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WELCOME TO IN THE LOOP

In the LOOP is an interactive space
Where teens and tweens can play with, manipulate
and create audio and video looping compositions.

Contact improv and sound design meet in a
gestural interface housed in a recording
studio where emerging artists make their
composition and then share it with the world.
In the LOOP is a place to:

- Play
- Create
- Compose
- Tinker
- Layer
- Improvise
- Iterate

- Design
- Collaborate
- Share
- Learn
- Challenge
- Move/Dance
- Produce
While learning about...

digital production
experimenting with movement
looping
editing and recording sound and motion
By having the user create their own looping compositions, the "In the Loop" technology adheres to the basic tenet of a constructionist learning environment, "learning-by-making" (Papert and Harel, 1991). The product of the learning process is a concrete artifact that is then added to the online library of "In the Loop" projects thus facilitating the "construction of a public entity" (Papert & Harel, p. 1, 1991). It shares the constructivist idea that learning occurs as "building knowledge structures" and that Vygotsky further elaborates as something that occurs as a social act. Users of the "In the Loop" technology, benefit from the help of their peers in constructing more interesting projects with deeper meaning.
Situated Cognition

In the LOOP" is a social learning experience informed by Brown and Collins' theory of Situated Cognition, wherein "activity and situations are integral to cognition and learning" (Brown and Collins, 1989). People who create loops in the physical space will participate in the activity in a variety of ways, giving them a context for learning about ways to manipulate audio and visual components. When interacting on the web component of "In the LOOP," users will also be entering into an online "community of practice" in which they can learn from others, and find ways to collaborate and compose loops via social participation (Lave and Wenger, 1990).
THEORY

Usability Design

The design of In The LOOP aims to be as intuitive as possible. In The LOOP contains three screens that operate as a workspace. The selector, creator, and manipulator screens are connected to make up a wall in the Loop’s recording pod. A learner is directed to each of the three screens when a specific screen is highlighted and makes a "ping" sound. This way, the learner is cued to which screen she should work with, and where to proceed from there. This method exemplifies the cueing principle, when design elements direct or signal learners' attention to important aspects of the environment (Plass, et al., 2009, PAGE). By being directed to important aspects, a learner wastes no cognitive resources on trying to figure out how to interact with the design.

The three screens that make up In The LOOP are connected and learners can drag loops back and forth between them. The learners will be able to select a type of loop, create it, edit it, and jump around in this process without getting lost. The "drag" navigability and the physical gesture needed to manipulate a loop calls upon the manipulation of context principle, in which learners interact with the visual design to induce germane cognitive load (Plass, et al., 2009). In The LOOP’s three production screens serve as a simple representation of selection, creation and editing, allowing learners to create a conceptual model of how the looping design process works. The design of In The LOOP offers elements that are user-friendly: visibility, a clear conceptual model, good mappings and feedback (Norman, 1988, pp. 52-53).
AUDIENCE

Teen and Tweens in grades 6-12

Why? Because they are...

• able to understand the concepts of production and editing

• interested in self expression and social modes of creative interaction

• not often targeted by these sorts of exhibits

School Groups and After School Programs

Teens and Tweens at home

Visitors to the Museum
In The LOOP can be an interactive exhibit in a music museum. In tradition museums, visitors are spectators not creators. They rarely have the opportunity to be inventive and productive in a museum.

In The LOOP can allow museum goers to MAKE a creative production, TAKE it home with them virtually, and SHARE it by exporting it to In The LOOP online.

Make - Take - Share
Where We Envision It

After School Programs
And Cultural Centers

In The LOOP can be a key tool in after school program or cultural center focused on music, performance, art, or technology. In The LOOP allows kids to create high quality compositions easily without dwelling on the technical aspects of production.
Music Schools

Schools of music and performance like Berklee College of Music or Julliard have summer programs and activities for kids. In The LOOP can allow kids to enter the world of performance and music composition in a collegiate and professional setting.
INSPIRATION

Contact Improv Game
“The Machine”

Photo Booths

Photo Booth on Mac

Scott Snibbe Art Installation
INSPIRATION

Microsoft Kinect

Interfaces in Minority Report

Sony Wonder Technology Lab

Recording Studios
INSPIRATION

JPG photo sharing

San Francisco Symphony Kids Site

Deezer playlists
TAKE A LOOK INSIDE: FEATURE SET

Physical Space

• Lobby
• Floating Gallery
• Kiosks
• Recording Studio
• Exporting
In The LOOP is a physical space that loosely resembles a recording studio. Upon entering the space, visitors will be able to see the work of others displayed in the Floating Gallery and then check-in to kiosks if they want to make a LOOP themselves. After signing up, visitors can enter one of the recording studios and make their own LOOP. After completing a composition in one of the recording studios, visitors will be able to see their LOOP on display out in the lobby.
Take a Look Inside: Lobby

The lobby of In The LOOP is dynamic, vibrant space. Visitors can interact, watch loop compositions, and log in to their online LOOP accounts.

