

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

System Concept Statement

- **What is the system name?** Aperture
- **Who are the system users?** Collectors (fully fledged and newbies)
- **What will the system do?** The system will allow collectors to discover artwork and artists. In the process, the action of discovery will help these collectors (experiences and otherwise new to the scene) feel empowered to visit studios and purchase artwork.
- **What problem(s) will the system solve?** This app will solve knowledge gaps. Collectors will be able to find artists and items for their personal collections easier (purchasing and bidding). They will also gain increase accessibility to the artist through feedback and live stream components.
- **What is the design vision and what are the emotional impact goals?** [What experience will the system provide to the user?]
 - This application aims to....
 - Collectors can avoid frustration of searching for desired works of art.
 - Collector can be “in the know” and empowered”.
 - Collectors will feel a connection with the artist.
 - Collectors will have a sense of accomplishment with their purchase.
 - Allow Artists to express themselves
 - Allow fans a platform to connect with their favorite Artists
- **Interface Type:** Mobile

Personas/Scenarios

User 1: Newbie Collector

Title: Searching for opportunities to view and experience art

Task Scenario: Sue has always wanted to see an artist’s studio or go to an art exhibit, but she is apprehensive. She feels that she is not familiar with the nuances of the art world. Sue searched within the app store to see if she could find an application related to art. She found an app called **Aperture** that seemed to help acquaint the user to the art world by helping them gain exposure to local art and find studios and galleries to visit. Sue creates her profile and explores the app. She’s able to find artist profiles, venues for exhibits and see works displayed from various artists. The app suggests some venues and also has a map feature that highlights shows and galleries in her vicinity. There is also a chat feature that lets her talk with particular artists. Although the chat is interesting, Sue is too nervous to use it. Despite this, she goes to see an exhibit near her workplace on Friday night. She decided to go because the artist’s work on the app was really interesting.

User 1: Newbie Collector

Title: Uncover and get a better understanding of the art world

Task Scenario: To familiarize herself more, Sue reads the background and profiles of the three artists featured in the exhibit. Sue would never have walked into an exhibit like this before but using the app

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

gives her an idea of what to expect. Once there she signs into the exhibit with the app. Seeing the layout on the app, she feels comfortable walking around the works of art. She notices some of the paintings on the app are also in the show, but are much grander in real life. Referencing the artist's profiles, she sees two of the featured artists at the show milling around answering questions and discussing their works of art. Sue sees the one artist, Bob, whose work she likes best and decides to approach him to ask what his inspiration was for the 'Magnolia' painting she saw on the app. The conversation is interesting and Sue is glad she approached him. Sue notices on the app that most of the pieces of art are for sale, though not in her price range. She is intrigued by the cost of some of the paintings in the show and is able to look up their prices in the app. After a couple hours, Sue leaves the exhibit feeling pleased with her new adventure and fascinated with the overall experience - truly an accomplishment because she was able to fulfil her goal to visit an exhibition. Sue is sure she will search out more shows and exhibits to attend.

User 1: Newbie Collector

Title: Reflecting on the interaction.

Task Scenario: Later that evening Sue receives an alert from the app asking a few questions about her experience at the exhibit and for feedback on the works of art. It is a quick survey, and again, the chat feature pops up making it possible to converse with one of the artists if she chooses to. The app also saves the show in her profile as 'attended' and she can tag her favorite pieces. After completing the survey, Sue receives a few alerts suggesting artists and specific types of media according to her responses. The app sends daily alerts and finds some works with prices that fit into her budget. Sue plans to research more artists and exhibits before making a purchase. Sue feels the app has helped her explore and gain knowledge of the art world.

User 2: Expert Collector

Title: Searching for artwork to purchase.

Task Scenario: Jasen wants to purchase a small piece of art to fit on a shelf. He searches the internet for sample works from various artists. He finds an app with artist profiles and some of their works displayed digitally. The app also can search the local art scene for upcoming show openings. Jasen sets up his profile, which includes the varying types of art he prefers, specific artists he likes, his ideal budget for purchasing and his location. Jasen generally goes for very abstract work, and while he is browsing through the art, he is able to tag specific works and artists that interest him. Jasen finds a small sculpture that he is interested in, but before purchasing, he always delves into the inspiration and process an artist uses to create the piece. He pours over the description near the picture of the sculpture in the app. Exploring the work and its history is Jasen's favorite part of the process. A chat window pops up asking if he would like to 'Ask the artist' anything about their work. Jasen and the artist have a short chat about the artist's process and inspiration. Shortly after, Jasen thanks the artist, says goodbye, and signs out. Jasen chooses a show that opens this weekend and exports the date and information to his calendar.

User 2: Expert Collector

Title: Interacting with the art world.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

Task Scenario: Jasen can opt in to see other users' comments/feedback on certain works of art, get alerts on purchasing, and understand whether or not the piece will be on display at a studio or exhibit. Although a user can select a specific genre of work, Jasen does not choose one as he would like to see all types. Jasen particularly likes to get alerts when new art is added to the site so that he can purchase right away if he is interested. Jasen has been using the app to follow, chat with and receive updates on one of his favorite artists. He sees that the artist is hosting a live look in to one of his painting sessions. After the live feed, the artist sends a request for feedback and adds the finished painting to his catalog for purchasing. Jasen loves the painting and places a bid. At the close of the bidding session, Jasen has won the bid. He completes the purchasing transaction and eagerly waits for status updates and delivery.

User 2: Expert Collector

Title: Reflection on interaction and purchase.

Task Scenario: Once a piece is purchased through the app, a digital representation (i.e. a picture) is added to the purchaser's virtual art collection for others to view either publicly or with private access. Jasen leaves his collection for public viewing as he is proud of his purchases and feels he has a very diverse collection of art. The public option includes a chat room, which allows users and artists to converse. Jasen feels he has a greater connection to the art world as the app has given him the ability to discover many more artists and expose him to a plethora of artwork.

Focus Scenarios and Personas

Scenario title: Uncover and get a better understanding of the art world.

Persona Name: Newbie Collector

Brief Description: Sue is not familiar with the art world although she is interested in seeing an artist studio or going to an art exhibit. She is apprehensive because she feels she isn't familiar with the nuances of the art world. She found an app which will educate and give her insight to connect and enjoy artists and their work.

Scenario title: Interacting with the art world

Persona Name: Expert Collector

Brief Description: Jasen is an avid art collector and is constantly on the lookout to purchase artwork. He has found an app which will keep him in constant contact with his choice of artists and offers a wide variety of art to purchase.

