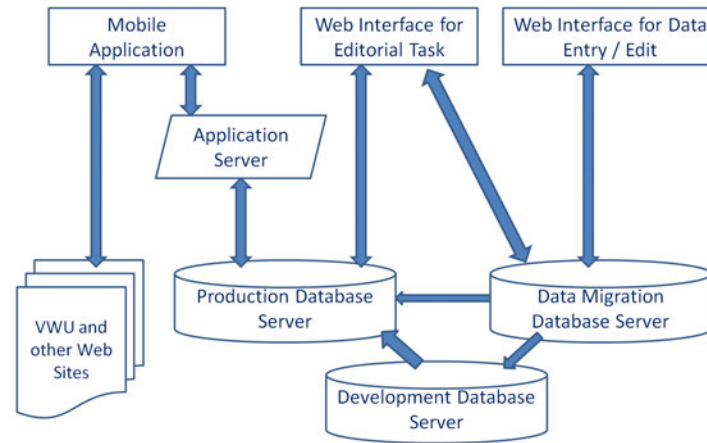


Figure 2. System Architecture.

Content providers or scholars use the web interface to enter data into the Data Migration Database. If the material is approved by the editorial staff, data is then reviewed and copied to the Production Database. If necessary, data is copied to the Development Database for the development team to test its compatibility with new features.

The servers are hosted by The University of Iowa. The decision to store content separately from the mobile application allows frequent updates to the content by our many contributors. The server side applications are implemented in PHP, and the database engine is MySQL. The server side application responds to the mobile application's request by querying the MySQL database to provide up-to-date information.

With the limited display space on mobile devices, care has been taken to prepare an abbreviated version of the information for a more comfortable viewing experience. The database mainly stores abridged versions; most full-length content or source materials are housed within their original sources, such as the Virtual Writing University Web servers. Users can read or view condensed versions, then choose to follow the links and read the full content within the mobile application.

The Database Model

At the core, we have a variety of artifacts to be stored in the collection, including authors, locations, transcripts, media, literary works, events, etc. Almost every artifact is represented by its dedicated entity in the database model. A few categories of artifacts share a database entity because they have similar attribute sets and they will be grouped logically in the application. For example, the audio and video materials are stored in a single table.

The database model was designed to be flexible in anticipation of possible expansion. Even though the end user application uses authors as the main starting point to navigate the collection, it is possible that any single artifact can be connected structurally with any number of other artifacts. For

this reason, we have created a general purpose “relationship” table in the database to maintain connections between any two artifacts, regardless of type.

In order to ensure data consistency and integrity, we have also implemented a “proxy” table to map universal UCOL_IDs to corresponding IDs in their specific entity group. For example, Figure 3 demonstrates how author A in the Author table can be associated with Location L in the Location table by way of the proxy table and the relationship table. In the example, Author A is assigned an A_ID of ‘00015’ and location L is assigned with an L_ID of ‘00015’. Notice that even though both IDs are the same number, they represent different artifacts because they are from different database tables. From the proxy table, we can obtain the universal UCOL_IDs for each item. In this case, we have UCOL_ID ‘0000252’ for A_ID 00015 and UCOL_ID ‘0000569’ for L_ID 00015. Thus, if we want to associate Author A with Location L in the database, we need to associate Author 00015 to Location 00015, which in turn will be translated into a relationship that links UCOL_ID 0000252 to UCOL_ID 0000569 in the relationship table.

