2010

Virtual Libraries Tour

Chris McHale
Margeaux Johnson
Dina Benson
Missy Clapp
Matthew Daley, et al.
Check here if this is your first grant application where you will be serving as a principal investigator (PI).

Principal Investigator (PI) Name: Chris McHale

Department: Library West Circulation  Email: cjmchale@ufl.edu  Phone: (352) 273-2542

Additional project applicants, please give name, email, and brief role for each:

Margeaux Johnson, margeaux@ufl.edu
Dina Benson, dbenson@uflib.ufl.edu
Missy Clapp, melshoo@uflib.ufl.edu
Matthew Daley, matdale@uflib.ufl.edu
Stacey Ewing, staewin@uflib.ufl.edu

Title of grant application project: Virtual Libraries Tour

Project abstract (no more than 100 words):

The goal of this project is to create a digital map of the college campus that will inform and direct users to the services offered by George A. Smathers Libraries, and to establish the organization as the center of academic research and scholarship at the University of Florida (UF). To accomplish this goal, the Virtual Libraries Tour (VLT) mini-grant team will work with the Emerging Technologies Advisory Group (ETAG) in two phases of development. This VLT proposal requests funding to support Phase 1 of this project, which will include hiring and training OPS staff for research and development of the tour’s content. They will collaborate with the ETAG to ensure that the resulting content is compatible for use in Phase 2; the release of a mobile, web-based tour of UF campus that will provide users with on-location access to information about library services as well as step-by-step directions to each branch and collection in the library system.

Funds requested (Limit of $5,000): $4,915.20

Describe how the 10% mandatory cost share will be met (be specific):

Dina Benson will dedicate her time toward this project by training student assistants and supervising content development. 1.0% of Dina’s yearly salary amounts to $499.69 cost share.

Margeaux Johnson, Missy Clapp, Stacey Ewing, and Matthew Daley will also work with student assistants and participate in content development.

Please list the library resources to be used in this project and the name of the person authorizing the intended use and date authorized. Each authorizing person must initial their approval and availability of resources for this project. If you need more room, continue on a separate page.

<table>
<thead>
<tr>
<th>Resources Required for Project as applicable including cost share contributions</th>
<th>Authorizing Individual</th>
<th>Approving Initials</th>
<th>Date Authorized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special and Area Studies Collections</td>
<td>Rich Bennett</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DLC-Digitization, Dina Benson</td>
<td>Laurie Taylor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marston Science Library, Margeaux Johnson</td>
<td>Vernon Kising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library West; Stacey Ewing, Missy Clapp</td>
<td>Leilani Freund</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Signing in Vernon’s absence*
a. Description of project.

Maps are some of the most commonly requested brochures at any information desk on a college campus. As librarians search for new ways to optimize and promote library services, they often forget that one of the most important aspects of active outreach remains in customers' awareness of the locations at which services are offered. The goal of this project is to create a digital map of the University of Florida campus that will inform and direct users to the services offered by George A. Smathers Libraries, reinforcing our organization as the center of academic research and scholarship at UF. To accomplish this goal, the Virtual Libraries Tour minigrant team will work with the Emerging Technologies Advisory Group in two phases of development. This minigrant proposal requests funding to support the first phase of this project, which will include hiring and training student assistants to research and develop the tour's content. These students will collaborate with the minigrant team to ensure that the resulting content is compatible for use in the second phase: the release of a mobile, web-based tour of UF campus that will provide users with anytime location-related access to information about library services as well as step-by-step directions to each branch and collection in our library system. We anticipate that this service will provide new students, faculty, staff, and visitors with a fun and educational way to learn about the UF campus and the opportunities available at the George A. Smathers Libraries.

b. Statement of importance.

As academic libraries suffer decreases in funding and staff, many of the traditional library tour services are neglected in favor of time spent on classroom sessions that focus on use of the library's digital resources like catalogs and databases. Of the 68 ARL institutions surveyed by researchers in 2000, 93% still offered guided tours of library buildings and services despite the enormous effort this requires from faculty and staff. Many of the librarians that responded considered "spatial orientation to the library building important aspects of active outreach (Oling & Mach, 2002)." In the article "Usage of Academic Libraries," Simmonds and Andaleeb conclude that "the use of academic libraries is influenced most by users' perceived familiarity with the library and its resources." In fact, "if library usage is to be increased, it is important that libraries find new ways to familiarize users with the library (2001)."