Interface Metaphors

- **Magazine/catalog (like flipping a page)/ Guestbook:** On the front page there will be a discover artist section which will show trending artists and allow users to search and discover artists by type. Users will be able to bookmark their favorite artists.
 - Advantage: Popular artists will be easy to find

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

- Disadvantage: unpopular artist can be harder to find depending on the search parameters.
- **Book:** Artist pages are like books about the artist. An artist can show their artwork, information on themselves and galleries. Arrows that move user through the pieces/auctions like a book. When you click on the arrow it will allow you to view photos and information on the different artwork work. You can also bookmark artists by pressing the bookmark icon.
 - Advantage: It will be easy to get a snapshot of all the information you need about a certain piece of artwork and artist.
 - Disadvantage: Could get annoying to click page by page
- **Gold Star-** The application will allows users to favorite artists that they like with stars. The more stars you have the more you will be trend on the front page of the application.
 - Advantage: Popular artists will be easy to find
 - Disadvantage: unpopular artist can be harder to find depending on the search parameters.
- **Canvas** - The application's appearance will consist of soft whites and grey. The user will begin with a blank canvas and be urged to "add color" to experience by discovering artists and saving them to their repertoire by favoriting or purchasing pieces of work.
 - **Advantage:** The collector can feel like an artist, in a matter of speaking, filling out their blank canvas with favorites and purchases. They can create several "canvases" to organize their preferences into categories.
 - **Disadvantage:** The interface may appear plain. Some users might be turned off by the minimalism at first or not understand the application. As such, system prompts would direct the user to browse artists in order to change their experience. As the user becomes an expert, they will enter the application with a large repertoire to draw from.
- **Read Receipts at the start of the chat that acknowledge and state when the artist will realistically reply at the start of the chat. As the chat continues, the read receipts disappear because tone is set for the type of chat it is (quick/flowing vs. artist will reply later).** - When chatting with an artist, the user (newbie and expert collector) can see if the artist read their sent message.
 - Example: "Received. Your artist is currently prepping for a show. We will make sure he gets back to you as soon as possible" or "Received. The artist is online and ready to chat."
 - Advantage: This helps reinforce a crucial element of human life: body cues and facial expressions. When people talk to one another, there are social cues that help individuals understand that they have been heard and also understand when to continue talking. Read receipts could help facilitate this. Helping collectors understand the availability of the artist helps prevent frustration and curbs their expectations that the artist reply quickly at all times.
 - Disadvantage: Read receipts may put undue pressure on artists to feel that they need to respond very quickly. Some users may not be comfortable with read receipts at all. Taking this into account, the user can opt in to having read receipts appear.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

- **Eye icon to signal a lot of views** - Users will be discovering artists and have the ability to see how other users are experiencing exhibitions and how many are interested in certain artists.
 - Advantage - The eye icon can signal how popular and artist is and whether or not they have a positive popularity. Alternatively, a user who wants to be more low-key can try to find artists with a lower profile.
 - Disadvantage - Users may not understand what an eye icon means by itself in terms of magnitude. To aid their understanding, we can signal when a page has gotten 10+, 50+, 100+, 150+, or 500+ views by putting the respective number next to the eye icon.

Interaction Types

- **Consumer to small business** - This app aims to link the collector (consumer) to artists (small businesses/entrepreneurs). The app will take special care to demystify this relationship, instilling trust and added transparency between the two. Consumers (collectors) will become more confident as they learn more about the artists' work, their intention behind it, view live stream, and gain the ability to engage with artists through auctions and commentary. This helps cultivate trust, which is backed up through notifications that the artist read the comment/replied.
- **Discovery based-** The app will allow users to discover new artists and learn about their artwork.
- **Remembrance-based-** The mobile app stores pieces collected and galleries visited. As a result, the user can look over past purchases and possibly (purchasing and visiting patterns)
- **Comprehension-based** - Within the chat, the interface takes input from the artist regarding availability. As such, the chat is setup to relay artist availability to the user and help set expectations of the user. The chat feature would be comprehension based, because it will configure an instant/flowing chat vs a chat that has a longer time horizon for replies.
- **Association-based** - While discovering art, the user can type in the city (or zip code) that they are in to start finding location exhibitions. The app will associate this location with art exhibitions/events in the area or livestreams.

Card Sort Summary and Report

Tools: Optimal Workshop

1st link, source of preliminary data: <https://0031o4j1.optimalworkshop.com/optimalsort/5a68u41z>

2nd link to accommodate more tests: <https://0031o4j1.optimalworkshop.com/optimalsort/5a68u41z-0>

Total Participants: 14 completed the open sort.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

Process: This app will connect the novice and experience collector with artist venues and the ability to purchase artwork. As such, the user needs to be able to have a saved profile, communicate with artists, discover exhibitions, update settings that orient their experience (notification), and have way to administrate purchases.

Results from the Participant-centric Analysis:

- Common pairings:
 - Sign Up, Settings
 - Orders, Cart
- Harder for users to connect to a category. These are areas ripe for refining, especially as we consider the newbie and expert user. These categories could be clustered under master categories that make them easier to identify/more obvious (see final navigation map for solutions to this problem):
 - Active Auctions
 - Discover
 - Connect
 - Favorites

Link 1:

Consider IAs with 2 - 5 groups

Similar IAs: 2/6

3 groups submitted by #1

Housekeeping

Similar group labels

Home

Wheel Symbol

Sign Up

Settings

Purchase

Similar group labels

Cart Symbol

Your Purchases

Orders

Cart

Active Auctions

See

Similar group labels

Your ArtBids

Discover

Favorites

Connect

Similar IAs: 2/6

3 groups submitted by #2

Housekeeping

Similar group labels

Home

Wheel Symbol

Sign Up

Settings

Shopping/Likes

Similar group labels

Explore my profile

Your Purchases

Purchase

Favorites

Orders

Cart

Content

Similar group labels

Discover

Connect

Active Auctions

Similar IAs: 1/6

2 groups submitted by #3

Shop

Similar group labels

Discover

Favorites

Cart

Active Auctions

Account


Similar group labels

Sign Up

Settings

Connect

Orders



HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

Similarity Matrix ?