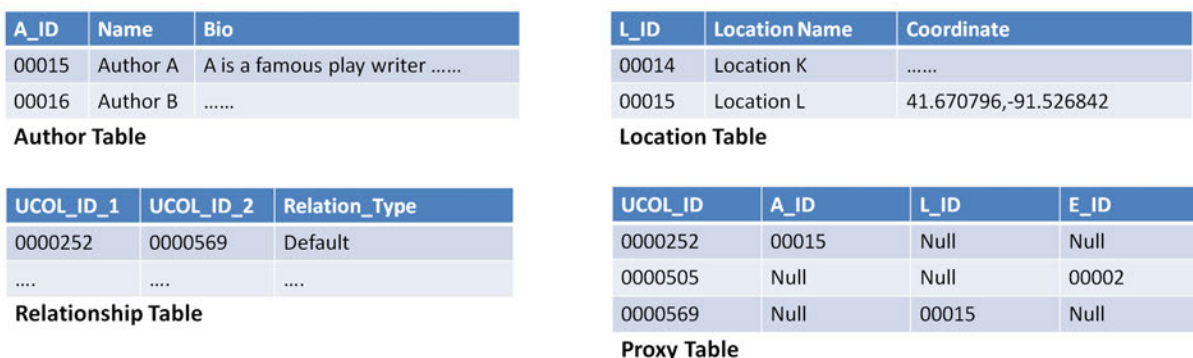


Figure 3. A partial example of the database shows how different entities (Author, Location) are associated together in the Relationship Table by an indirect reference through the Proxy Table.

The indirectness of this proxy table ensures the simplicity and flexibility of the relationship table. The relationship table requires no changes if there are new types of entities added to the database. The use of this proxy table trades a bit of space (the null values used in the table) for more robust database integrity by asserting that each row in the table contains one and only one entity ID (e.g., an author ID, a location ID, or an event ID) in addition to the UCOL_ID. All other fields in the same row must be of the value “null.” If new entities are added to the database, the required change to the existing database schema involves only the proxy table, and it is as simple as appending one more column to account for the new entity type.

The Web Interface

A set of web-based interfaces were implemented to allow distributed data entry and content administration. Authorized scholars and researchers can contribute to the collection in remote locations. Editors in the research team can check and approve content on these interfaces for public release.

The data-entry web interface (Figure 4) consists of multiple tabbed panels structured to represent different aspect of information about an author, rearranged and relabeled slightly from the structure

of the database to reflect the syllabus and students' understanding of the project. This design logically connects essential information so that it can be formalized and stored in the proper location within the database. The interconnection of different pieces of information allows the digital library to form hypertext structures for the incoming information. This hypertext structure becomes the underlying navigation structure for the mobile application. For inexperienced content creators and scholars, the structured interface creates a logical sequence of information to assist them with minimum individualized guidance.

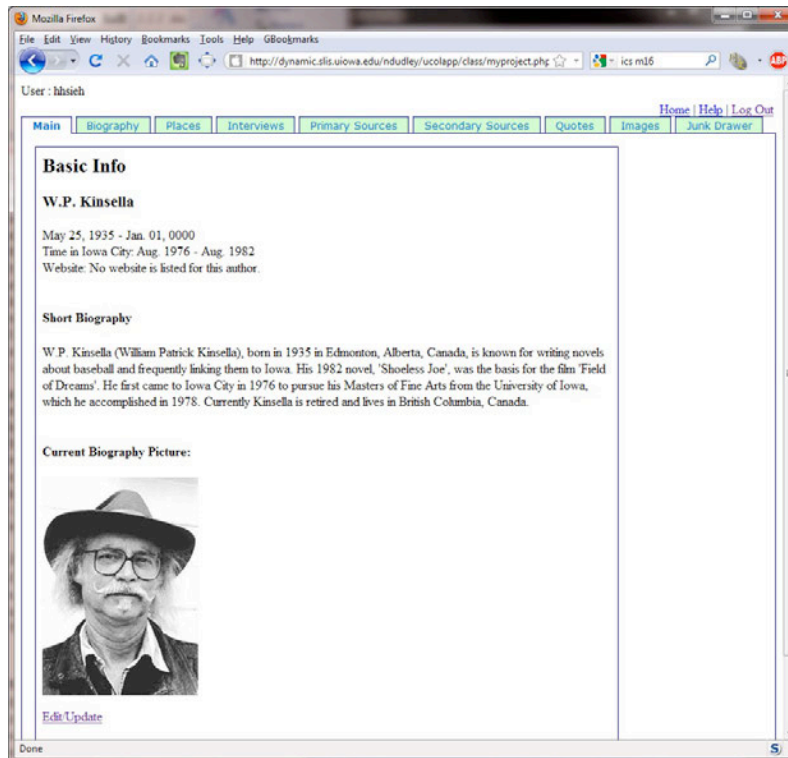


Figure 4. Web-based interface for data-entry and update. Different aspects of information related to an author can be accessed from the tabbed interface. Preview mode and work area for holding temporary text (the Junk Drawer) are provided for convenience.

