Design Journey Part 1

Group name: Kitty

Members' names: Dou Mao, Shangyuan Niu, Yevhenia Stets, Lillian Wang

Members' NetIDs: dm577, sn522, yvs4, lw444

Section: 201

Part 1: Client Selection

Client Description

Tell us about your client. Who is your client? What kind of website do they want? What are their key goals?

Our client is Jamie Jett, who is a mom of 3 small children from Michigan. Her husband works for an automotive company. She is the head cheerleading coach for Cornell who started making hair bows for her oldest daughter and subsequently launched a business selling these bows. Jamie would like a website where she can showcase and sell her products. Her goals are to get her products out to a broader audience, make it easier for customers to order bows, and automate the selling process so that she does not have to manually process each order.

NOTE: If you are redesigning an existing website, give us the current URL and some screenshots of the current site. Tell us how you plan to update the site in a significant way that meets the final project requirements.

Target Audience

Tell us about the potential consumers of this website. How, when, and where would they interact with the website? Get as much detail as possible from the client to help you find representative users. This will make it easier for you to test your site on potential users and to generate useful personas.

The largest group of consumers would be mostly cheerleaders (Cornell), and also other cheerleaders from local cities. Cheerleading coaches may also browse this site to get accessories for their cheerleading squad. She would like to branch out to dance groups, children, and even grownups. Customers would most likely browse the site from their own home PCs when looking for new hair accessories for their cheerleading outfit. They will need to be able to view different products, place them into a shopping cart, then pay for their products through Paypal. They may also need to contact Jamie if they have any questions regarding her products or if they wish to place a custom order.

Purpose & Content

Tell us the purpose of the website and what it is all about.

This website is basically an e-commerce site for our client's homemade hair bows. Customers should be able to view products, add them to a shopping cart, then pay for their order through Paypal. Customers may also need to contact Jamie through a contact form. The client should be able to add, update and remove products as needed.

Needs and Wants

In this table, collect your client's and target audience's needs and wants for the website. Come up with several appropriate design ideas on how those needs may be met. In the Memo column, justify your ideas and add any additional comments you have. There is no specific number of needs required for this, but you need enough to do the job.

Needs and wants (What does your client and audience need and want?)	Design ideas and choices (How will you meet those needs and wants?)	Memo (Justify your decisions; Additional notes)
Client wants to be able to add new items or remove existing items for sale.	Create SQL databases, and construct corresponding queries for the items. Make a page for admin login in order to edit the database. Properly design the UI so that it's easy to use and fits the general site theme.	The site is actually a basic form of e-commerce site like Ebay or Amazon. We need to pay attention to the design and usability issues. (The design of Amazon is a pretty bad example.)
Update the information(pictures, description, etc.) of the items.	Similar to adding and removing items, to update information require appropriate operations on the database.The backend will be done by SQL queries, and the frontend user interface will be in the form of an editing page after the client logs in with the admin account.	Admin login is extremely important, since we can't allow regular users to easily modify the site content lol. Basically it's what we did in P3.
The design should be whimsical, energetic, and attractive to teenagers.	Use bright colors, and different shapes to add energy to the general feeling the web page creates. Avoid using too much black, grey and dark blue; avoid using too much straight lines, since it will make the page too rigid.	Since the target audience is mostly teenagers, so the design should of course appeal to them. Other details will be discussed in future DJMs.
The site should be really easy to use for the buyers.	Make it easy to view items; perhaps allow customers to sort or search for items? Buyers should also be able to easily view their shopping cart, add or remove items, and check out.	Extensive user testing is required. It's crucial for improving the user interface design.
Custom bow section – specify color, accessory, size	The client was thinking of an interactive bow designer (like https://www.shoesofprey.com/3d). We were thinking of having a selection of drop down menus for accessory, a checkbox for color and a box for extra details or just having the user specify all the details in a message	The interactive designer is beyond the scope of this class; however, the drop-down menus and/or message should be effective.

Part 2: Project requirements

Design

What design elements should be utilized? Tell us about the design elements you plan to have for the site. Do they fit your client's needs? Why did you choose to follow (or not to follow) the client's expectations? If you chose not to accommodate a need, why did you make that decision?

The one specific design element that our client requested is that her website uses vibrant colors and be very "whimsical- Dr. Seuss inspired". She also specifically mentioned that she does not want a white background for her website. We will try our best to implement a colorful site that looks and appeals to the target demographic: cheerleaders and their coaches.

Client's Edits

Does the client need the ability to edit the site after the end of the semester? If **Yes**, tell us how you site fit your client's need. If **No**, write down N/A.

Yes: she will need to be able add, update, or remove products from her inventory. In order to accommodate this, we will implement an admin panel that allows her to change her inventory as needed.

