VirtualVisit
Interactive Digital Display

Design Proposal
for
The Long Island Museum

by

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February 29, 2013
CSE323
Summary
Long Island Museum, located in Stony Brook, NY is spread out in ten different buildings. As people enter the museum they tend to spend more time on earlier displays along their path. As they wander museum fatigue takes over and they step through the remaining installations much faster. They may have been more interested in a later display but by the time they get there they are tired. I would like to solve this problem by designing an interactive digital display where people can visually preview where specific installations are and better plan their visit. Instead of a static directory, this display will provide visual interest by communicating information to the visitor based on what they want to explore. This display will also give a visitor the ability to search a specific display by name.

They will be presented with a 3-d isometric plan of the buildings and can move their mouse though the travel path on the plan. As they move along the circulation, images of different installations will appear in a secondary and more abstract 3-d space. This would give them an idea of where the more relevant installations are that they would want to spend the most time on. In addition they will also be able to preview a panorama of special spaces within the museum. The VirtualVisit would have an administrator's interface where museum staff can easily update the data (images and text) as the displays change through the year.

Target Audience
Long Island Museum is very much a family museum comprised mostly of parents with young children. Visitors here can be divided into three age groups. First, children ranging from 8 to 10 visit the museum through a school trip for educational purposes, sometimes as part of their curriculum. Second, people in their forties visit the museum with their children for a family outing. Third, people in their 50's and up visit the museum for entertainment and to learn about Long Island's history. Scholars also visit the museum for research purposes. The typical users will most likely have an intermediate knowledge of computers and technology. They are expected to be suburban, local residents of Long Island. VirtualVisit will be designed to appeal to these three user groups. It is assumed that a research scholar will not need this type of guidance since he or she will already be well versed in what they came there to research.

Precedence
Interactive digital displays are becoming increasingly popular in large buildings. Directories and maps are utilized at points throughout a museum to guide people. Virtual tours can generally be obtained from a museum's website but few, if any, will be as interactive as VirtualVisit. Not only will it show what installations are available, but it will also help in way finding.

In museums especially these displays can be found at major circulation intersections inside a building and features of these displays are also integrated in the museums website. Most displays present a floor plan and by clicking on on icon in a gallery a visitor is able to see a thumbnail of the display. Links to four such maps from New York City museums follow along with a brief description:

Museum of Natural History: http://www.amnh.org/plan-your-visit/interactive-floorplan
Visited by a diverse audience, this museum is loved by children and adults alike. Their interactive map displays a plan of each floor and by clicking on icons in different galleries, it displays a thumbnail and description of the gallery.

The Metropolitan Museum of Art:  http://www.metmuseum.org/visit/museum-map
This incredibly complex museum’s website displays a plan of each floor and by clicking on a gallery a description pops up. Clicking on the description leads you to a home page of the gallery. This is most useful for adults and researchers. The information is detailed and ordered systematically.

Guggenheim Museum:  http://www.guggenheim.org/new-york/visit/plan-your-visit/map
Hovering your mouse over circulation ramps of the Guggenheim presented in 3D view, displays a thumbnail of the installations.

The Frick Collection:  http://www.frick.org/visit/virtual_tour
Clicking on a gallery plan takes you to a virtual panoramic tour of that gallery.

Approach
Our brain functions in an organic way and tends to want to construct an internal model of the outside world\(^1\). This can best be done if the visual images on a computer are presented in a manner closest to the way we examine actual objects in the non-virtual world. We don’t click on objects in real life; they are there to be viewed and we just have to turn our head towards them.

My approach will be most similar to the one taken by Guggenheim Museum. I find clicking on galleries can get monotonous and deprive the visitor of a rich visual experience. For children with shorter attention spans, touring the space by following a path, like driving a car and looking out the window, would be more immersive and generate interest rather than clicking on a static plan.

Design
The interactive kiosk will be placed at the Visitor Center.

The Visitor
At the VirtualVisit kiosk the visitors will be presented with a plan of the entire facility showing all buildings. The kiosk will include a mouse or be a touch-type display, depending on cost and availability. By hovering their mouse over a building, that building outline will morph into a three dimensional and roof-less building so they can peek inside. By moving the mouse over differently areas images of each installation will pop up. More information will be presented on selected displays that have significant facts associated with them. The only clickable element will be icons in the center of each gallery, which will show a 360 degree panoramic view of the space.

While viewing the images the visitor can create an itinerary and have it emailed to them which they can view on their mobile device. This information will include a thumbnail of the installation, a plan showing the location and a brief description which they can have with them to help them find the installation they want to view.

Besides the site plan, the display will also present broad categories of topics covered by the museum. Clicking on these will take the visitor to related images and clicking on one of those images will link back to the plan showing where this particular object is located.

The Administrator
A back end will be provided for the administrator where one will enter new images and text, and link it to a location on the plan. This will update the database and the next time the display is viewed by a visitor, it will be updated with the most current information. Updatable elements will include thumbnails of images depicting the displays, text for the displays, detailed text for selected displays, location of the displays on the plan and the 360-degree panoramic views.

The Kiosk
The kiosk that will house this display will be designed from the ground up, taking varying human factors, such as height of a child versus the height on an adult. It will be designed as modern millwork and will stand apart from the traditional architectural style of the building. It will be simple, attractive and generate curiosity in this age of high-tech electronics. Its modern look will complement its function. Similar to a modern addition to a historic building it will be integrated into the museum responsibly as not to diminish the importance of the existing historic fabric.

Research and Collaboration
I will conduct field research to observe how people visit displays in The Long Island Museum to get a better feel of their objectives and study the distribution of age groups. I will research displays in other children-friendly museums to understand what is successful and what is not. This will help me add additional features as necessary, which may not be mentioned in this proposal.

I will be collaborating with Joshua Ruff, the curator of The Long Island Museum, on documenting and highlighting significant features of the museum. He will provide all necessary historic data, images and curated facts.

Collaboration
I will work on this project by myself. The design will include:

- Survey - photography including panoramic and single images
- Building a 3-d model of a museum in AutoCAD
- Field research - observation and survey
- Graphic interface design - for visitor
- Backend interface design - for staff
- Database for images and text to be displayed
- Design of the kiosk

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