By using a single, multi-faceted, web-based-interface that serves both to store new content for the app and organize the large number of small, multimedia components of the research assignment in one place to be submitted to the instructor, we hope to avoid issues of information fragmentation and provide a simplified system in the spirit of Reimer's 'Global Information Gatherer'.¹³

One feature worth pointing out is that we included a temporary holding space called the Junk Drawer in the data-entry interface. By including the Junk Drawer, scholars can store work-in-progress content, leave notes in the workspace to themselves without worrying about them being

¹³ Yolanda Jacobs Reimer, Melissa Bubnash, Matthew Hagedal, and Peter Wolf, "Helping Students with Information Fragmentation, Assimilation and Notetaking." *Proceedings of the 9th ACM/IEEE-CS Joint Conference on Digital Libraries* (2009): 15-18.

published or seen by peers, and use the workspace to draft content. Content in the Junk Drawer exists only on the Data Migration Server where most data-entry happens. This slightly different implementation between the Data Migration Server and the Production Server ensures that content not intended for publication is secluded, and it saves space on the Production Server.

A major component of the app is the geographically-aware map. This map can acquire the user's position via GPS and display geo-tagged "events" from the app. In his research about placing biographies in the context of events and places, Larson argues that the content is made more useful and interesting when put in geographic and event-related context.¹⁴ By connecting the research materials that student researchers find with real places in Iowa City, they contribute to a more in-depth, community-relevant body of work for the digital library. Examples of geo-tagged events include locations of local readings, former dwellings of resident writers, and Iowa City locations referenced in literature. This information can be used to take a literary stroll (Figure 5) through Iowa City or to visit sites relevant to a specific author. Of course, as the amount of information included in the app increases, we can feature geo-locations anywhere in the world.

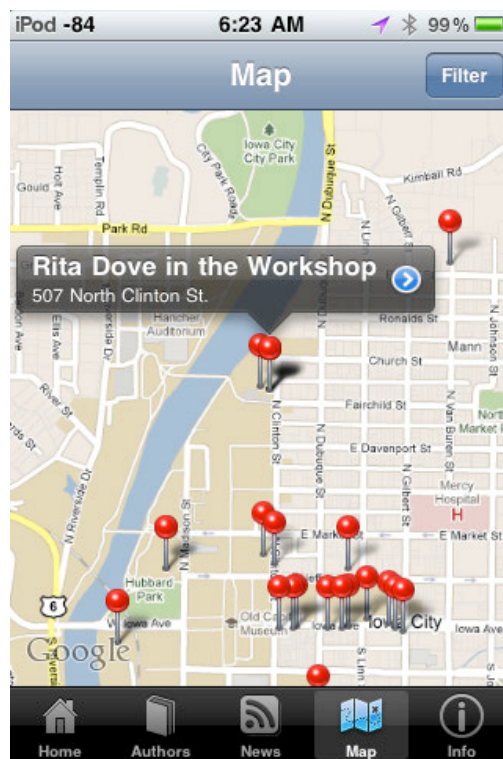


Figure 5. A map of Iowa City with locations marked with pins. Touching the pin will reveal its caption, address, and options to view more.

Geo-tagged events can be associated with different types of records, such as an image. GPS coordinates are associated with the record so that this linked information is accessible through the

¹⁴ Ray R. Larson and Ryan Shaw, "Mapping Life Events: Temporal and Geographic Context for Biographical Information." *Proceedings of Joint Conference on Digital Libraries* (2009): 471.

map view in the user-side application, and related authors or events are associated with the coordinates so that these Geo-tagged events can also be accessed by navigating via authors or events. Figure 6 shows one of the web interfaces used to create a geo-tagged event.