Information Architecture, Content, and Navigation

Lay out the plan for how you'll organize the site and which content will go where. Note any content that you need to make/get from the client.

Note: As with the Needs and Wants table, there is no specific amount to write here. You simply need enough content to do the job.

Main navigation (List your site's navigation here)	Sub category (List any sub categories of under the main navigation)	Content (List all the content corresponding to main navigation and sub categories)
Example: **Portfolio**	Example: **Websites** **Mobile Apps** **Tablets**	Example: **Portfolio**: list all the projects (as images) this client has worked on. When the image is hovered over, display a description of the project; add a search function to enable users search for specific projects; **Websites**: showcase all the websites designed by the client, with thumbnail images and a brief description for each design; **Mobile Apps**: showcase all the mobile apps designed by the client, with thumbnail images and a brief description for each design; **Tablets**: showcase all the tablet applications designed by the client, with thumbnail images and a brief description for each design;
Main Page	**Admin Login** **About Me** **Gallery/Catalog** **View All** **Cheerleading** **Dance** **Kids** **Adults** **Single Item Page** **Checkout and View Cart Pages**	**Main Page**: will look like a big ad: maybe a photo slider for product images and navigation bar, or a picture of the client. We might also design a logo and put it on the banner. We are still discussing that with the client. **Gallery**: like in P3, this is the page that will contain links to the Cheerleading, View All, Dance, Kids, Adults pages **Admin Login**: for logging in as admin to modify stuff, also this is where the information about all the orders will be displayed and where the client will be able to mark orders as completed **About Me**: info about our client, maybe client picture would be better here, also contact information will be here for if the user wants to contact our client directly

| | Design Your Own(if we can) | **View All**: display all products
Cheerleading: display only products for cheerleading
Dance:display only products for dance
Kids:display only products for kids
Adults:display only products for adults
Single Item Page: the user will be able to view details about an individual item on a single page
Checkout and View Cart Pages: user will be able to view the contents of their cart and proceed to checkout, not sure how this will work because not familiar with Paypal, maybe we will have to keep track of cart or maybe its part of Paypal library
Design Your Own page: not sure if we'll be able to do this: let user click on image of an accessory and click on a part of accessory to be able to choose color/sparkles/etc for it and then be able to add their designed accessory to cart; maybe there's some API we can use for this, if not then we have not been taught how to do this and this is outside of the scope of the project |

Interactivity

What interactive features will your site have? What PHP elements will you include?

Much of this is up to you, however, implementing a log-in system is ***required***. Logging in should not be required to view the site, however it must unlock extra functionality, e.g., admin functionality, comment posting, etc.

Also, describe how the interactivity connects with the needs of the clients/target audience.

We will implement a login system so that our client may update her site as needed. Logging in will allow the client to add, remove, or update her inventory. The login system will not be used for anything else.

We will also implement a "catalog"/"gallery" portion of the website, where all available products are displayed on her site. Customers will be able to select products and add them to a shopping cart. When they are done, they can check out and pay for their goods on Paypal.

Lastly, we will include a contact form(probably a message box under each item). This will allow customers to contact Jamie if they would like to place a custom order (specific color / design not featured on the site). Jamie will then be able to respond to these queries with details including the cost of their order and expected time of completion.

Use of Existing Libraries

What libraries (e.g. editor.js, jQuery Cookie, Image Sliders, jQuery) are you planning to use for the site? What do you have to do to incorporate those libraries? How much of your own code will satisfy the project requirements?

We will likely include some jQuery to implement shiny stuff.

Database

How will you use a database to improve the functionality of the website? Describe a possible schema that could meet your client's needs.

We will have a table called Items with information about each item (url is image url as in P3):

name	type	size	primary	null	AI
i_id	INT	11	true	false	true
url	VARCHAR	256	false	false	false
name	VARCHAR	100	false	false	false
price	DOUBLE	22	false	false	false
description	VARCHAR	500	false	false	false

This is a table called Categories, which specifies categories of products, initially it will contain 4 categories: Cheerleading, Dance, Kids, and Adults

name	type	size	primary	null	AI
c_name	VARCHAR	256	true	false	false

And the ItemsInCategories table:

name	type	size	primary	null	AI

| c_name | VARCHAR | 256 | false | false(is foreign key) | false |
| i_id | INT | 11 | false | false(is foreign key) | false |

Orders table(our client will be able to view orders and see if they were completed or not and mark them as completed, if we decide to have color and size as separate inputs then they will also be added to this table, but for now, we are keeping it simple. Message is the user's message about how they want the product to look while contact_info is user's message with instruction on how to contact them with updates or delivery of their order)

name	type	size	primary	null	AI
o_id	INT	11	true	false	true
message	VARCHAR	256	false	false	false
contact_info	VARCHAR	256	false	false	false
i_id	INT	11	false(is foreign key)	false	false
complete	BOOL	1(values 0 or 1)	false	false	false

And finally a Logins table for admin login to access privileges for modifying content and viewing the status of orders(password will be hashed of course, with salt).

name	type	size	primary	null	AI
user_id	INT	11	true	false	true
username	VARCHAR	256	false	false	false

password	VARCHAR	256	false	false	false

Scale

How large will the site be (approximate number of pages) and how many hours of work will be required to complete it?