Cart							
83	Orders						
66	50	Favorites					
16	0	50	Discover				
66	50	33	50	Active Auctions			
0	16	33	50	16	Connect		
0	16	0	0	0	50	Sign Up	
16	33	16	16	0	16	66	Settings

Link 2:

Similar IAs: 5/8
3 groups submitted by #7

checkout

Similar group labels

Cart

History

Purchase

Orders

Cart

Sign up

Similar group labels

whose who

Create an Account

Home

Discover

Sign Up

Connect

Profile

Similar group labels

Favorites

Settings

Active Auctions

Similar IAs: 2/8
3 groups submitted by #4

Settings

Similar group labels

My Stuff

Favorites

Settings

Sign In

Similar group labels

Sign Up

Connect

Shop

Similar group labels

Discover

Orders

Cart

Active Auctions

Similar IAs: 2/8
3 groups submitted by #5

checkout

Similar group labels

Cart

History

Purchase

Orders

Cart

Home

Similar group labels

Sign up

whose who

Create an Account

Discover

Connect

Active Auctions

Settings

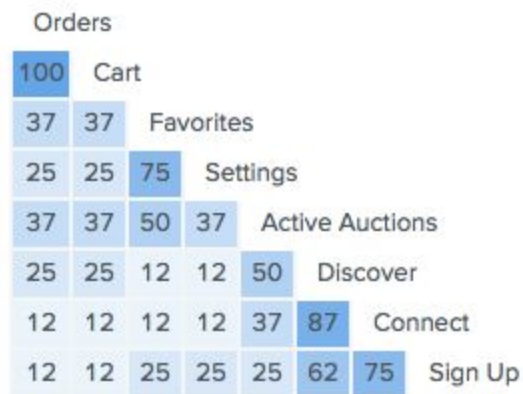
Similar group labels

Favorites

Sign Up

Settings

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)



Navigation Map (also submitted separately as a .pdf).

Please provide the filename of the navigation map here: HCI 440 A5 (Conceptual Design) - Team 9_NavigationMap.pdf

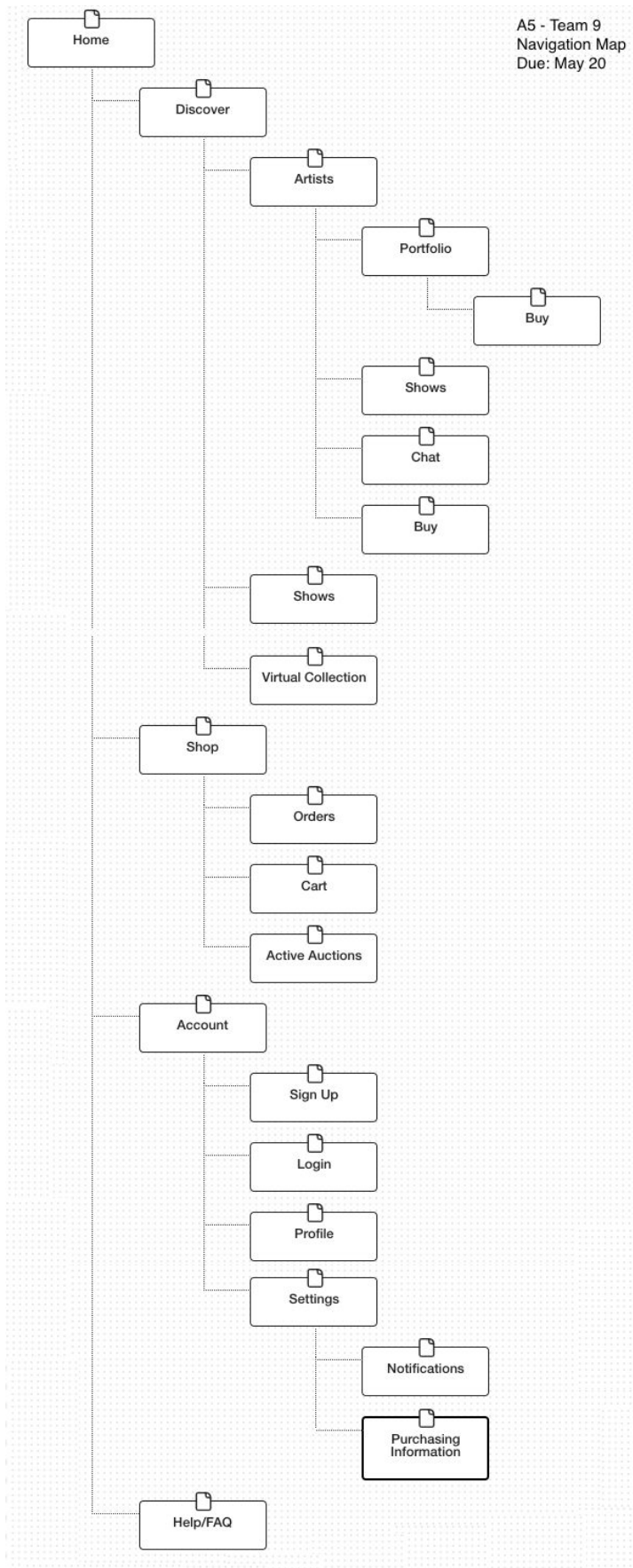
Explanation of Categories:

- **Home** - Main screen (the canvas). This is where users can see a summary of their activity or receive suggestions on what artists/exhibitions to browse. For a new users, this page would have helpful prompts to guide them on their first tour of the app.
- **Discover** - User gains ability to look through artists, their work, and exhibitions. This is a pretty intuitive metaphor used in most mainstream apps. Discover has a stronger implication of user desire than browse.
 - Artists - takes user to tabular view of artists. Under each artist the user can then further interact with the artist
 - Portfolio - See pieces of artwork
 - Buy - Can opt to buy piece of their artwork.
 - Shows - Browse upcoming shows
 - Chat - Chat with the artist
 - Buy - Buy pieces of their artwork
 - Shows - For the user who is more interested in finding upcoming events and doesn't concentrate on artists just yet. The user can see a map and list of upcoming shows near them.
 - Virtual Collection - This houses the user's favorites (artists that collectors like, but haven't purchased items from yet).
- **Shop:**
 - Orders - Shows transaction history only of active and old orders and auctions. Links included to track shipping via external carrier website.
 - Cart - Items saved but not purchased to yet.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

- Active Auctions - Summary of auctions that user is active in. The user can go to this page to re-enter auctions and see the progress of the bidding.
- **Account**
 - Sign Up: User can create an account here. (This goes away if the user already has a profile)
 - Login: Existing Users can log in.
 - Profile: User can edit profile that other users see in the application.
 - Settings:
 - Notifications (alarm symbol) - to see recent notifications, main landing area to learn about bidding updates
 - Purchasing Information - The user can set up payment options here (Paypal, credit card, etc).
- **Help/FAQ** - User can email or chat with help team if they run into problems. Frequently asked questions will appear here as well for common problems.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)



HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

Wireframe Model - 5 screens minimum.

