TourGuide Shows the Way to the Future

Released on September 27, 2012, TourGuide is a web-based mobile application capable of guiding users through a single gallery to an entire city or even larger area. It is aimed at, and free to, educators, and does not require a native application, so it works with iPhone or Android phones and other mobile devices. Because it is web-based, users simply go to a link on the web.

Creation of TourGuide was made possible thanks to the generosity of Henry Timnick (BA 1955, MA 1958, Business), who chose to sponsor TourGuide in honor of his late mother, Otilie Schroeter Timnick. Mr. Timnick’s financial assistance enabled the project to move beyond the development stage and into production, including creation of three kiosks to house the app.

GPS IS KEY TO SUCCESS
Due to its built-in GPS, TourGuide knows where the user is on a preloaded map that auto-hides as the user gets close to the next information point. This feature also allows TourGuide to know when to present the user with new information.

"TourGuide has audio narration, images, a print of the tour text and map," says College of Arts and Letters Director of Educational Technology Scott Schopieray. "Video can also be added. And, again, because it is web-based, we simply have to fill out forms to create a tour."

The idea for TourGuide came to Schopieray while he was attending a conference where attendees were brainstorming apps.

“I thought of a tour guide application that could be used by anyone to create a tour,” he says. “Students could take a mobile device, pair up with others, and still see and hear the same content as they went on a self-guided tour.”

Schopieray says that the proof-of-concept stage involved creating a web-based app with CAL Curriculum Development Specialist Brian Adams that cached onto the iPad for a tour of the 25 Frank Lloyd Wright homes in Oak Park, Illinois.

“As a proof of concept, we wanted a very simple one-off, just for Frank Lloyd Wright, to see how that would work,” Adams says. “So, we developed a rapid prototype app on the iPod Touch that Scott could test when he traveled to Chicago. It was a mobile web app, a static app, so it was just Frank Lloyd Wright; there was no interface.

Adams says the team took what it learned in that process to create the first prototype of the web app, which was taken to trial within a couple of months.

Arts and Letters students Tatum Walker (Art History) and Brooke Hawkins (English/Professional Writing) created the content for TourGuide.

SILENT SPRING CAMPUS TOUR
Says Schopieray, “Our creative team’s first on-campus tour supported the MSU Museum’s major exhibition for 2012, ‘Echoes of Silent Spring—50 Years of Environmental Awareness,’ and its 12-station walking trail.”

The MSU Museum’s exhibit, which ran May 29 – December 30, 2012, was tied to the 50th anniversary of the release of Rachel Carson’s 1962 book “Silent Spring,” and chronicled the story of
Dutch Elm Disease; the dying robins and other birds; and the likely impact of DDT. Carson’s book was the first to alert people worldwide to the potential dangers of pesticide use.

“The research into pesticide use and effects on Dutch Elms that was done at MSU was very important to the issues raised by Rachel Carson in ‘Silent Spring,’” Schopieray says, “including Dutch Elm Disease, and infestation by the Bark Beetle.”

Today, the MSU campus has one of the largest, if not the largest, concentration of elm trees in the world. Two of these “survivors” are on the MSU Museum walking tour.

“We placed QR codes on the tour signage,” Schopieray says, “that take the user directly to the individual tour stop, and then, by clicking ‘Next,’ provide directions on how to get to the next stop on the tour.”

Schopieray adds that student Tatum Walker worked with MSU Museum Director Gary Morgan to write the content for the ‘Silent Spring’ tour, take and source photos for the locations, and select and arrange for voice talent, including a native Spanish-language speaker.

Says Walker, “The ‘Silent Spring’ campus tour includes Beal Gardens, two of MSU’s surviving elm trees that stand across from the Library, Beaumont Tower, the Sacred Space, the MSU Museum, Ag Hall and a rock marker at the corner of Collingwood and East Circle Drive near the new Broad Art Museum. The plate on the rock notes that this is the spot where on May 24, 1889, Michigan Agricultural College Horticulture and Landscape Gardening Professor Levi R. Taft began control of orchard pests by spraying.”

Walker says that the tour continues on to the fountain and the Natural Science building, where testing had shown huge drop-offs in bird populations as DDT was affecting eggs, baby birds and nesting areas. The tour also includes a stop by the Red Cedar River behind Bessey Hall near the MSU Bike Shop, where the Band Shell used to stand.

“Key to everyone’s efforts was to focus on the importance of location and place when creating a tour,” Walker says. “It’s a quality we continually work to emphasize in our work.”

Above: Arts and Letters staff members Scott Schopieray, Brian Adams, and grad student Tatum Walker discuss possible upgrades to the TourGuide kiosk and interface.

“We decided not to commercialize TourGuide, but rather to launch an open-source app in the future,” Schopieray says. “In the meantime, we’ve been working on creating various new capabilities, such as user assessments, and the ability to leave comments and suggestions for museums, and notes so users can remind themselves where they saw various things.”
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SUPPORTING PLACE-BASED LEARNING

Schopieray agrees. “TourGuide is an application that supports place-based learning, so we have been working on several tours,” Schopieray says. “I’ve been collaborating with Steven Thomas at the Museum for a long time, so that is a natural. Another project involved various scientists and artists, CAL Professor John Frey and “Architectural Digest” magazine, on East Lansing Modern, a project of Professor Susan Bandes that was tied to the State Historic Preservations Office’s Michigan Modern project.”

He notes that Walker also worked with Denise Leach, specialist, virtual outreach social studies, on research into determining how student learning changes when students are turned loose on their own.

Officially unveiled to the public in October 2012 at the College of Arts and Letters Homecoming tent, the TourGuide kiosk is the first of three state-of-the-art kiosks built to allow those who do not have a mobile device or who are unable to take campus-based tours to have an interactive campus experience. Educational Technology staff members Schopieray and Adams built the kiosks with help from student Nick Reynolds, and Arts and Letters students Walker and Hawkins created the content.

“The kiosk was tied to the 50th anniversary and a tour of campus buildings,” says Adams. “The initial data creation – putting all of the pieces together – was done in TourGuide, but the kiosk itself was a static app that was created separately.”

“Being able to see the map and click on different buildings that were particularly relevant to my student life was a fantastic way to reconnect to my college experience. I’m excited to see how many more places and spaces can be added in the future!”

—Kate Sonka
CAL Alumni Board Secretary

Adams adds that there are a number of authors now creating tours, with the TourGuide team managing the overall system that lets people go in and create their own tours. Users are responsible for their own content, and go in and create it using a desktop, laptop, or other device.

THUMBS UP FROM ALUMNI BOARD MEMBER

Arts and Letters Alumni Board Secretary Kate Sonka was one of many intrigued and impressed by TourGuide during Homecoming 2012.

“I was able to test out the TourGuide kiosk at the CAL Homecoming Tent this year, and found it to be a useful tool with a beautiful interface,” Sonka says. “Being able to see the map and click on different buildings that were particularly relevant to my student life was a fantastic way to reconnect to my college experience. I’m excited to see how many more places and spaces can be added in the future!”

Schopieray, Adams, Walker, Hawkins and other team members are also interested in the future of TourGuide.

“We decided not to commercialize TourGuide, but rather to launch an open-source app in the future,” Schopieray says. “In the meantime, we’ve been working on creating various new capabilities, such as user assessments, and the ability to leave comments and suggestions for museums, and notes so users can remind themselves where they saw various things.”

Says Schopieray, “We’ve barely scratched the surface on where TourGuide can go.”