Project Plan
IPRO 306: Hyde Park Art Center Digital Façade

Objectives

The goal is to create a nationally recognizable icon capable of displaying artwork, advertising events or classes and integrating an element of human interaction.

The scope of this project is to present a variety of solutions, determining and defining a system required to implement a digital façade for the new Hype Park Art Center. The pioneering icon for the Hyde Park Art Center will engage neighbors and those who pass by, in addition to ideally attracting visitors from all over Chicago and beyond.

The projection area will be the Art Center's signature while serving many exhibition and studio needs by bringing art directly into the view of the community it serves. The idea is that the art created because of this façade will be a signature as well. Because of this, the façade system itself needs to accommodate many different digital art mediums to function as a blank canvas with opportunity for a creative manipulation by artists, visitors, and the Hyde Park Art Center to the full capabilities of the technology.

Background

Described as the neighborhood's most resilient and progressive institutions, the Hyde Park Art Center mission is to stimulate and sustain the visual arts in Chicago. It is the oldest alternative exhibition space in the City and boasts a long record of education outreach in the community.

In addition to its wide array of art courses that people of all ages can participate in, the Hyde Park Art Center also hosts panel discussions, gallery talks, poetry readings, music performances, open house events, and a series of short pieces by guest writers that expand upon the approaches and ideas presented in each exhibition and engage a broad audience. The Art Center utilizes its diverse exhibitions program and is expecting to attain national recognition for themselves with the new building and façade to be designed by IPRO 306.

To fulfill its mission statement and goals, the Art Center actively pursues arts mentorships within the community by fostering a collective spirit among artists, teachers and students, children and families, collectors, and the general public. The Art Center was founded in 1939 and is now renovating a former University

of Chicago building. With IPRO 306 to push the envelope, the Art Center hopes to inspire new loyal supporters with a new beginning.

Methodology

Technical Viability:

Technical issues must be recognized and resolve for this project to be successful. Some of the areas which still need attention are how to transfer information from a given control station to the façade and which transmission media to use. Other issues are, but not limited to, computer hardware, application software, methodology of transforming film and slide art to digital renderings and network connectivity. Expansion possibilities for future growth, in terms of use and technology, must also be taken into account.

The display equipment must be able to meet certain criteria in order to make this project feasible. The equipment must have small dimensions and light weight to enable an ease of management and maintenance. It is imperative for the equipment to possess a high aesthetic quality in order to avoid becoming an eyesore. The angle, distance, sizing capabilities, and resolution must all be considered to determine suitable equipment and its location in the gallery. Egress along the catwalk cannot be disrupted by bulky equipment or cables due to the key role it plays in the gallery's circulation pattern. The projector itself must be able to accept and interpret data transmitted to it over some type of internet connection. All of this needs to meet reliability and cost parameters for the needs of the center as well.

Marketing Feasibility:

While emphasis should be placed on artists needs, without the careful study of sound and projection, the project may be in danger of creating a disturbance for certain portions of the residential area. The buildings that face the east-oriented façade of the Hyde Park Arts Center are comprised of high rise residential structures, making it the most densely populated area in the city of Chicago. Elements generated to compliment the images on the façade such as sound may cause neighborhood interference, but can be avoided if thoroughly researched alongside City of Chicago Ordinances. Such sound could make use of AM or FM radio frequencies, but is only one option of many where possibilities must be researched. The audio's effective distance range should also be taken into consideration, as it will be a deciding factor in the size and orientation of speakers.

The exhibition space should be viewable from both inside and outside, but there are several considerations for other available space. The second level catwalk will remain essential for traveling between two second-story rooms that will also be used as gallery space. The art façade should remain as flush as possible to provide the greatest possibility of interaction in the building. Although the façade will have equal emphasis for viewing locations, enticement needs to happen for the outside.

This project is about how to make art possible from performance art to, installation, digital projection and adhered images, this façade should have the capacity to grow with future progressions of art. There is interest from the Center for the capability to give real-time art class and studio video feeds but to foremost engage the street in a way no other building has done. To do this, the separation between gallery and studio must be broken down.

The Hyde Park Art Center is a community art center that not only specializes in putting on exhibits of art work but also offers art classes and studio spaces. It mission is to be at the very forefront of the art community with the desire to gain national attention while maintaining a strong link with its community. The digital art façade will continue to emphasize this mission, making its goals a definite reality. Not only will the façade increase artists' ability to present to the general public, but more importantly to innovate through the use of the façade as a media. Interest in the Hyde Park Art Center by community members is a crucial market for the center to sustain operations, but this façade has the possibility to nationally expose Hyde Park Art Center and develop a much larger following. By increasing exposure to the general population by means of viewing possible art and video while passing by, the greatest outcome is to increase opportunities to acquire the public's attention and possible interest.