In the second phase of the proposed project, the content developed under this grant will be used to create an interactive, location-aware map of UF campus. Library buildings, collections, and services—as well as several non-library locations as reference for users—will be tagged with GPS markers to create a 24hr virtual guide for students, faculty, and visitors. This service will increase awareness of library locations and resources, as well as fulfill the mission of the UF Libraries by adding to existing information literacy, instruction, and outreach opportunities.

The ETAG is also investigating the implementation of "augmented reality" applications, which is defined as "technology that augments the real world with virtual information (Sierra & Wust, 2010)." This software will utilize the camera on a mobile device, such as an iPhone, so that digital content can be layered over a real-time image on the display. With the use of this technology, ETAG plans to create an interactive mobile environment that will connect users directly to content hosted in UF Digital Collections (UFDC) and the University Archives including information about library services, descriptions of library collections, and facts about UF history and heritage. A visual example of the augmented reality aspect is included in the appendix of this proposal. In addition to promoting the physical presence of the library system, this service will also bring attention to UF Libraries' digital services, collections, and initiatives. It will demonstrate an institutional involvement in emerging technologies and provide an effective library tour with the least amount of impact on staff.
This service will also impact users in other departments and organizations at UF. The Florida Cicerones and Student Alumni Association offer campus tours for potential students, visitors, and college freshmen on a regular basis throughout the year. Maintaining accurate information about the libraries on this tour is an important way to market services to new users. The digital tour will provide a reference for tour guides to ensure that the correct information is included at each stop. It will also serve as a supplementary service that can be marketed by the Cicerones as an after hours self-guided tour of UF campus. While fulfilling a larger need for the University in general, this service will promote a positive image of the UF Libraries to incoming freshmen, international students, and visitors.

c. Similar projects in academic libraries.

Although virtual tours were in development at many of the academic institutions surveyed, 31% reported the current use of digital tour guides in 2000. Among these, 86% relied on the reference and instruction units for the creation and maintenance of these services (Oling & Mach, 2002). These numbers are expected to rise over the next few years both as a way to maintain tour services with less staff involvement and as a way to utilize the modern mobile technologies that are currently in wide use.

The mobile interface of the tour will be modeled after North Carolina State University’s (NCSU) WolfWalk, which provides user’s with an interactive map and over 50 global positioning system (GPS) locations of interest on the NCSU campus. Each location is supplemented with images from NCSU Special Collections Research Center digital archives and users may access these images while exploring the map. More information about this program, including screenshots and downloadable version of the software, may be found on the the NCSU Digital Library Initiatives project website:


d. Resources needed to complete the project and impacts on other departments

To accomplish this goal, VLT minigrant team will hire and train two student assistants to collect and prepare a variety of multimedia for the project. Although they will collaborate on an overall narrative for the tour, each will focus on an aspect determined by their individual talents. One will serve as a visual coordinator for the project and work with University Archives staff to locate images and videos of each library and reference location on the tour. The other student assistant will consult with staff and utilize library resources to develop the storyboard narrative for each site. The overall goal is to create an fun and educational way to learn about the UF Libraries and its services, but it will also make use of UFDC’s Florida History collections to highlight the history and heritage of UF’s campus. Once the resources have been collected, the VLT team will supervise the creation of the digital tour’s content by combining marketing, journalistic writing, and digital storytelling into a single interactive narrative.

No additional materials are needed.
e. Plan of action for the project.

Virtual Libraries Tour team (VLT): Margeaux Johnson (MJ), Dina Benson (DB), Missy Clapp (MC), Matthew Daley (MD), Stacey Ewing (SE), Visual Coordinator Student (VC), Content Coordinator Student (CC)

<table>
<thead>
<tr>
<th>TIME</th>
<th>ACTION</th>
<th>BY WHOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov</td>
<td>Hire 2 student assistants for research and development</td>
<td>PI</td>
</tr>
<tr>
<td></td>
<td>i. Visual Coordinator (VC)</td>
<td>VLT</td>
</tr>
<tr>
<td></td>
<td>ii. Content Coordinator (CC)</td>
<td>DB</td>
</tr>
<tr>
<td></td>
<td>Decide which locations to use for the tour</td>
<td>MD</td>
</tr>
<tr>
<td></td>
<td>Introduce VC to UFDC/IR for visual research</td>
<td>MC</td>
</tr>
<tr>
<td></td>
<td>Introduce SE to organization and historical content development</td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>Arrange meeting between CC and Carl Van Ness for historical content research and development</td>
<td>DB</td>
</tr>
<tr>
<td></td>
<td>Recommend appropriate digital format for content</td>
<td>MD</td>
</tr>
<tr>
<td>Nov - Jan</td>
<td>Collect visual media for Libraries and Historic sites</td>
<td>VC</td>
</tr>
<tr>
<td></td>
<td>Develop content for tour narrative at each site</td>
<td>CC</td>
</tr>
<tr>
<td>Jan - March</td>
<td>Decide on visual media for project, Develop tour narrative to match the visual content</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>CC, VC</td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>Begin Emerging Technologies Mini Grant for Phase 2</td>
<td>VLT</td>
</tr>
<tr>
<td>Feb - March</td>
<td>Create digital content</td>
<td>CC, VC</td>
</tr>
</tbody>
</table>