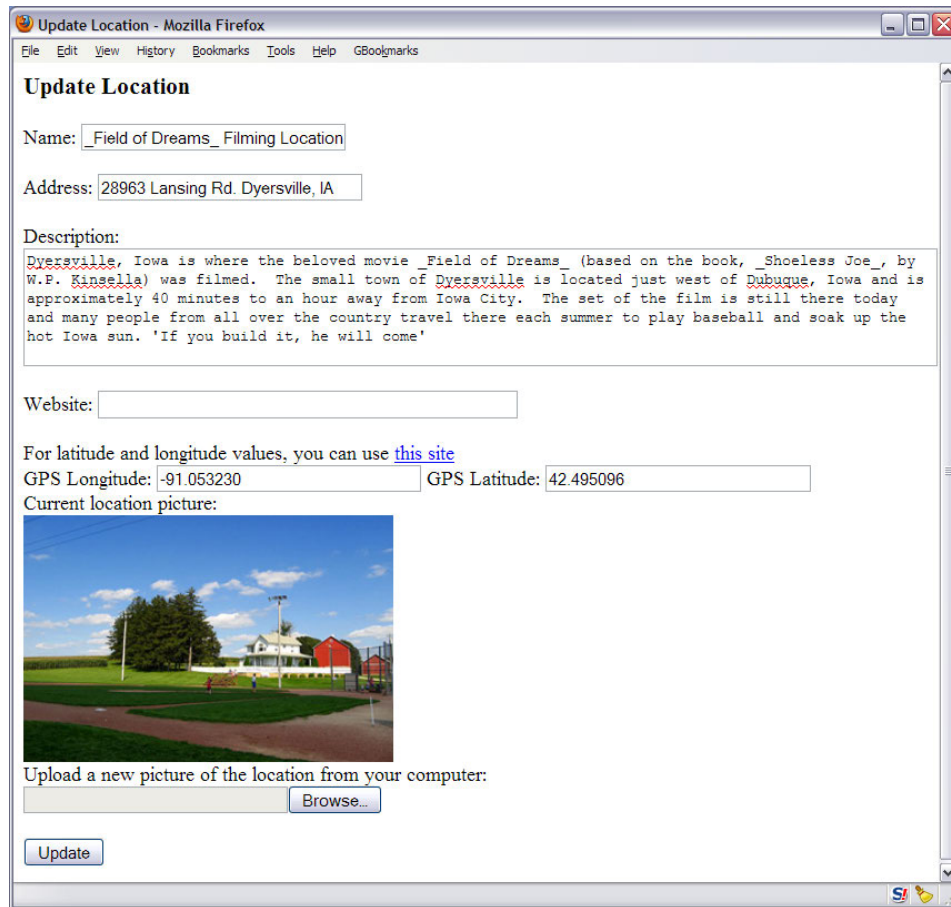


Figure 6. A web interface for authoring a Geo-tagged event.

Since all content will need to be reviewed by the staff editors before publication, a set of administrative interfaces were provided for the editors. The administrative interfaces include a main interface (Figure 7) that shows all the authors, each with a last updated date. Editors can preview all uploaded material and control whether an author's content should be published (go live) or not. Editors can also lock a selection of authors to prevent other editors or authorized content creators from making changes while the editor is reviewing or updating these authors.

Locked	Live	Name	Date updated	Manage related entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Adam Haslett	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Dorothy Garlock	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ethan Canin	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Patricia Foster	2011-01-25 17:52:13	Manage entries	Preview
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Larry Baker	2011-01-25 17:52:13	Manage entries	Preview
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Marvin Bell	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	ZZ Packer	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Robert Dana	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mildred Wirt Benson	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mary Syzbist	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	W.P. Kinsella	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	William Lashner	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sandra Cisneros	2011-01-25 17:52:13	Manage entries	Preview
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Jeremy Jackson	2011-01-25 17:52:13	Manage entries	Preview

Figure 7. A Web interface for editorial staff and researchers to review and approve content to be published. ‘Live’ status approves content to the app, and ‘locked’ status prevents content from being edited.

