`

University of Louisiana at Lafayette

College of the Arts

STEP Grant Request

UL Lafayette in Second Life

Robert Willey, School of Music

Yeon Choi, Department of Visual Arts

Onézieme Mouton, School of Architecture and Design

Lucy Henke, B. I. Moody III College of Business Administration

Christoph Borst, Center for Advanced Computer Studies

_____
Signature of Dean
College of the Arts

Title: UL Lafayette in Second Life

Date: January 19, 2008

Contact Person: Robert Willey
Department: School of Music

phone: 482-5204
email: willey@louisiana.edu

ABSTRACT

Second Life is an Internet-based multi-user virtual environment used by a growing number of people. Hundreds of businesses and universities have constructed an interactive world that is used for music, art, discussion, distance education, collaborative work, and business.

We propose to rent "land" of approximately the same size as the UL Lafayette campus for a two year period, and to hire five students to assist with planning, construction, administration of the environment, and to assist students and faculty. The entire student body will be welcome to interact with other students, teachers, invited guests, and visitors in this space.

We will construct a number of virtual buildings including an auditorium, art gallery, lecture hall, and help/study resource center, leaving room for other departments, individuals, and organizations. These buildings will be used for activities such as music performance, display of artwork, animations, instruction, and study. Students and faculty from four departments (music, art, architecture, and business) will collaborate to design the environment, construct the space, present work, and market it. Part of the area will be reserved for students from any department to experiment and exercise their own imagination.

We expect to involve students in collaborations between university departments and organizations such as the LITE center, as well as cultural and business organizations in South Louisiana. The project will increase communication between students and faculty, as well as with visitors from across the United States, and around the world.

Budget Proposal

Length of Implementation (in years)	1	[2]	3

1. Equipment

(4) Audio interfaces (Zoom H2) $200/ea. $800
Convert audio signals to USB input. Can also record events for later broadcast.

2.   Software

(Unlimited copies) Second Life client software   Free
The software that is run on your computer to enter Second Life

(5) copies of Nicecast $40/ea. $200
This software will run on our computers converting our audio signals to a form that can be sent to the provider, which will then in turn be streamed to Second Life users, becoming the audio for the environment the user is visiting. For example, one stream could be used to broadcast what a music student is performing in the virtual recital hall, a second stream could carry a class in the lecture hall, a third a discussion in the conference center, and a fourth a conversation at the help desk.

3. Supplies
None

4. Maintenance
None

5. Personnel

Student assistants (5), one each from architecture, music, art, business, and computer science.

Students, under supervision of the professors, will help plan the space, be available to assist students in person and through an in-world help desk, and implement details. The majority of their hours will be used the first year of the project.

80 hours per student
403 total hours @ $6/hr. $2,420

6. Others

"Land" purchase of 1/4 region (16,384 m^2) $500

Rent on 1/4 region $100/month $2,400 for 2 years

(4) Shoutcast audio server streams for two years
The visual representation of users and their environments is produced by Linden Lab servers. Audio is handled by servers run by 3rd parties.

$25ea./month $2,400 for 2 years

(1) video stream service for second year of grant
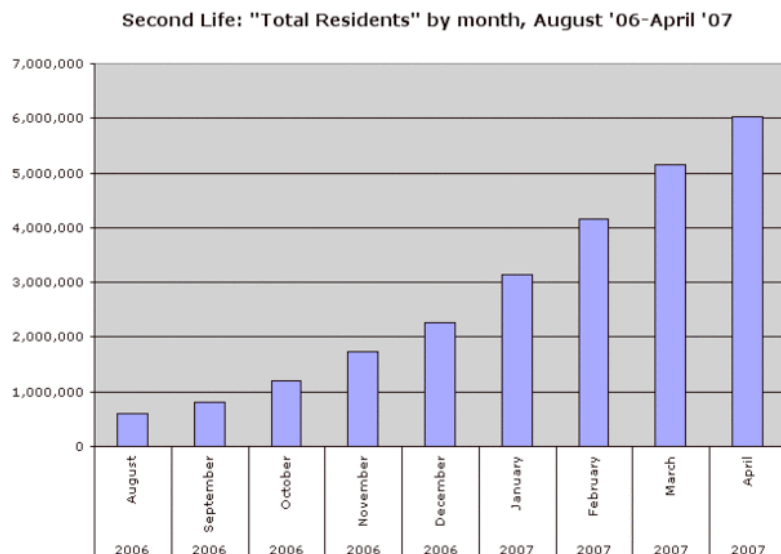*Movies and animations will be streamed to visitors in one of our venues by a 3rd party service.*

$80/month $960

Total: $9,680

3. Description of Proposal

Second Life offers a number of exciting opportunities to people wanting to share their creations and connect with other people. Unlike multiplayer game environments, it is a world created and visited by a growing number of visitors (over 6 million in May 2007).