g. Provide a means of measuring the success of the project.

Following the implementation of Phase 2, statistics can be kept on the number of times the application is accessed online.

h. What are the long-term financial implications if the project is successful?

There are no anticipated recurring costs other than web hosting for tour materials and updates to content when changes in services occur.

i. What will happen after the project ends?

The content developed by this project will be used by ETAG in Phase 2, which will include publication on a mobile, web interface. Other possible uses include:

- Training materials for staff conducting guided tours
- Printed self-guided tour materials
- Promotional and developmental opportunities
## 1. Salaries and Wages (no fringe benefits required)

<table>
<thead>
<tr>
<th>Name of Person</th>
<th>Salary times % of effort</th>
<th>Grant Funds</th>
<th>Cost Share</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris McHale, PI</td>
<td>56,172 x 1.0%</td>
<td>$0.00</td>
<td>$562.00</td>
<td>$562.00</td>
</tr>
<tr>
<td>Dina Benson</td>
<td>49,968 x 1.0%</td>
<td>$0.00</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Matthew Daley</td>
<td>73,832 x 1.0%</td>
<td>$0.00</td>
<td>$738.00</td>
<td>$738.00</td>
</tr>
<tr>
<td>Martha Johnson</td>
<td>58,479 x 1.0%</td>
<td>$0.00</td>
<td>$584.00</td>
<td>$584.00</td>
</tr>
<tr>
<td>Melissa Clapp</td>
<td>67,027 x 1.0%</td>
<td>$0.00</td>
<td>$579.00</td>
<td>$579.00</td>
</tr>
<tr>
<td>Stacey Ewing</td>
<td>56,884 x 1.0%</td>
<td>$0.00</td>
<td>$599.00</td>
<td>$599.00</td>
</tr>
<tr>
<td>Student Assistant - Visual Coordinator</td>
<td>$10/hr, 12/wk, 20 wks</td>
<td>$2,458.00</td>
<td>$2,458.00</td>
<td></td>
</tr>
<tr>
<td>Student Assistant - Storyboard Editor</td>
<td>$10/hr, 12/wk, 20 wks</td>
<td>$2,458.00</td>
<td>$2,458.00</td>
<td></td>
</tr>
</tbody>
</table>

**SUBTOTAL** $4,916.00 $3,562.00 $7,478.00

## 2. Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity times Cost</th>
<th>Grant Funds</th>
<th>Cost Share</th>
<th>Total</th>
</tr>
</thead>
</table>

**SUBTOTAL** $0.00 $0.00 $0.00

## 3. Supplies

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity times Cost</th>
<th>Grant Funds</th>
<th>Cost Share</th>
<th>Total</th>
</tr>
</thead>
</table>

**SUBTOTAL** $0.00 $0.00 $0.00

## 4. Travel

<table>
<thead>
<tr>
<th>From/To</th>
<th># of people/# of days</th>
<th>Grant Funds</th>
<th>Cost Share</th>
<th>Total</th>
</tr>
</thead>
</table>

**SUBTOTAL** $0.00 $0.00 $0.00

## 5. Other (services, vendors, etc.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity times Cost</th>
<th>Grant Funds</th>
<th>Cost Share</th>
<th>Total</th>
</tr>
</thead>
</table>

**SUBTOTAL** $0.00 $0.00 $0.00

**Total Direct Costs (add subtotals of items 1-5)** $4,916.00 $3,562.00 $7,478.00
October 13, 2010

Bess de Farber,

Dear Bess,

Dina Benson has requested that I write a letter of support in regards to her application for a mini-grant to create a virtual library tour for mobile phones. Specifically, I have been asked to comment on the “augmented reality” portion of the tour that will connect users to relevant content in UF Digital Collections and the University Archives.