The administrative interface also allows a finer granularity of control over which related artifacts are published. An individual artifact-management interface (Figure 8) displays all artifacts associated with the selected author and groups them by categories. Staff editors proofread and preview each entry to decide which entries should be published with the author. The database is periodically copied from the Data Migration Server to the Production Server or Development Server.

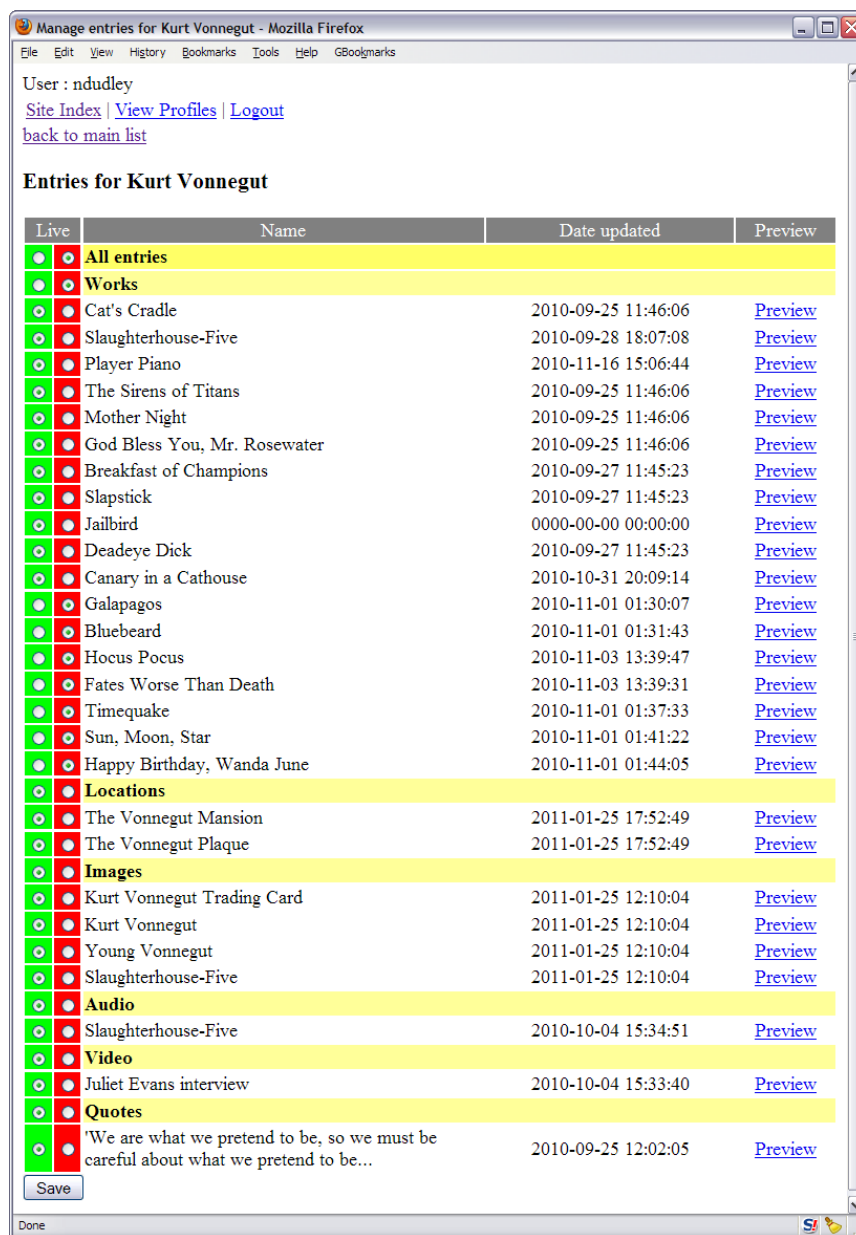



Figure 8. Individual artifacts related to an author can be approved by the editorial staff by checking the 'live' button on the left column.