The lobby space will serve as a place to allow visitors who are waiting to go into a recording studio to experience looping and interact with media. This is not a “waiting room”!
In The Loop video compositions made by participants will be displayed on the walls of the Floating Gallery within the Lobby. Any LOOP thumbnail can be touched to play so that visitors to In The Loop can see what kind of production the media affords. The Floating Gallery can also display LOOPs created in other In The LOOP spaces all over the world.

People will also return to this area after completing their compositions and be able to share LOOPs with other visitors.
Before recording in a studio, all visitors must log-in or create an account at a kiosk. The kiosks display In The LOOP online, a space where users can store compositions and be part of the greater Looping community. All learners create an online account so that they can take and share the composition they made In The LOOP.
Studios have a big screen that covers most of the wall. The screen is a gestural interface so the participant can stand in the middle of the studio and still interact with the screen on the wall.
Take a look inside: Recording Studio

Selector Screen

In this screen, participants can select audio or video loops. The audio feature includes a number of looped sounds that are prerecorded (trumpet blasts, clapping, vacuum noise, brushing teeth, etc) and the option to record your own sound. The video feature allows the user to film a loop of herself in the studio. The length of the loop is also determined here (1 to 10 seconds).
Users can drag the loop selection from the Selection screen to the Creation/capture screen. Here they will be recorded in video or audio depending on the selection. If they selected a prerecorded audio loop, they can play it back on this screen. Users can create multiple video and audio loops. Each time they create a new one, the creation screen will split into a grid to include the new loop.
To add effects to a loop, a user can select a loop in the creation grid and drag it to the manipulation screen. Here, effect can be added to a video (warp, grayscale, kaleidoscope, static, strobe light) or audio (delay, reverb, EQ, compression) and previewed on the manipulation screen. If the user likes the effect, she can drag the effect back onto the clip on the creation screen to apply it. Video and audio loops can also be combined by pressing two squares of the grid together. (The grid is 3 x 3 squares at maximum, allowing for nine videos). The end product is a looping composition of video and sound, consisting of nine or less loops playing simultaneously.
After a loop is created in the recording studio, it can be exported for viewing out in the Floating Gallery. When a user revisits the kiosks in the lobby or logs on to In the LOOP online, they can also share their compilation via email or social networks.
Mock Up
Mock Up
IN THE LOOP ONLINE

The IN THE LOOP website allows the user to continue learning about looping in a fun and interactive way, even when they have left the physical exhibit.

IN THE LOOP online offers many opportunities to get involved in the IN THE LOOP community. The user can make compositions at home with the MINI LOOP application. They can publish their finished projects to the website to share with friends or enter them into weekly challenges. The rating system allows peers to leave feedback on fellow members’ loops and the Top Ten Chart Toppers recognizes the site’s most popular projects. Guest DJs and musicians will be invited to make their own IN THE LOOP compositions, demonstrating to the community the ways professionals use looping in the music industry.
WEB COMPONENT USER FLOWCHART

In the LOOP Home Page

returning user?

new user?

sign up

log-in

My LOOPs

previously challenges

library of finished LOOPs

drafts

Selector

Creator

Manipulator

export

In the LOOP web

Physical Space

other web: email, facebook, etc

Floating Gallery

previous winners

open challenges

The Challenge

The Challenge

previous winners

Top Ten Comps

The Challenge

Artist of the Week

Floating Gallery

What is looping?
**Wireframes: Homepage**

**IN THE LOOP**

1. **Floating Gallery**
   - As this pane is selected, completed projects from the physical space, are displayed in a "floating gallery" similar to the one users will experience when they visit the lobby of IN THE LOOP.

2. **What Is Looping?**
   - Pane will display image and sample text: "What Is It, Who Uses It, and How You Can Become a Looping Artist". Will link to a page on information about looping in general.

3. **In The Loop @ Home**
   - Pane will showcase an image of the "studio" interface, in order to interact with the app the user would be led to a login/sign up page. Sample text: "Create Your Own IN THE LOOP Compositions at Home and Share Online".

4. **The Challenge**
   - Pane will display previous challenge winners and the top ten "chart toppers" as voted on by the site users. Sample text: "Create, Compete, and Vote on the work of Fellow IN THE LOOP Artists".