As Dina points out in her narrative, there are several obvious applications for virtual touring on campus. In addition to the almost daily tours conducted by the Cicerones, there are many impromptu tours conducted for smaller groups that attract far less attention. In all of these tours, the information provided is limited to the tour guide’s personal knowledge. For the Cicerones, the knowledge is limited to what is provided in their scripts.

The creation of online mapping tools as a way of providing additional campus information began a number of years ago. The University’s Google map provides limited information on campus buildings and Facilities Planning has a primitive map locating types of trees on campus. Until recently, though, the technology was limited by the lack of mobile devices that would make field application possible. In the past year, I have been approached by several people, in addition to Dina, who want to explore possible applications of archival information to mobile phones. The interest is clearly there. Nor is the interest confined to historical background on buildings and places. For example, few people know that there are seven water-filled sinkholes on campus, that the football stadium was built in a sinkhole, or that there is a natural spring under the stadium’s east stands.

The Libraries’ are a logical starting place for a campus virtual tour. We are geographically dispersed, we have a need to disseminate information, and we possess one of the University’s most significant historical buildings. If successful, this grant could be the seed for a campus-wide project. I would strongly urge the Digital Library Center to investigate possible partners to go beyond the scope of this proposal once the project is completed.

Sincerely,

Carl Van Ness
University Historian and Archivist
Mr. McHale and team,

My name is Karsten Farrell and am the Vice President of Programming for the Florida Cicerones/SAA, the official student ambassadors to the University of Florida. My primary function in the organization is to facilitate our external programming with our contacts across campus and the community, including but not limited to the Office of Admissions, University Athletic Associate and President’s Office. I write you today on behalf of our executive board and 146 members to show support for your project and the Minigrant you are seeking.

Having been the Cicerones former Tour Chairperson, I see this endeavor having significant potential to help our organization provide quality experiences for the over 37,000 visitors we work with each year. We also firmly believe that a institution on the level of the University of Florida should always be on the cutting edge of new ways to provide for and educate potential students, which the Historic Tour certainly will do.

We as an organization greatly look forward to seeing the application fully functional and are more than willing to lend any help or support needed along the way.

All our best and of course, Go Gators!

Karsten Farrell

Programming Vice President
Florida Cicerones/SAA

(727) 415-8042

Documents made or received by anyone acting for or on behalf of the UF Foundation are confidential and exempt from F.S. 119.07(1) pursuant to F.S. 1004.28(5) and in accordance with the UF Foundation policy on confidentiality of Foundation documents.
Dear Chris,

I am writing in support of your mini-grant proposal to create a mobile tour of the UF Libraries’ collections and services. The libraries must continue to stay at the forefront of new technologies to attract and sustain users and donors. This user interaction method of “touring” the libraries will be a quick and easy way for students, faculty, staff and visitors to learn more about the libraries.

It will bring attention to the libraries’ collections and interesting facts in real time that can spark an interest that may never be realized by users finding locations on a traditional printed or even web-based map. Many students and faculty are not aware of all of the campus libraries and this will serve as an educationa; tool so that they will learn about the breadth of the UF library system. This will also be a useful tool when promoting the libraries and collections to new users and potential donors.

You have my support in any way you need in creating and editing content to make this a reality.

Regards,
Barbara

Barbara Hood
Public Information Officer
University of Florida George A. Smathers Libraries
PO Box 117000
Gainesville FL 32611-7000
352.273.2505 | Fax 352.392.7251
References


1. Please get Will Chaney’s approval to commit Matthew Daley’s effort.

This has been acquired and forwarded to Bess.

2. Will the project team be reusing the location software used in Wolfwalk? There’s not much discussion of the actual application.

In Phase 2 of the VLT project the team will collaborate with the Emerging Technologies Advisory Group to upload the content created in Phase 1 into an interactive, mobile application. ETAG has a contact from NCSU’s Digital Library Initiatives team that will be providing the software code developed for the WolfWalk program. Although this software is location aware, it does not include the augmented reality feature that will be utilized by the University of Florida’s Virtual Libraries Tour. The WolfWalk source code will provide a useful reference for staff in the development of an augmented reality tour using a tool called Layar:
   “Layar works by using a combination of the mobile phone’s camera, compass and GPS data to identify the user’s location and field of view, retrieve data based on those geographical coordinates, and overlay that data over the camera view.”
   <http://site.layar.com/download/layar/>

3. What expertise will be used to "create an interactive, location-aware map of UF campus" so that it will be useable in phase 2?