Axure share link: <http://9fm7s2.axshare.com>

Prototype Url: <http://7wuyrj.axshare.com/#g=1&p=signup>

Focus Scenarios :

Scenario title: Uncover and get a better understanding of the art world.

Persona Name: Newbie Collector

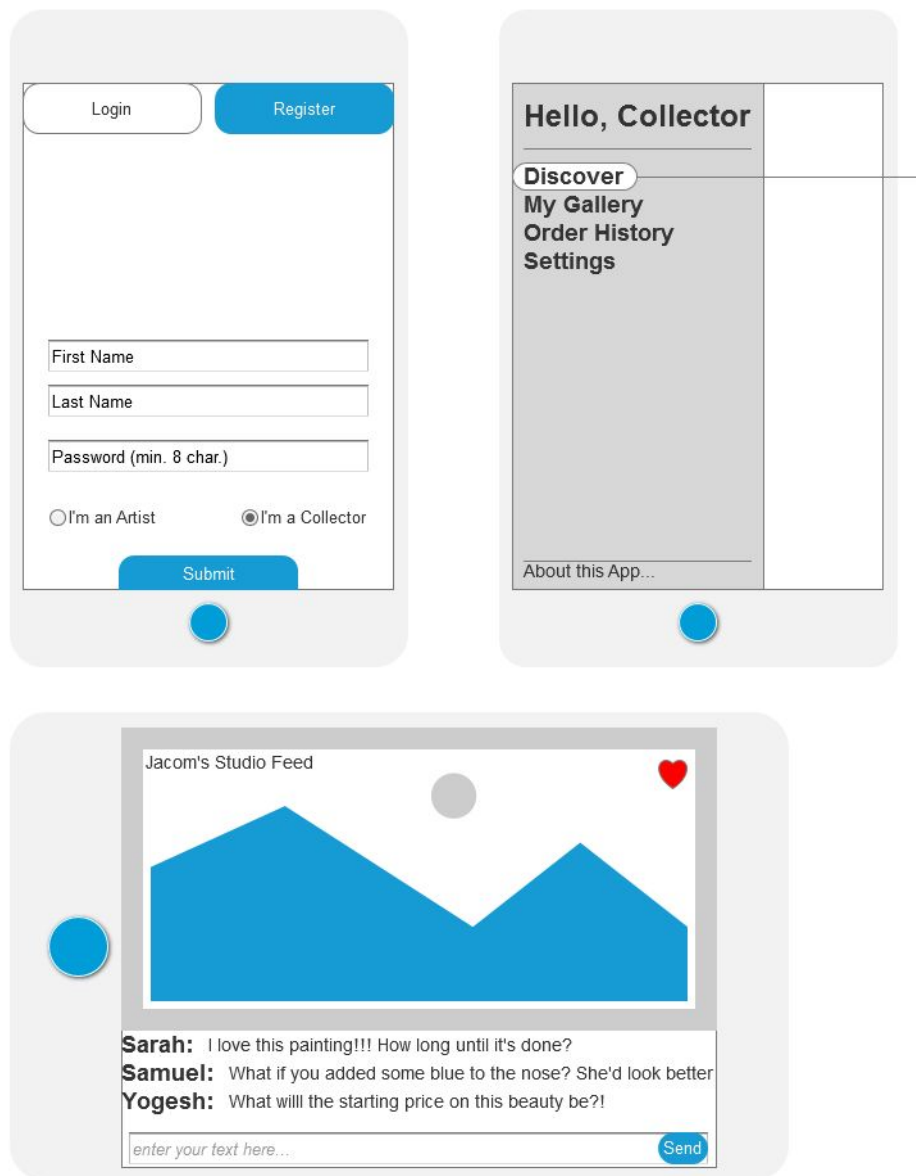
Brief Description: Sue is not familiar with the art world although she is interested in seeing an artist studio or going to an art exhibit. She is apprehensive because she feels she isn't familiar with the nuances of the art world. She found an app which will educate and give her insight to connect and enjoy artists and their work.

Scenario title: Interacting with the art world

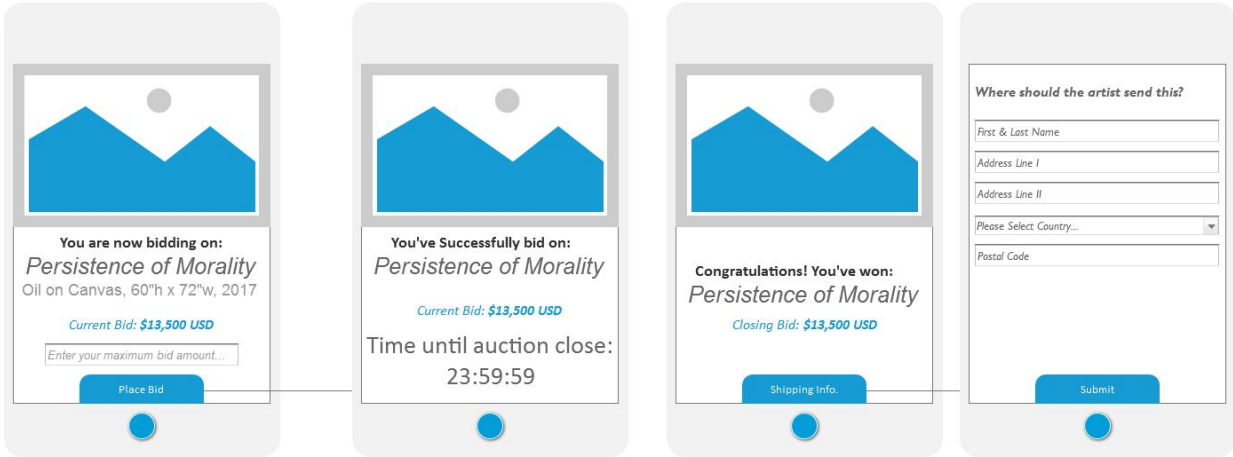
Persona Name: Expert Collector

Brief Description: Jasen is an avid art collector and is constantly on the lookout to purchase artwork. He has found an app which will keep him in constant contact with his choice of artists and offers a wide variety of art to purchase.