5. **Artist of the Week**
   - Pane will display IN THE LOOP compositions of this week’s guest DJ or recording artist. This page will link to an info page on the artist, video/audio samples of their work, and their MySpace page and official band website. Sample text: "Check Out Our Featured Artists of the Week".

6. **User can choose to play and expand to full screen compositions in floating gallery.**
Wireframes: Personal Profile

1. This header shows up when user is logged in.

2. Projects that are completed in the physical IN THE LOOP space are sent to this personal library. Their prominent position on the page will entice online users to go to the physical space if they haven't done so already.

3. Users have the option to a) email file as an attachment b) share it on a social network platform c) send it to the floating gallery.

4. Stats about the user - username, short bio, their rank according to frequency on site, badges and challenges they’ve won.

5. Users have the option to download mini loop compositions to the physical IN THE LOOP space from the kiosks in the lobby.

6. Here users can find a collection of their draft or published compositions. User can also see which projects have won contests and which ones are currently entered in a challenge. If a user selects a draft project, they will be directed to the MINI LOOP application where they will have the opportunity to edit their composition.
**Wireframes: Mini Loop App**

1. This header shows up when user is logged in.

2. Where user can select from a library of prerecorded sounds/images OR choose to record their own. User can also choose the duration of selected clip by "smushing" duration time line.

3. Real time capture screen that splits into different quadrants as sounds/images are chosen from the selector. Selected clips are played back in a looping sequence.

4. The user can choose an audio/video clip form the creator screen to manipulate at their choosing with a selection of embedded special effects.

5. Pop out screen. Which ever screen the user is interacting with (i.e. The Creator, The Selector, The Manipulator) will come out "in front of" the other screens.

6. User selects this button when they are ready to record their own images or sounds.

7. Once the user is finished working on their composition, user can send a draft to their library or publish in order to send to floating gallery, enter into challenges, have other users rate, share on other social media platforms.
WIREFRAMES: CHALLENGES

1. This header shows up when user is logged in.

2. Drop down menu - user must choose between IN THE LOOP (i.e. compositions made in the physical space) or MINI LOOP (i.e. compositions made in the virtual space). Since the quality of compositions made on one platform differs greatly from the other they compete in different challenges.

3. The current open challenges are displayed along with short description of the regulations and icons of submitted entries. User can click on the challenge name to access individual challenge page, where they can find all submitted entries and challenge details.

4. The user can scroll to see all the open challenges open for submitting published compositions.

5. Users can click on badge to see what challenge that composition won as well as other submitted entries for that challenge.

6. Composition information - name of composition, username of producer, rank of producer, rating on a 1 - 5 star system in which shows average rank tabulating # likes and weighted for number of challenges won. Also number of Likes (i.e. how many people voted they liked it) and number of comments.
EXPERIENCE DIAGRAM
Carlos is 15 years old. He goes to the “Museum of Making Music” with his breakdancing crew and finds “In the Loop.” He discovers The Floating Gallery in the lobby and begins looking through different compositions made by teenagers all around the world. A bunch of his friends have gathered around the screen and are touching the thumbnails to view compositions as well. At the end of a video, the screen says “Make Your Own Composition at In the Loop Recording Studios.” Carlos is excited to create his own composition to post on this huge screen, so creates an account at the kiosk and heads into the Recording Studio.

Inside the studio, Carlos immediately encounters a reflection of himself and makes a series of short, quick movements, Carlos realizes that his actions are being captured in real time by a camera above his head and begins to follow prompts across the three different screens to select various options and create his own loop.
Carlos makes a compilation of different dance moves smushed together with sounds and manipulated by special effects. Once he’s created each piece of his compilation, they immediately begin to loop continuously. He experiments with different aspects of production by editing the loops, smushing them together and reviewing each piece in between.

Carlos steps out of the recording studio to call over his friend Keiko, who takes one look at the composition and says that she wants to add a loop too. Carlos and Keiko add loops until they reach the maximum number of nine divisions on the creation screen. Some loops feature Carlos, some feature Keiko, and some are a collaboration. When they are finished, they decide to share it in the Floating Gallery by pressing the export button.

Back out in the lobby, Keiko calls over the rest of the crew to share the compilation. Meanwhile, Carlos goes onto the In the LOOP website at the kiosk to email the composition to himself and post it on his Facebook wall.
Miss Golan is an after school music and performance teacher in Bach to Rock music school in Bethesda, Maryland. Bach to Rock was fortunate enough to receive a grant to install In The LOOP recording studios in the music school. The presence of In The LOOP has significantly improved Miss Golan’s curriculum and opportunities she can offer her students.