The Layar tool is free and requires a team of developers with an average expertise in web development. The VLT group is still in the process of collecting information and resources for Phase 2 of this project. We are exploring partnerships with students from the Computer Science and Engineering departments and the Digital Worlds Institute. It may be necessary to hire an additional OPS programmer to meet project deadlines. There are additional support materials and resources for developers hosted on the Layar wiki:

4. What are other measures of success for phase 1 of the project? What’s the actual product for phase I? Number of GPS points, positional accuracy of those points, number of images collected, any proposed audio descriptions, etc.?

At the end of Phase 1 the VLT team will have content for use in various outreach and promotional activities at the UF Libraries. There are plans to improve upon the current version of our “Libraries in Brief” handout, including the development of a self-guided paper tour of the UF Library System and campus history and to update and revive the Libraries web tour:
40 individual sites will be included in the tour including all 9 branches of the UF Library System and 31 significant landmarks from the list of historic buildings on the UF campus. A variety of multimedia will be incorporated including audio narratives and visuals pertaining to each location. Furthermore, the success of Phase 1 can be measured by keeping statistics on the number of printed tour guides requested at campus service desks and by tracking usage of the web based tour application.

5. Can other outside letters of support be obtained? (2 out of 3 letters are internal)

The Virtual Libraries Tour team is currently seeking additional external letters of support from the UF IT Department, the University of Florida Preservation of Historic Buildings and Sites Committee, and New Students and Family Programs at the Dean of Student Services Office.

6. Literature cited is 8 to 9 years old. Is there newer literature supporting the project?

The literature was selected to demonstrate a precedence for academic libraries to be involved in campus tours. The Oling and Mach study not only surveyed ARL institutions, but describes the different strategies employed by these institutions to educate users about the spatial orientation of the library branches on campus. These tour strategies will influence the development of products in Phase 1 and set goals for the outcome. Newer literature was not found that accomplished this same purpose, but we could expand the literature review outside of the fields of academic librarianship to include museum studies, etc.

7. I would like more information on the materials to be produced in Phase I, number.

The content created for this tour will center around the University of Florida Library System and include visual landmarks from the list of sites that make up UF’s Historic Campus (31). The narrative accompanying the content will be designed to offer a guided, walking tour of the 9 UF Library Branches. Each stop on the Virtual Libraries Tour will include a current list of services, collection strengths, and other interesting facts about the location. Significant campus landmarks will be included to supplement the user’s experience and improve the way we introduce new students to a spatial orientation of campus with special emphasis on the Libraries. Historic sites on the tour will focus on the University’s history and heritage and showcase both material and digital collections from the George A. Smathers Libraries. A variety of multimedia formats (visual, audio, and text) will be utilized to create a content rich virtual world for new students and visitors to the University of Florida.

In Phase 1 the VLT group will collect and create content that can be uploaded to a
location-aware, augmented reality application that will run on most Android and iPhone mobile devices at a later date (Phase 2). This content will also be used in a variety of digital and print resources, such as a web based virtual tour and self-guided tour pamphlets, so that it may reach a larger audience of users that may not have access to a compatible mobile device. There are current examples of this type of service at the UF Libraries including the “UF Libraries in Brief” handout and even an outdated web based tour that is still being hosted at the following web address:

<http://www.uflib.ufl.edu/videos/libtour/>

The content created in Phase 1 will be used to improve upon these current projects while Phase 2 will expand these services by making them available on a mobile platform.

8. YouTube videos were created to market the UF Libraries, will those videos be incorporated in Phase II?

Links to existing outreach materials will be included in the tour content after they have been evaluated for accuracy. This will include Youtube videos, promotional materials, and official UF Libraries’ profiles on existing Web 2.0 resources (Facebook, Twitter, etc.).

9. Are there existing examples of augmented reality tours in general?

There are no current examples of augmented reality applications being used in a library setting. The San Jose Public Library has an Institute of Museum and Library Services grant to work towards a historical tour for San Jose. They are only in the research phase. The City of Philadelphia is also in the process of developing an augmented reality prototype that will be connected to the Phillyhistory.org photo archive. They were awarded a grant in March 2010 by the National Endowment for the Humanities Office of Digital Humanities. Other examples may be found on the Layar website at the following address:

<http://site.layar.com/create/examples/>.

10. These references discuss this type of project http://www.slideshare.net/islanderlee/augmented-reality-libraries, http://ilearntechnology.com/?p=3035 and provide some current references, will your project be similar?

Phase 2 of this project will make use of these references, particularly information about the augmented reality development tool, Layar, which be used to upload content created in Phase 1 into a mobile platform.