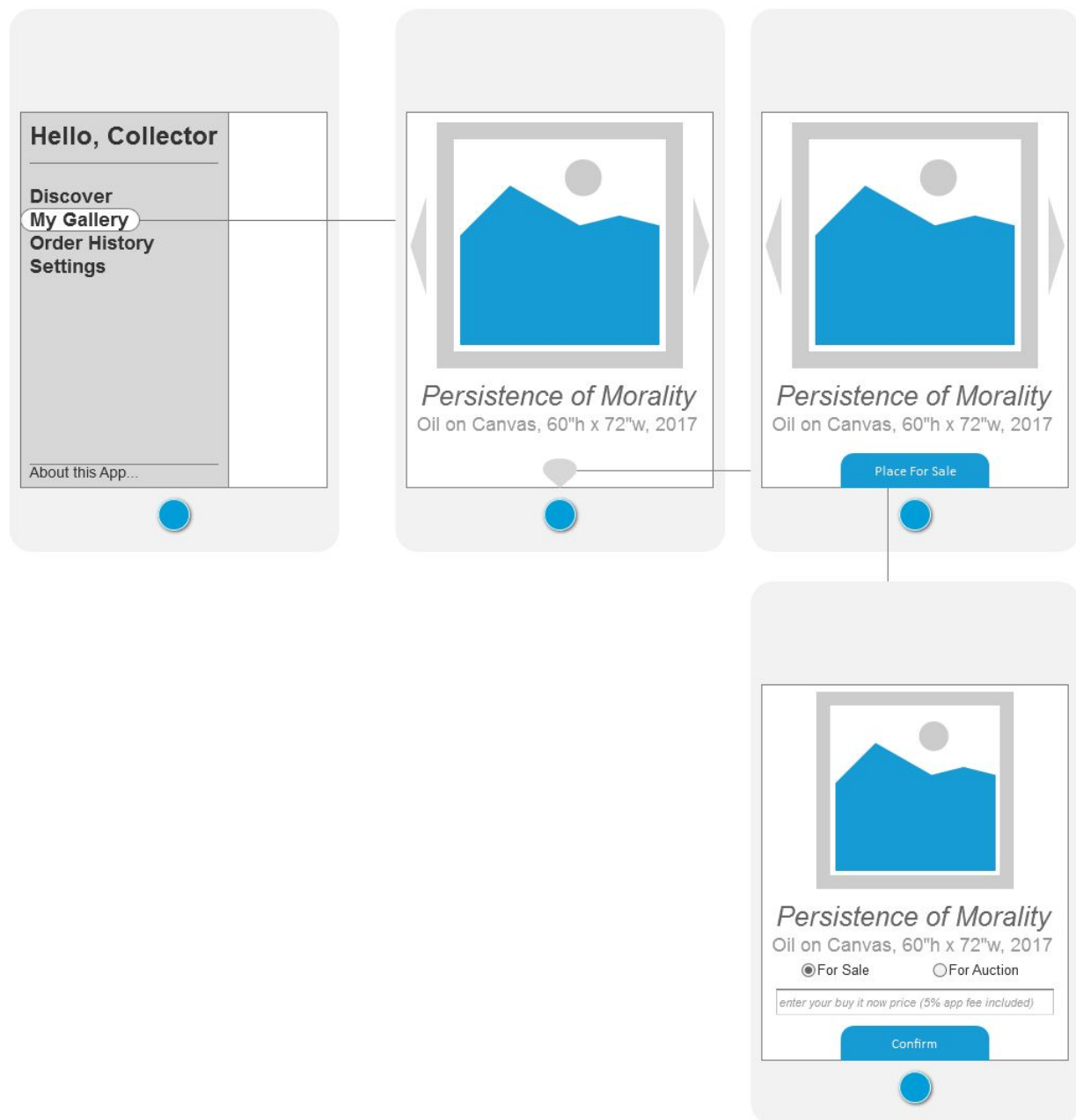
HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)



HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)



HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)



[Please provide the filename of the wireframe model here. For model requirements, please see **Description** for details.]

Process Retrospective

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

- The participant-centric analysis was very interesting. We had 7 users test the card sort, but one user abandoned the test. We wish optimal sort could tell you why or let users leave comments.
- The navigation map will be a pivotal feature to test during the project. As we changed emphases in who our main user was (the newbie and expert collector), the navigation map changed drastically from when we focused on the collector and artist. The card sort, conducted on a small group of people, gave interesting results, but we need a bigger test cohort to gain more insight.
- In thinking about interaction types, it was a bit hard to think about how the app will interact with users. In thinking about these types, are these things that users would pick up on?
- In creating the focus scenarios, it was interesting to tease out the user's emotion during the scenarios. However, it was hard to mix the scenario with allusions to app features without it overtaking the emotions described.
- In breaking down our collector into two user types (expert and novice), it is easier to conceive of the design heuristics, especially the one related to flexibility for new and old users. Additionally, this breakdown may make it easier to sense error prone situations while designing the prototype and evaluating the design in user testing.
- Interface metaphors are hard to create without getting overly cheesy.

Team Member Contributions

Name	Contribution
Ashvi	System concept statement, Interface metaphors, editing
Jasmine	System concept statement, Interface metaphors, Interaction types, card-sort, navigation map, process retrospective
Kyle	Focus scenario, Conceptual scenarios, wireframe mock-up
Laurie	System concept statement, Focus scenario, Conceptual scenarios

Instructions for this Module:

HCI 440: Introduction to User-Centered Design

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

Assignment 5: Conceptual Design

Due: May 17, 2017 @ 11:59 PM

Description

In this assignment, work as a team to create a conceptual design for your product.

- Create a brief, structured description of the intended product: the system concept statement. This is based on the more generic Project Description created by the team in Assignment 3, but adds important constraint elements necessary for design. These include identifying what the product will do, the problem the product will solve, and what experience the product will provide to the user.
- Analyze the results of your work on Assignment 4—conceptual model, personas, journey map, and requirements—to create **six (6)** conceptual task scenarios for your product. The scenarios should correspond to personas for your product's two distinct classes of users in each of the three phases of an integrated experience: anticipation/planning/research ('before'); visit/event ('during'); and reflection/reminiscence ('after'). For example, if your product has parent and child users, you would have scenarios for the child before, during, and after (= three scenarios) and for the parent before, during, and after (= three more scenarios) for a total of six scenarios. Take care in crafting these scenarios: they are critically important to the the rest of your work. They act as the task model framework for your conceptual design and final design.
- Select **two (2)** of the six conceptual task scenarios—one each representing the two distinct classes of users of your team's product—for detailed development for the rest of this assignment and for Assignment 6. You may choose two scenarios from two different phases (e.g., parent/before and child/during) or both scenarios from a single phase (parent/during and child/during). You can mix the type of platform (e.g., desktop Web/before and mobile/during) or focus on a single platform (mobile/ before and mobile/during). If you have more than one persona defined for a class of user (say, 'child' and 'special needs child'), choose only one of the personas for the class. Explain the reason for your task scenario and persona choices.