The "City of Lit" App

With the proposed data model, it is possible to form any arbitrary interconnection between every entity available in the database. ("Arbitrary" in this sense is referring to the idea that the system will allow us to make a connection between any two objects—the connection capability is not limited by entity type. For instance, there's nothing to stop users from connecting two books together should s/he choose to do so.) However, we chose to use "Authors" and "Location/Map" as the main portals for users to explore the digital library. We have developed a mobile application (currently available on the Apple iOS platform) for the general public to explore the digital library. Although

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the mobile application is not the main focus of this paper, a brief introduction of the “City of Lit” app is provided below. When the app is started, the user is presented with a “quote of the day” immediately following the UNESCO City of Literature splash screen. The quote of the day is determined by the server, and it will not change during the day in order to encourage viewers to come back the next day.

A tap on the screen will bring the users to a list of available authors (such as in Figure 1). Other options for navigating the app can be accessed at the bottom of the screen (Figure 10). Users can choose either “News” or “Map” to explore the collection. The map will use the device’s location service to determine the user’s proximity and show a map of Iowa City (Figure 5) with pins to identify interesting locations nearby available in the digital library.

Multi-media elements are central to the app. Users can access a constantly growing collection of audio and video recordings of readings and interviews (see Figure 9), along with photography and graphics related to the authors (Figure 10). In addition to the biographical documents, the app also includes a daily quote by a selected author on the opening screen. Other constantly updated features of the app include “News” (reports on Iowa City and the literary world) and “Events” (local readings, book launches, films and lectures), information dynamically fed from the Virtual Writing University website. These features improve university/community relations by informing the community of ongoing events.

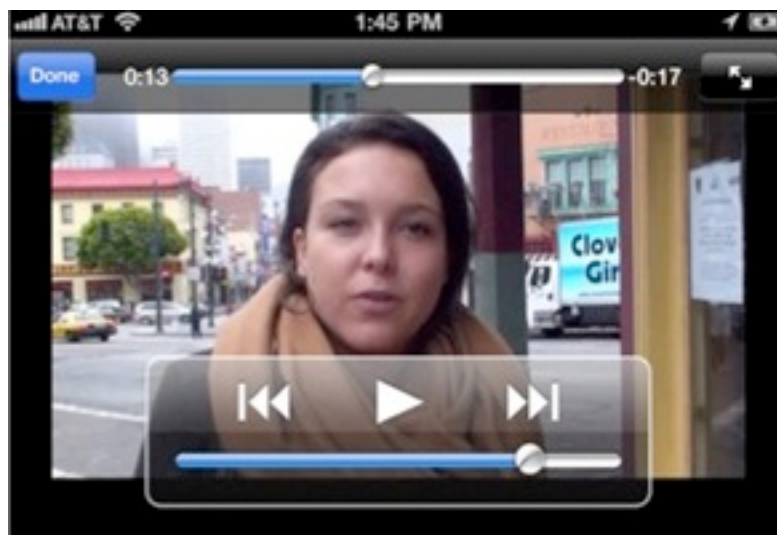


Figure 9. “City of Lit” can stream video and audio created by users, allowing community members to contribute their knowledge to our project.