Miss Golan’s students are active participators both in the physical and online spaces of In The LOOP. Each time a new challenge is announced, Miss Golan researches the challenge with her students, and helps them prepare original entries.

The new challenge posted on In The LOOP online is called “Going green: enter a loop composition that shows your feelings about saving the environment.” Miss Golan introduces her class of 12 middle school students to the challenge. Some students are familiar with In The LOOP, for the have been in the Bach to Rock
after school program for a few weeks. Some students have just entered the program and are new to In The LOOP. Miss Golan groups the students so that each group contains novice and experienced participants.

Before the students get a chance to create their own loops, Miss Golan has each group research ways to “go green” so they can better understand the challenge. They walk around a local park, and look into projects in their community that are trying to preserve the environment. Miss Golan instructs the students to take note of the colors, sounds, and sites they see as they research.

Back in Bach to Rock, Miss Golan asks each group to choose a theme for their composition. One group chooses bird songs, one chooses running water, and another chooses bulldozers.
When it’s time to record, students have come prepared wearing clothes in a color that they feel fits their theme, and having in mind sounds that express how they feel about going green. Miss Golan enters In The LOOP while the students select, create and manipulate loops. Because In The LOOP recording studio is big, Miss Golan can stay out of the way while the students record, only stepping in to point out In The LOOPS animal sound library, and color effects.

Miss Golan’s class creates five loop compositions and enters them all In The LOOP online challenge. The students send the compositions to their families and friends, and encourage all In The LOOP members to vote on their work.
Not only is Miss Golan’s class a part of the In The LOOP global community, they are their own school community as well. Miss Golan shares all of her students’ compositions to Bach to Rock’s blog. She is thrilled as she watches her students take pride in their work, and explore looping in their music studies outside of the In The LOOP experience.
Ambar is a talented 15-year-old violinist and aspiring professional musician. She is most proficient with the violin but enjoys learning and experimenting with the rhythms and pitch of other instruments. She is highly influenced by musician Emily Wells who is able to create symphony like compositions, layering her violin melodies onto rhythmic foundations constructed on analog synthesizers and other nontraditional instruments such as the glockenspiel and toy piano. On top of that, in live performances, she does not use any pre-recorded loops, rather she creates her loops while performing. Ambar aspires to one day loop so proficiently.

One day Emily Wells posts a link on her Twitter feed of a composition she made as a guest musician for a new looping website, IN THE LOOP. Ambar follows the link to the website and sees an opportunity to practice looping in creative, unconventional styles. She begins creating looping compositions using the MINI
LOOP online application using their assortment of effects to manipulate her own recorded melodies and rhythms she produces with a variety of instruments. Interested in some feedback from the IN THE LOOP online community, she begins entering her compositions into the challenges. She enjoys the limitations presented by the challenges as they inspire her to be more creative growing her knowledge of accompaniments. She soon accumulates many wins, becoming a high ranking member of the IN THE LOOP community. She is pleased with her status and exposure on the site and enjoys being part of a community of other talented looping artists.

After Ambar communicates with other high-ranking users through the website, they decide to visit the physical IN THE LOOP space in order to collaborate on a composition reflecting their different styles and talents. Ambar visits the Berklee School of Music as a prospective student where the IN THE LOOP interactive space is housed. Mariah, a ballerina, was the only other user that was able to attend the
proposed collaboration project date since she lives in the city. Ambar and Mariah invite Kenny to join their project. Kenny is an aspiring hip-hop producer whom Ambar meets on her tour of the school. They begin with Kenny’s fiery and bold beats, which he quickly produces tapping his drum sticks on various objects in the studio. They layer harmonies Ambar has been developing with her violin and a pitch altering toy microphone. Mariah contributes her much practiced pliés and pirouettes, which she has structured into an originally choreographed piece. The end product is a composition that merges hip-hop and the classical in both sounds and images combined with color and shadow effects.
Once they are done, they export the piece to the floating gallery. Outside, on the kiosks, Ambar and Mariah decide to immediately post on their Facebook accounts while Kenny opens up an account on IN THE LOOP and explores the different features of the site. Their dynamic piece garners a lot of attention through the virtual floating gallery and is voted on to the site’s TOP TEN CHART TOPPERS where it stays for several months.
Looking into the Future

- In the Loop is a *living system* that concentrates on the people, not the technology.

- **Global**: Institutions can be connected around the world; floating galleries can show compositions from the whole globe.
CONCLUSION

....and now you are in the loop.
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