These two conceptual task scenarios and their corresponding personas will be referred to as your **focus scenarios** and **focus personas**.

Use the two conceptual task scenarios and two personas chosen in the previous step as the framework for the remaining work (below) in this and the next assignment. **You do NOT need to address all of your conceptual task scenarios and all of your personas in your remaining work!**

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

- Identify the contextual interface metaphor(s) (e.g., toolkit, book, etc.) that are appropriate for use in your application. Also identify a representative set of contextual concepts for each metaphor; you need not create an exhaustive set of these. Your conceptual model can help inform your choice of metaphor(s) and concepts. Explain the reasons for your choice(s): why they are appropriate, advantages and disadvantages, etc.
- Identify the relevant interaction type(s) (e.g., instructing, conversing, etc.) that are appropriate for use in your application. Your conceptual model and conceptual task scenarios can help inform your choice of interaction type(s). Again, explain the reasons for your choice(s): why they are appropriate, advantages and disadvantages, etc.
- In order to inform your navigation map design, perform a card sort on your application content. Your conceptual model can inform the types and names of the application content. You may perform either an in-person, paper-based card sort or use a Web-based online tool. You may use either an open or closed card sort. You may need to iterate your card sorts in order to get a stable, consistent classification of application content. Summarize and report the results of your card sorting.
- Based on the results of your card sort, create a navigation map of the content for your product. This must include a complete top level tier ('home page'), but you need only expand the rest of the navigation map to encompass your two conceptual task scenarios and two personas. Parts of your

product that are not covered by your two conceptual task scenarios need not be expanded in the navigation map.

- Using a suitable drawing tool, create a wireframe model for the top-tier view of your application and for each of the displays needed in order to carry out your two conceptual task scenarios. The screens in this wireframe model should be minimal—'mostly a bunch of rectangles'—with a level of detail corresponding to the example on the left slide of Slide 6-41. Put your effort into the screen layout, organization, and content relationships, not into details and beautification.

This result of this assignment is a set of decisions and artifacts that will guide your team in the design of your product in this assignment and the next.

To help you visualize what you need to do and what you need to produce, the workflow and deliverables for this assignment are depicted in **Figure 1**.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

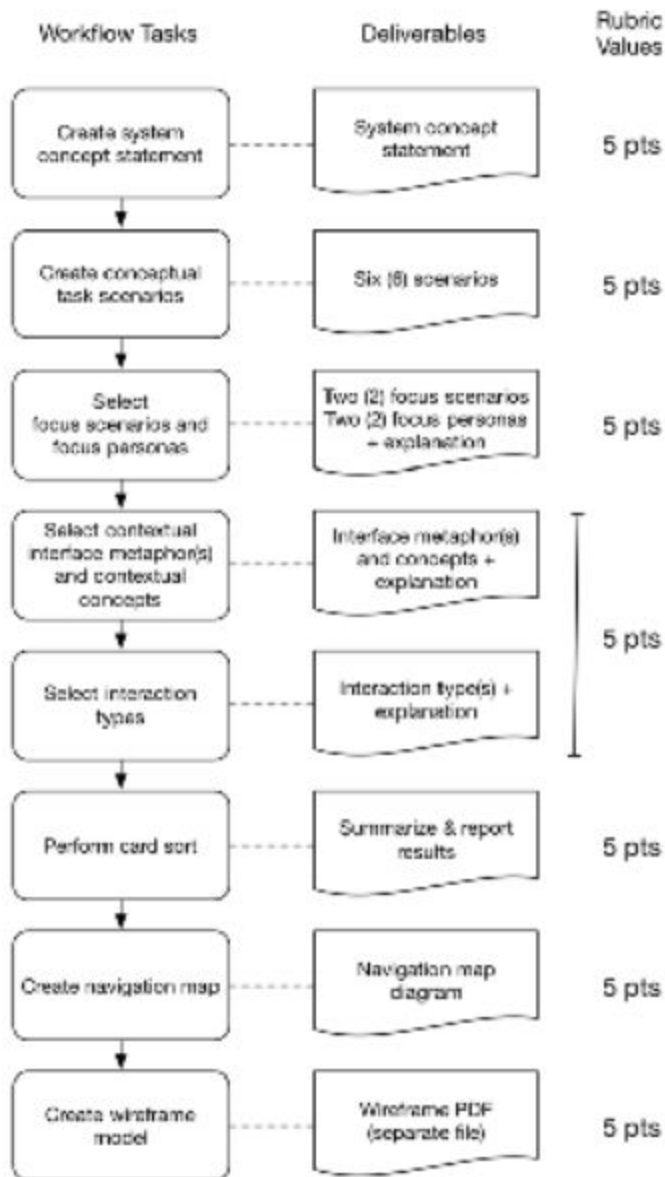


Figure 1: HCI 440 Assignment 5 Workflow and Deliverables

(sorry guys, I couldn't find a non-blurry version of this in the .pdf)