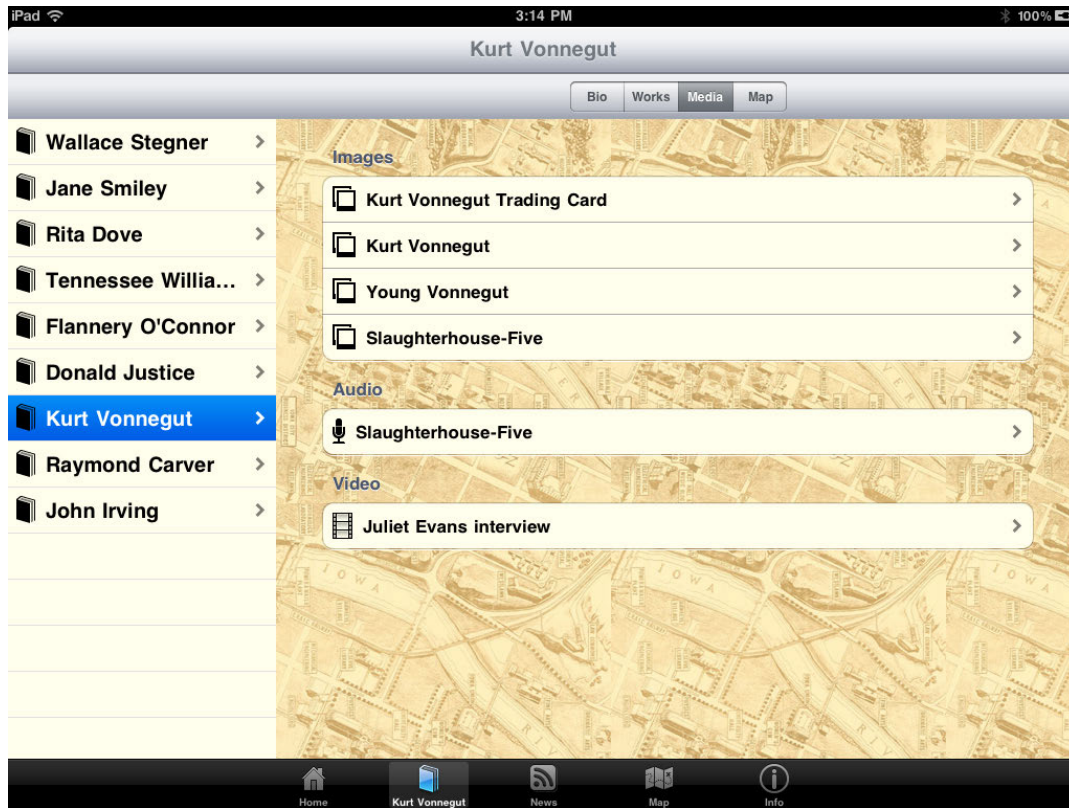


Figure 10. Multimedia content of an author is grouped together in the ‘Media’ tab for each author. In the example here, there are images, audio, and video recording for Kurt Vonnegut.

We have developed the mobile application for the iOS platform, including iPhone, iPod touch, and iPad. Other mobile platforms will be supported in the near future.

Content Creation

Transferring content into a digital library and keeping it updated is a challenge for many digital libraries. Our interdisciplinary research team includes editors from the Virtual Writing University, where much of the original content is available. A small set of the initial collection was converted and migrated from the Virtual Writing University website by its editorial staff. We also plan to train undergraduate researchers to perform basic research while contributing to the collection.

During fall 2010, English doctoral candidate Bridget Draxler, a practitioner of engaged pedagogy at The University of Iowa, incorporated the research component of “City of Lit” into her undergraduate “Interpretation of Literature” course, giving her students experience conducting research and creating multimedia content on local authors. The undergraduate students in this General Education Literature class each contributed research on one author for the digital library. In addition to creating traditional literary scholarship, students also produced recorded phone and video interviews with authors and literary scholars. UCOL Team members worked closely with the undergraduate students by providing technical support and training in multi-media authoring for the class. At the same time, student feedback helped the UCOL team to improve the data entry

interface. After this iteration, much of the content for the app will be generated by undergraduate student researchers and vetted by a professional scholar and biography author.

Involving undergraduate researchers in the project not only helps build content; it also broadens the students' research experience. The following two sections discuss the feedback we obtained from Draxler's class and the benefits of training undergraduate students to conduct scholarly research with digital library and new media technologies.

Twenty students enrolled in Draxler's undergraduate "Interpretation of Literature" class during the fall semester. Throughout the semester, students learned methods to conduct literary research. Feedback was administered at the end of the semester. Student reflections and evaluations, along with a formal survey designed by the UCOL team, were extremely helpful in identifying strengths and weaknesses of our pilot project. While collaborating with the undergraduate researchers, we gathered feedback from these young scholars about their experience in learning to use multi-media tools and contributing content to the UCOL digital library.