Long-Term Assessment:

The Art Center has stayed true to the mission of making artists of every kind and the public they display to contemplate contemporary art by fostering creativity. Creating venues and chances to create artwork exclusively at the Hyde Park Art Center should be considered, especially to encourage and incorporate arts that need more exposure such as sound and video installation. The façade to be designed should have multiple uses, included a way of viewing from outdoors even for film screenings since the street-level doors will open out from the building.

This project is an opportunity for a creative project to be explored with an element of practicality, but still full of options. IPRO 306 is challenged to understand the Art Center's uses of a digital art façade that is versatile, innovative, and interactive; withstanding the changes of time. For all unseen

animated or still projects created in any format, a gallery must be designed that is capable of transforming into a huge white or black box by intelligently dividing space.

With IPRO 306 an assessment of the projector(s), projection surfaces and the variety of topics included in the following research section will be concluded following the conclusion of Spring 2005 semester. Our team's goal will be to produce approximately three feasible solutions and professionally present them to our Hyde Park Art Center clients. These solutions will be based on factors such as budget or ease of maintenance, for the successful implementation of the digital façade. Other factors we need to consider are how to prepare for the creative uses intended and technology needed. Before concluding, we will analyze and compare implementation costs of possible operating systems and research the prospect of donations from companies as incentive in order to stay within our possible proposals.

List of research topics:

Technology

- Control station
- Programming so it's easy to run
- What programs are currently out there?
- How to input art?
- How to fake real slide projector?
- What kind of computers for the media?
- Changing format to digital from film/slides?
- How would it be timed or seasonal?
- Would it require someone to manage it?
- Future service providers
- Be interactive on the website
- Network interactivity (wireless, broadband)
- How to interact within infrastructure between gallery space.
- What does the computer have to handle
- Video splitters
- Powerpoint, avi's, java, director, flash, etc support
- How many computers?
- Existing examples of installations

Projector/Supporting system

- How many?
- Where/Location
- How easy to maintain
- Weight

- How will it be hung and supported?
- Suspension (tray needed)
- What will it look like?
- Halographic images
- Fully interactive from one point
- Resolution
- Angle of projection
- Distance and sizing capabilities
- Projection area
- Can it back light
- Inputs
- Electrical and other utilities
- Interaction (focusing, other menu options on projector)
- Can they be used for classrooms?
- Noisiness, heat or other factors
- Insulation for sound, ventilation for heat
- Aesthetic appeal (can't impose)
- Data Connection
- IP address
- Reliability
- Cost
- Warranties of product
- Movement range
- Digital seams, splits and programming
- What technology is involved?
- Ambient light technology
- Existing examples of installations

Interactivity

- How to sense people?
- How do they connect
- Virtual Reality
- With other areas of the building
- Catwalk
- Cell phones?
- What mediums?
- Webcams inside building
- Devices of communication
- What's happening in the world?
- Existing examples of installations

Projection Screen

- Material
- Material quality
- Translucent or Opaque (possibilities)
- Fixed or moving?
- Protection/warping (from air vents, etc)
- Size
- Weight
- Light interaction
- Maintenance and cleaning
- Support (critical)
- Stability
- Mount detail (critical)
- Manual or Automatic
- Power/Electricity?
- Glass as screen
- Least expensive option that is quickest to implement
- Cost
- Seamless
- Glass or other options (24bit true color)
- Existing examples of installations

Art/Programming

- Could it show hours, events?
- What are the possibilities?
- How it could be easy as possible to create on?
- Artist needs
- Existing examples of artists, like Diller Scofidio
- Space/Usage
- Existing examples of installations (Montreal, Canada; Sydney Australia)

Sound

- Portable
- Projected distance
- Noise canceling
- AM/FM transmission

Maintenance

- Customization
- Technical issues
- Projectors, equipment, screen material, etc.

Timeline

Deadline	Tasks
Jan 28	Organize group, discuss project plan and project objectives
Jan 31	Finalize Project Plan
Feb 04	Weekly Project Meeting
Feb 11	
Feb 18	
Feb 25	
Mar 04	
Mar 06	Mid-Term Progress Report Due
Mar 10	
Mar 17	Spring Break
Mar 25	Begin Final Report
Apr 01	
Apr 08	Final Report ½ done
Apr 15	
Apr 22	Poster Powerpoint Presentation at least ½ done
Apr 30	Abstract Due, Practice Oral Presentation
May 02	IPRO Day – Project Presentation
May 09	Final Report

Responsibilities

Project Aspect:	Student(s) Most Involved:
Group Leader	Mindy
Technology	Michael/Aaron/Blanca/Matt/June
Projection system supporting	Hyung/Michael
Projection screen	Ryad/June/Blanca/Hyung Ed/Aaron/Matt

Interactivity	
Sound	Ryad/Mindy
Website Design	June/Mindy/Ryad
Team Log, Journal	Leah