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

Figure 1: HCI 440 Assignment 5 Workflow and Deliverables

Assignment Content

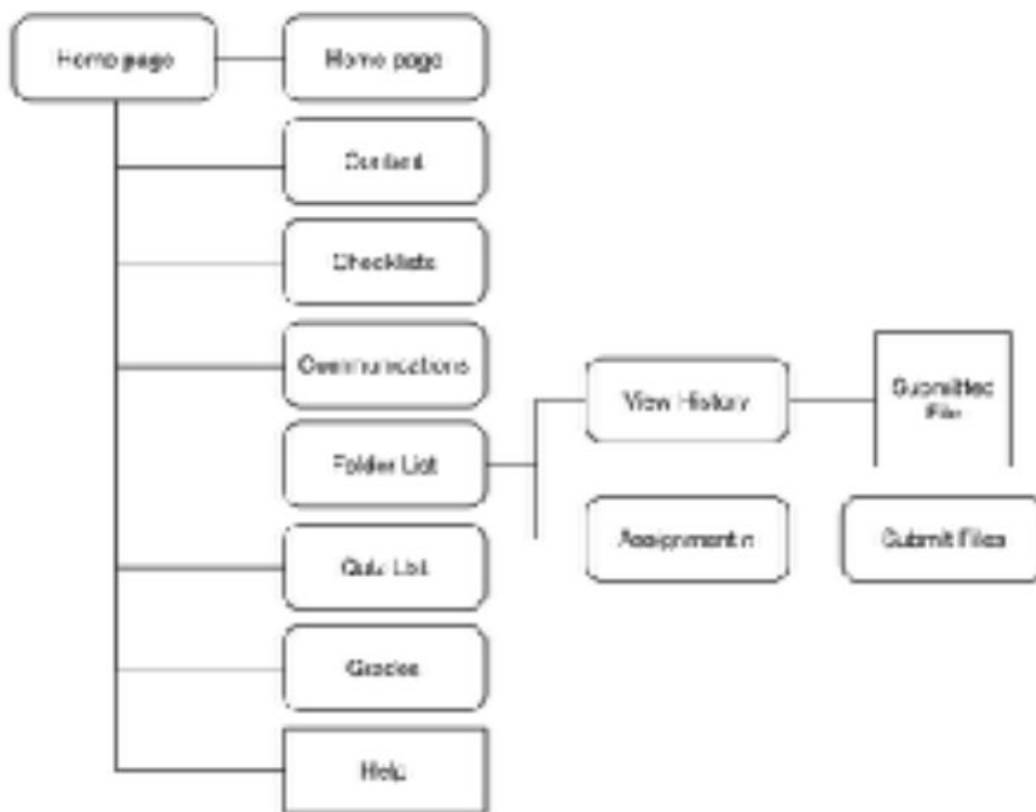
Use the Conceptual Design Microsoft Word template associated with this assignment, or create your own document. The provided template is a minimal but functional version; feel free to create your own richer version. However, if you create your own template, you must include exactly the same information (including heading names) in exactly the same order as the provided template.

- **System Concept Statement.** This is a brief, structured description of the product, including identifying the problem the product will solve and what experience the product will provide to the user. The content of this section can be used as an ‘elevator description’ for your product. Complete the indicated spaces in the template, removing any helper text in square brackets: [...].
- Extra effort in making the system concept statement as clear and concise as possible will pay off in this and the last assignment. The system concept statement acts as a focal point for the team during the design effort.
- **Conceptual Task Scenarios.** Six (6) conceptual task scenarios are required. See **Description** for additional details.
- **Focus Scenarios & Personas.** Two (2) focus scenarios are required, with an explanation of the reason for your choice of focus task scenarios and personas. See **Description** for additional details.
- **Interface Metaphors.** Appropriate contextual interface metaphor(s) and a representative (not exhaustive) set of contextual concepts, with an explanation of your choice(s), including advantages and disadvantages. See **Description** for details.
- **Interaction Types.** Appropriate interaction types for use in your application, with an explanation of your choices, including advantages and disadvantages. See **Description** for details.
- **Card Sort Summary & Report.** Summarize and report the results of your card sorting. Discuss the tools you used, how you selected your test subjects, the process you followed, and the results you achieved. You need not detail your categories and content items here—these should be incorporated into the Site Map (following). You may use a conventional index cards and Post-It™ notes approach, or use a Web-based tool. The best Web-based tools is Optimal Workshop:

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

<http://www.optimalworkshop.com/pricing> (A free, limited plan is available.)

- Navigation Map. Use the results of your card sort to create a navigation map of the content for your product. The map must include a complete top level tier ('home page'). However, you need provide additional navigation map content only for those elements that encompass your two conceptual task scenarios and two personas. For example, restricting ourselves to the navigation bar of our D2L course homepage, a navigation map restricted to a scenario about a student submitting an assignment to the D2L dropbox would show the following content:



(sorry guys, I couldn't find a non-blurry version of this in the .pdf)

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

The navigation map should use the navigation map notation conventions on Slide 6-24 The map may be created using any graphics or drawing tool (Visio, OmniGraffle, <http://www.draw.io>, etc.) and exported as PDF (preferred), PNG, or TIFF. **The site map should be submitted as a separate file in the dropbox.**

- Wireframe Model. ‘Mostly a bunch of rectangles’. Includes screens to carry out your two conceptual task scenarios. See **Description** for more details about the content and style of the wireframe model.

The wireframe model may be created using any graphics or drawing tool (Visio, OmniGraffle, <http://www.draw.io>, etc.) and assembled as a multipage PDF or Word file. **The wireframe model file should be submitted as a separate file in the dropbox.**

- Process Retrospective. Create this section after your team has completed all the other work for the assignment. Identify what went right and wrong in the conceptual design process, and what changes your team would make if you were to do the process again, say, in the next (hypothetical) iteration.
- Team Member Contributions. In the table, provide the name and email address for each team member, along with the specific contributions made by that member toward the final, submitted form of the assignment.

Submission Requirements

- Submitted documents must follow the order and content guidelines as outlined in Assignment Content, above.
- Include your team number and assignment component in each of the **three** submission file filenames; e.g., HCI 440 A5 (Conceptual Design_Main_17), HCI 440 A5 (Conceptual Design_Map_17), and HCI 440 A5 (Conceptual Design_Wire_17).
- Submit all of your assignment files to the D2L dropbox by the indicated time and date.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

- Reminder: Assignments may be submitted up to 48 hours late with a 20% grade deduction. Assignments submitted more than 48 hours late receive no credit but will be graded as time permits.
- The main Conceptual Design document must be in MS Word (.doc or .docx) format or Adobe PDF only. The navigation map may be PDF (preferred), PNG, or TIFF. The prototype **must** be in Adobe PDF.
- Please submit the Conceptual Design document, the navigation map, and prototype file as three separate files in the D2L dropbox. **Please do NOT bundle these files together in a Zip file.**
- If you make a submission error, you can resubmit your assignment files to D2L, but the latest submission files will be the ones that are graded.

General Grading Criteria

For course assignments, I expect high-quality, professional reports, including proper spelling and grammar. It is up to you to properly compose and format the report within the constraints of the assignment template so that it is readable and allows the reader to quickly extract essential information.

I will use the following specific rubric to evaluate Assignment 5.

Assignment 5 Grading Rubric

System Concept Statement. Clear and concise; includes all elements defined in the template.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

Conceptual Task Scenarios. Six (6) scenarios provided, corresponding to personas for product's two distinct classes of users, in each of the three phases of an integrated experience.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

Focus Scenarios & Personas. Represent the two (2) distinct classes of users of your team's product with explanation of choices.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

Interface Metaphor(s) & Interaction Type(s). Are identified and the reasons for choice(s) are explained.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

1 Unsatisfactory 2 Satisfactory 3 Good4 Very Good 5 Excellent

Card Sort. Tools, subject selection, and process are described. Results are summarized and reported.