Second Life: "Total Residents" by month, August '06-April '07

August 2006	September 2006	October 2006	November 2006	December 2006	January 2007	February 2007	March 2007	April 2007

This grant will pay fees for renting virtual space, provide assistance to student users, and technical support for a new type of virtual laboratory. The space will be used for students to display their work, to develop online business opportunities and activities, to benefit from distance learning, to interact with students in a variety of departments, and make contacts with visitors from other states and countries.

Five student assistants will be hired, one from music, art, architecture, business, and computer science. These students will help students and faculty within their departments, and users across the campus via the online help desk and electronic mail. The four professors on the grant will involve students in their classes in creating content or promoting and marketing it in and out of class, and be resources for colleagues interested in becoming involved.

The UL Lafayette presence in Second Life will be connected to department websites, and provide new opportunities for interactive multimedia instruction. While the project is initially set up by music, art, architecture, and business faculty, the proposed space (approximately the same size as the UL Lafayette campus) will be able to accommodate all interested departments, such as the Library, fashion, engineering, performing arts, education, English, linguistics, and communications. We will be able to host virtual study halls where individuals and groups can meet in the evening and on the weekends with each other and tutors. Any UL Lafayette student or professor connected to the Internet will have easy access to new creative educational opportunities.

This is a cutting-edge application that we can afford to take advantage of at little cost. It will also open the door to other opportunities, some of which we can predict, and others that we expect will surprise us, as has Internet in general, and the world wide web in particular.

Once the project is established we believe we can create partnerships with cultural organizations and businesses in the area that may not have the resources to develop a presence in Second Life, and in the process create opportunities for students to practice making contacts and finding employment. We believe partnerships will take place with non-profit groups such as KRVS Radio, the Dupré Library, University Art Museum, Center for Cultural and Eco-Tourism, the LITE Center, Vermilionville, Cité des Arts, the Lafayette Economic Development Authority, Lafayette Convention and Visitors Commission, Festivals Acadien and Festival International de Louisiane, Downtown Alive, the Acadiana Arts Council, South Louisiana Community College, Children's Museum, the State Office of Tourism, the Liberty Theater, the Public Library, as well as businesses such as the Teche Theater, Blue Dog Café, Tabasco factory, CA Guitars, Louisiana Heritage & Gifts, McGee's Landing, Café des Amis, Prejeans' Restaurant, Grant St. Dance Hall, Randol's Restaurant, Acadien Village, El Sido's, Club 307, the Blue Moon Guest House and Salloon, Tony Chacheres, to name more than a few. Depending on the demand, we may create a cultural center with kiosks or other displays making it easy for visitors to view displays, and attend events these organizations may wish to present, making them more aware of what south Louisiana has to offer. Some of these groups may wish to collaborate with us to maintain or enlarge our space, and part time employment and off-campus experience may result for students in the process.

a. Purpose of Grant and the Impact to Student Body as a Whole

Second Life has recently become host to virtual classrooms for major universities and colleges, with hundreds of educational and entertainment sites. This offers teachers an exciting alternative or add-on to material presently delivered through Moodle or other websites.

Students will be able to create, trade, and market items and services. Each department will have unique opportunities, as well find areas in which their interests overlap with others.

School of Music

Vocal and instrumental performances by individuals and groups, and masterclasses can easily be streamed via Second Life. Performers will use any of a number of rooms in the School of Music (Recording Studio, Postproduction Studio, MIDI Lab, Music Education Laboratory, Choir Room, the auditorium, etc.) to play in, or connect the portable system to any computer with a broadband connection to the Internet. Audio will be picked up by a microphone, converted to an audio stream with appropriate computer software which

will send audio to an audio streaming server (a separate service from Second Life), which then rebroadcasts the stream to up to 50 users, becoming the sound that they will hear when they enter one of our venues. This audio, like Internet radio, will also be available to any listener, for example in iTunes, for those who are not interested in navigating Second Life. Our events, along with dozens taking place elsewhere in Second Life on any hour of a typical day, will be scheduled and found through the standard search interface within Second Life, making it easy for visitors to find out what we are doing. Users of Second Life who attend these events can interact with the performers and other users in the audience via text or audio chat. This gives performers immediate feedback and new opportunities to learn from audience response to their work. Student DJs will also be able to play recordings made at School of Music concerts, student projects, local bands, and recordings produced by Pepper Records, a student organization that helps student recording engineers and performers, promoting the use of the School of Music's recording facilities. This will offer an opportunity to those who would like to work at a student radio station.