From reflections and evaluations, we learned that recording and editing interviews was the biggest challenge for most students, not only technologically but also strategically (in terms of identifying/contacting an interviewee) and personally (in terms of projecting confident public speaking). One student remarked, "The interview was a little bit of a hassle." We also learned, however, that recording and editing interviews was the biggest highlight for most students. When asked what aspect of the course was most useful, many said, "the author interview." Speaking with the author in person was especially enlightening for student, and in some cases transformative. Students enjoyed the project and learned a lot about their authors, their community, and themselves.

Overall, however, students found the extra effort to be worth their time. While students agreed that the course required efforts that differed in both type and degree from their expectations of an English class, students also agreed that the nontraditional components of the course were the most intellectually and personally rewarding.

"The UCOL project, though extremely stressful at times, was completely worth the work put in."

Summary and Future Work

We have developed a framework for young scholars to learn and contribute their research into the digital library collection. The initial feedback from this group of scholars is very positive. We intend to increase the number of undergraduate students conducting research. By propagating the course model developed from this experience, undergraduate students from a wide range of departments will lead research efforts to produce content for "City of Lit." Two more semesters of similar courses are scheduled, and the research team is collaborating with the instructors and the university to provide assistance for student training and to gain access to the students' class project content.

The development team is working closely with the Virtual Writing University's researchers and editors, as well as young scholars who contribute content to the digital library. This close relationship helps the development team to gather instant feedback in order to update different aspect of the digital library, including the database, the data-entry interface, the administrative interface, and the mobile application. The database implementation has gone through a few iterations to accommodate new requirements and will continue to improve. The web interfaces are used extensively and

evaluated by content providers and editors. The mobile application is under constant review by a focus group and user experience designers.

We have obtained positive feedback from the participating group of users, but one thing we wish we had time to complete is a detailed analysis or a comparison study to determine whether the use of such a digital library and its authoring environment affect the quality of generated content and of students' achievements. This research is planned for the forthcoming semesters.

In the future, we plan to expand to more mobile platforms, promote community engagement, and sustain a long-term project commitment.

1. Cross Platform Development

An iOS version of the mobile application was released last year. Apple device users in Iowa City—students, scholars, writers and avid readers—are currently able to navigate their environment with an enhanced sense of the literary, while being informed of current writing events in the community.

We plan to develop other mobile platforms as well as an online version of the app, so that worldwide users with an Internet connection will be able to learn more about Iowa City's literary history. The online version will branch into two directions: one focuses on providing a mobile-device friendly interface with a clean layout and intuitive navigation. Another focuses on providing more complete content that can utilize the full screen size of a computer screen. An experimental version that utilizes device detection scripts to generate specific layouts for popular mobile platforms is under development.

2. Community Engagement

In the next phase of app and programming development, users will be able to move from a more passive role of consumers to an active role of producing citizen-scholars, able to contribute personal text, photo, video, and audio commentaries by calling, texting, or uploading via the app. This multimedia content will vary from scholarly contributions to anecdotal video or audio recordings of important literary moments to personal experiences with and responses to local literature. The potential audience for our application will increase as well, as we expand support for additional platforms via a multimedia web-application.

The UCOL team is in the process of engaging local community members, including the UNESCO City of Literature board, the Iowa City Senior Center, and United Action for Youth, a visionary after-school program for local teens. By collaborating in and with the community, we can breach the traditional "town & gown" social construct, improving relations with those who support The University of Iowa and expanding the potential number of citizen scholars/citizen researchers contributing to "City of Lit" to create a richer cultural and community tapestry.

3. Long Term Impact

We expect this digital library will provide a wealth of information to scholars interested in writers from Iowa City. The information will be maintained in a database that can be queried easily. We are in conversation with the other UNESCO Cities of Literature and the UNESCO Creative Cities Network, and there is a high degree of interest in adopting and adapting our app to fit the needs and

cultural offerings of other Cities of Literature. Using Iowa City as a test case, our eventual goal is to facilitate community access to cultural information worldwide.

The University of Iowa has made a commitment to the Digital Humanities. We hope the UCOL project can serve as an exemplar at the University of Iowa and in the field of digital humanities and New Media, illustrating how traditional scholars can participate in engaged digital humanities research, facilitating intercollegiate collaboration at the highest levels of creative research and practice.

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