1 Unsatisfactory 2 Satisfactory 3 Good4 Very Good 5 Excellent

Navigation Map. Includes complete top level ('homepage') tier and additional map content for all elements encompassing focus scenarios and personas.

1 Unsatisfactory 2 Satisfactory 3 Good4 Very Good 5 Excellent

Wireframe Model. Clearly represents the layout and organization of content for the essential elements of the focus scenarios, using minimal wireframe style.

1 Unsatisfactory 2 Satisfactory 3 Good4 Very Good 5 Excellent

Process Retrospective. Presents a realistic and constructive analysis of conceptual design process.

1 Unsatisfactory 2 Satisfactory 3 Good4 Very Good 5 Excellent

All other elements of the template not specifically identified above are correct and complete; document meets relevant **Submission Requirements**, is well edited, neatly formatted, and easy to understand and interpret.

1 Unsatisfactory 2 Satisfactory 3 Good4 Very Good 5 Excellent

Individual Criterion Descriptions:

- Excellent (5): Greatly exceeds minimum assignment quantity or quality requirements.
- Very good (4): Significantly exceeds minimum assignment quantity or quality requirements.
- Good (3): Exceeds minimum assignment quantity or quality requirement.
- Satisfactory (2): Meets minimum quantity or quality assignment requirements. A **Satisfactory** rating is given when a criterion meets, but does not exceed, the **minimum** assignment requirements described in the Assignment Content section of this document and/or in the assignment template.

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

- Unsatisfactory (1): Does not meet minimum assignment quantity or quality requirements.

Overall Assignment Score (a point score of 45 is the maximum):

- Excellent: 45 (normalized score: 100)
- Very good: 36 (normalized score: 90)
- Good: 27 (normalized score: 80)
- Satisfactory: 18 (normalized score: 70)
- Unsatisfactory: 17 or below
- Note: The formula for converting the points score to a normalized (0-100 scale) score:

normalized score = $((10/9) * \text{points}) + 50$

Appendix: Notes from Previous Assignment 5 Workshops

Note: These notes are from quick follow-up emails from previous workshops. Text may be a bit rough and contain minor typos.

- Try to craft conceptual task scenarios that are sufficiently rich to make interesting wireframes and an interesting, functional prototype (in Assignment 6). Top level display plus 3 or 4 other screens to complete scenario is about right.
- For conceptual task scenarios, try to follow the spirit of the example on Slide 4-32 as closely as possible. This means focusing on one specific goal (e.g., using the alarm clock to get Vince up at 6:45 AM the next morning) for each scenario without any unnecessary side trips that dilute the goal (e.g., changing the display from 12-hour to 24-hour format). The conceptual task scenario does not need additional narrative detail. It will be the source of your usability evaluation scenario, which, in turn, will be the basis for your wireframes and your low-fi prototype.
- Try to 'sterilize' your conceptual task scenarios of technology details. Again, the scenario on Slide 4-32 could be carried out by any technology from a wake-up call to a conventional alarm clock to a mobile phone. Don't think about your user using your app, think about what they are trying to accomplish. The conceptual task scenario should not describe downloading and installing an app. It's the place for planning a visit to some location or some activity. Make statements as generic as possible. Use 'Amanda checks museum hours, then checks the weather forecast for tomorrow.'

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

She decides which exhibits she wants to visit and purchases a ticket for a special exhibit' instead of 'Amanda checks museum hours in the 'Visit Us' section of the app, then uses a link in the app to check weather on weather.com. She then uses the app's exhibit list to decide which exhibits she wants to visit, and purchases a ticket for a special exhibit through the app.' The first version gives you unlimited options for fulfilling Amanda's needs, while the second restricts you and includes design decisions when you should still be conceptualizing.

- If you have alerts in your scenario (say during the activity), focus on the things that the user does after the alert rather than on configuring the alert. Configuration and settings scenarios usually aren't too rich and tend toward the minimal. For example, if the alert lets the user know there is an interesting art piece nearby, have the scenario start with the alert, followed by the user dismissing the alert and then performing follow-up activities like getting more info about the artist, the period in which the work was created, and whether the gift shop has a book on the artist or period. (This was an Art Institute App)
- For the selection of the two focus scenarios, you don't need to rewrite the scenarios (or do any additional work), you just need to let me know which scenario/persona choices you've made and why. For the personas, just give me a one or two sentence description gleaned from Assignment 4 to help me recall your full persona (e.g., 'Carol is a mother of three who loved Disney World as a kid and wants to give her own kids the best possible experience on their first visit.')
- For those doing 'during' scenarios on mobile, you may need to use icon names as your top-level categories. For example 'Camera Icon', 'Compass Icon', 'Share Icon', etc. Since you're doing wireframes (and low-fidelity prototypes in Assignment 6), you won't have fancy icons at your disposal. A rough icon with a label will be fine. If you are doing a closed card sort, you can use just the icon labels as your top-level categories.
- Interface metaphors can be relatively simple, if need be. Just think of real (= physical) world analogies to what you are doing in the app. 'Desktop', 'Book', etc. aren't suitable for many apps. 'List selection' and 'Calendar' are perfectly acceptable metaphors. We all use these and are familiar with the physical analogues, and these translate well into metaphors at the user interface.
- Choose metaphors that allow the user to easily draw analogies between the real world and the application. You can be creative with metaphors. Some that came up in the past included journal, map, itinerary, tour guide, and something like an amusement park expert. Try to choose metaphors that give you the most analogous power: for travel, an itinerary is more powerful than a simple list. The itinerary derives its power from context: we expect an itinerary to include times and places in chronological

HCI 440 A5: Conceptual Design	Your team number: 9
Project Name: Aperture	Submission Date: May 17th (Final)

order, possibly along with services, such as refreshments being available at particular locations. A simple list doesn't automatically convey this.

- You can have different metaphors for different phases of the experience: before might use a 'Facebook profile' metaphor, while during might use a 'tour guide' metaphor.
- Remember that interaction types are things like instructing, direct manipulation, etc.
- Your card sorts may end up giving you very rough, non-definitive results. This is to be expected on your first, single-pass card sort activity. If you end up with a majority of subjects giving a consistent classification (or category name), you're lucky. You may get only 2 out of 8 that match. You'll need to use your judgment on whether your results make a strong case for organizing along the lines of the data you collect. It may be the case that the card sort can inform your IA, but not define it (due lack of consistent results). Ultimately, you may need to make the decisions on how to organize your content. Pay attention not only to the positive outcomes (Wow! 3 out of 8 users classified this activity in our intended category!) but also the mistakes (Good grief! No one put their artist preferences in the right category). Information is information, whether it is positive or negative.