Students taking Introduction to Music Technology (MUS276), Music Synthesis (MUS277), and Recording Techniques I and II (MUS376 and MUS377) will have easy access to facilities to broadcast their music, and Second Life will be used in lab sessions, and individual and class projects in these courses, as well as for student-initiated projects, and be able to assist performance and education majors who would like to broadcast their playing and teaching.

Chan Kiat-Lim, one of the School of Music's professors has been invited to pool his piano students in Second Life with those at another university during masterclasses, so that students at our school can perform for, and be critiqued by, a new and larger group of students and teachers. We expect that a number of such collaborative educational experiences will arise with students and faculty at other universities during the grant period. Dr. Willey is interested in collaborating with music industry programs at other universities, sharing guest speakers and working on joint projects.

In addition to a virtual auditorium (which can be instantly reconfigured to accommodate a variety of ensembles and styles such as solo classical events, jazz combos, rock groups, and chamber music), we plan to create a zydeco nightclub, the first in Second Life, which will be used to present south Louisiana bands. When the space is not booked we will open it to other groups around the United States and in other countries in order to promote Louisiana culture and make contacts with other musicians. Music business students (MUS238) will book and operate our performance space, and manage Second Life musicians in their performances at our venue, as well as in other locations.

Visual Arts Department

Students work in 3D modeling and animation classes will be directly imported to Second Life to be viewed. Students will be able to apply techniques learned in a number of classes, such as Introduction to Computer Graphics and Animation (VIAR365),

Intermediate Computer Graphics and Animation, and Advanced Computer Graphics and Animation (VIAR465). Animation and modeling software presently used in Art Department classes can export creations in a format that can be imported into Second Life, making it easy to integrate projects created in courses in the current curriculum. Digital video from Media Workshop class (VIAR 335 and 435) can be streamed in Second Life as well. Also other forms of student work such as paintings (VIAR 250, 350), drawings (VIAR 312) and photographs (VIAR 396, 397 and 490) can be exhibited in the Second Life space after being digitized.

Displaying work in Second Life makes it available to a wider audience. A student working with 3D modeling software cannot show a project to someone else unless they have the same software. However, once the project has been placed in Second Life, anyone who installs the free client software can visit the space and move around the model, and look at it from different angles and distances.

Visitors to the site will be given the opportunity to leave feedback for the students, or chat with them should they both be in the gallery at the same time. Students will become familiar with other art resources in Second Life as well, and in the process see what is being done by others, learn from them, and get help. This association with a large virtual community of artists and designers will help students make contacts around the world.

School of Architecture and Design

Second Life offers many benefits to the architectural community. Users can virtually explore buildings and surrounding spaces, giving a better experience for clients. The software presently used in classes to do architectural modeling can export buildings in a form that can be imported into Second Life.

Architecture students will get experience collaborating with students from a variety of disciplines. They will help do land use planning and construct buildings.

B. I. Moody III School of Business Administration

Students will be able to start Second Life businesses, promote Second Life businesses either within Second Life or real life (to drive people to the site), and engage in sales for Second Life businesses. Residents retain copyright over the content they create in Second Life, and legal trading has encouraged the creation of companies that function within the environment. Some companies eventually grow to the point that they become real world companies requiring real buildings.

Second Life has its own economy and a currency called "Linden Dollars." Residents can sell goods and services, and buy from other residents. Linden Dollars can be converted into dollars. We hope to develop methods to earn money, for example, admission to events, purchasing copies of artwork, renting space, getting sponsorship from local

companies, contributions, etc. in order to make the project self-sustaining, so that future rent could be offset by money made in Second Life.

Courses that could facilitate participation in Second Life include:

Principles of Marketing (MKTG 345)
Consumer Behavior (MKTG 355)
Retailing (MKTG 350)
Personal Selling and Sales Management (MKTG 370 and MKTG 360)
Promotional Strategy and Management (MKTG 380)
Business to Business Marketing (MKTG 415)
Entrepreneurship (MGMT 340)
Introduction to eBusiness (MGMT 333)

Hospitality Management is another major whose students may be interested in applying techniques learned in classes such as:

Travel and Tourism (HRTM 109)
Facility Management, HRTM 204
Lodging Management, HRTM 210
Special Events/Convention Sales, HRTM 407

Computer Science

Second Life provides an opportunity for computer science students to use scripting skills learned from studying C++ to create behaviors and affect the environment within our space. Dr. Borst will offer student assistants hired for the project the opportunity to have their work be part of a special project. He and Jim Etheridge teach gaming and virtual environments, and will help spread the word to students and other faculty.

b. Lifetime of Enhancement

If the work proceeds as we expect, and Second Life is still a dynamic environment in two years, we will find funding to maintain what has been created. The grant is for two years of rent, after which we hope to be self-sustaining.

c. Person(s) Responsible for implementation, installation, maintenance, operation, and training

The five student assistants will help train students and faculty in their departments, and across the campus.

Dr. Robert Willey teaches music media and manages the studios and laboratories in the School of Music. He will train and assist the other three professors and student assistants in the installation, operation, and maintenance of the audio equipment.

d. Details of Proposal's Budgeted Categories.

Software

Client software to create and access content in Second Life is free for all students

Streaming audio and video software is needed to send audio signals from real world locations on campus to 3rd party servers, which then rebroadcast audio and video to users in Second Life.

Hardware

The specified audio interfaces (Zoom H2) are portable recorders that plug into a computer's USB port. This will allow for live broadcast, or recording of events for later broadcast.

4. Budget Proposal Form.

See Budget Proposal above.

5. Timeline - Project Implementation Schedule

Spring, 2008:

Secure funding, interview and hire student assistants to plan and set up environment. Define plan for the area–which areas will be developed and for what general purposes, where the initial buildings will go, and the physical landscape they will be located.

Rent ¼ region (32,768 square meters). Create two structures in order to start offering musical performances and art shows, used by individual and class projects. Invite participation by other students, faculty, and departments.

Fall, 2008:

UL Lafayette presence publicly launched. Add more buildings, such as lecture hall, student center, help desk, conference center. Staff help desk.

Spring, 2009:

Continue rent on ¼ region. During the second year we will begin video streaming to one venue.

Fall, 2009:

Students continue to benefit from what has been created. Faculty continue to use the spaces for class and collaborative projects. Secure funding to maintain space over the summer and following year.

6.   Additional Information

A letter of support from the LITE Center:

From: carolina@lite3d.com
Subject: UL Lafayette in 2nd Life
Date: January 24, 2008 6:05:02 PM CST
To: drwilley@bellsouth.net, GBrooks@louisiana.edu

Dear Robert:

I am delighted to write this email supporting your proposal titled "UL Lafayette in Second Life." This technology is changing the way we communicate and share information by bringing people together in a digital shared world. These shared spaces are breaking the geographical distances and the time delays to disseminate ideas and knowledge. It is exciting to know that UL Lafayette is taking the initiative of joining this digital revolution and that it is allowing groups like LITE to collaborate in this initiative.

LITE has been exploring the possibility of also joining Second Life, and certainly a collaboration with your team will be mutually beneficial and exciting. We have research teams with UL faculty and students in our center that will be very open to participate and use Second Life as a method of communicating and sharing their research activities at LITE. Our business activities also lend themselves to innovative uses of Second Life which can provide excellent test beds for your planned research and development work.

In sum, LITE is happy to collaborate with your team in this initiative and contribute to the development of the virtual space.

Best regards,

Carolina

--
Carolina Cruz-Neira, PhD
Executive Director & Chief Scientist
http://www.lite3d.com

Note of interest from Cinematic Arts Workshop

From: cinematicartsul@yahoo.com
Subject: Re: grant ideas
Date: January 29, 2008 10:23:35 PM CST
To: drwilley@bellsouth.net

The Cinematic Arts Workshop strongly supports the proposed project. The Workshop is an interdisciplinary institution designed to support research and creative expression in the field moving image media. As such, the Workshop seeks opportunities for faculty, staff, and students from across the curriculum to collaborate on innovative media projects. The program proposed in this grant fits well within the scope of the Workshop's mission, and we are pleased to provide our support and shared resources.

-Charles Richard

7.   Previously funded STEP Projects

Robert Willey (School of Music)

"School of Music Resource Center Upgrade" (7/07), co-investigator, new computer study stations, software, $21,638

"School of Music Pro Tools Recording System" (7/06), major renovation of recording studio facility creating professional 24-track digital audio recording system, $41,338.

"School of Music Resource Center Upgrade" (7/06), software to create web sites, piano instruction, software, wireless connectivity, administration software, ethernet cabling, Reason synthesis software, $4,657.

"School of Music Resource Center Upgrade" (1/06), upgrade software and hardware, $6,055.

"School of Music Resource Center Upgrade" (7/05), upgrade software and hardware, $4,055.

"Resource Center Upgrade" (1/04), upgrade workstations, server, video transfer, add DVD authoring, $4,902.

Yeon Choi (Department of Visual Arts)

"Motion Capture Laboratory" (7/06), purchase of hardware and software for the Computer Science Department's new laboratory / classroom for Video Game Design and Development. $99,678.75