The site will have about 12 pages(not necessarily different design but different content) along with a page for each item (same design but displaying different individual items). We are not sure how much time it will take to complete, our initial estimate is perhaps around 100 hours, so about 25 hours per person.

Part 3: Work Distribution

Describe how each of your responsibilities will be distributed among your group members.

Who will be responsible for backing up other members should someone fail to meet a deadline? How will you communicate with each other? What are your expectations for communication? How will you share your design documents and ensure that no one disrupts each other's code? How will you manage deadlines? How you would keep track of task completion and the progress within your group?

If you will be using any tools for scheduling, sharing documents, managing tasks, etc., make sure you describe them here. This is also a good time to identify challenges (like who will be unavailable due to religious holidays or sports events), and how you will manage these challenges. Keep updating this on a regular basis for your own benefit.

If you are not tracking tasks (calendars, shared to-do lists, bug trackers or gantt charts, etc.), you might want to use the basic task tracking table shown below.

Set internal deadlines. Whose task needs to be completed first in order for another person's task to be relevant? Be specific in your task descriptions so that everyone knows what needs to be done and can track the progress effectively. Consider how much time will be needed to review and integrate each other's work. Most of all, make sure that tasks are balanced across the team.

Note: Again, you want the right number of items for the job. The table should have enough information such that each team member understands what is expected of them and by when.

Task	Team Member Names and roles	Due Date	Status
Contacting the client / maintaining communication throughout the project	Lillian: leader; Steven, Jane and Dou	4/7/15	Done

Initial website sketches: drawn markups	Dou: leader	4/14/15	Done
Logo and banner design	Dou: leader;	4/21/15	In progress
Initial coding (HTML / CSS, NO PHP or SQL): the foundation of our site	Steven: Leader Lillian: Backup	4/21/15	Not started yet
Database things: create database tables, populate them, write PHP code for: adding items to database, modifying items, displaying all items in Items table of database, displaying items based on categories, maybe sorting (based on price), or maybe have date created/updated and sort on it as well as price, maybe have functionality for displaying items only in certain price	Jane:Leader, Steven, Lillian, Dou: Backup	After the initial skeleton of the site is done	Not started yet

range, for orders have code to view completed orders and uncompleted ones and mark them as completed **Important:** have functionality for deleting all completed orders, or essentially make sure that each item in database can be 1 created 2 updated 3 displayed 4 deleted			
Custom order form: features a series of dropdown boxes that allows users to select the color and accessories, text boxes for quantity and contact information, and a field for additional comments. Also all forms required for admin to modify site(html)- add, remove, update inventory	Lillian: Leader	After the page has been built	Not yet started
PHP code for hiding info when user not logged in and showing info when she is.	Jane: Leader, Steven, Lillian, Dou: Backup	After all the content has been added(website look does not need to be fully done, but content must be)	Not started yet
PHP + SQL shopping cart, also integrating Paypal or other API to handle transactions	Steven: Leader, Lillian, Dou, Jane: Backup	After other PHP and SQL	Not started yet

resources: http://minicartjs.com/ https://developer.paypal.com/docs/integration/web/web-checkout/		parts are set up and ready to use	
Searching for an API or library that would allow us to make a Design Your Own page, if cannot find one, will not make that page because we do not know how, if can find one, do it	Jane: couldn't find anything, but maybe someone with better googling abilities can Steven: I'll try to google it again	After we are done with other parts of the site, since this is quite advanced and we cannot guarantee that we will be able to do it	In progress
Helping the client set up the site	Jane: will explain how to use the form to modify items/database and how to log in Steven: Create a user manual for the client	After we are done with the site, we will all meet with client to present it to her	Not started yet

We will primarily communicate with each other through email, though we may message each other on Facebook for shorter messages. We will use Google Docs to work on DJMs. For the code, an instructor on Piazza said "There will be a group account set up on the server for you guys in the next couple of days", so we will use that. If we need to modify another teammate's code, we will ask them first. And we will keep track of our progress by periodically notifying teammates about our progress, and when we are done with a task and marking it off in this table as well as telling teammates.

Part 4: Additional Comments

If you feel like you haven't fully explained your design choices, or if you want to explain some other functions in your site (such as special design decisions that might not meet the final project requirements), you can use this space to justify your design choices or ask other questions about the project and process.

Design Journey Part 2

Group name: Kitty

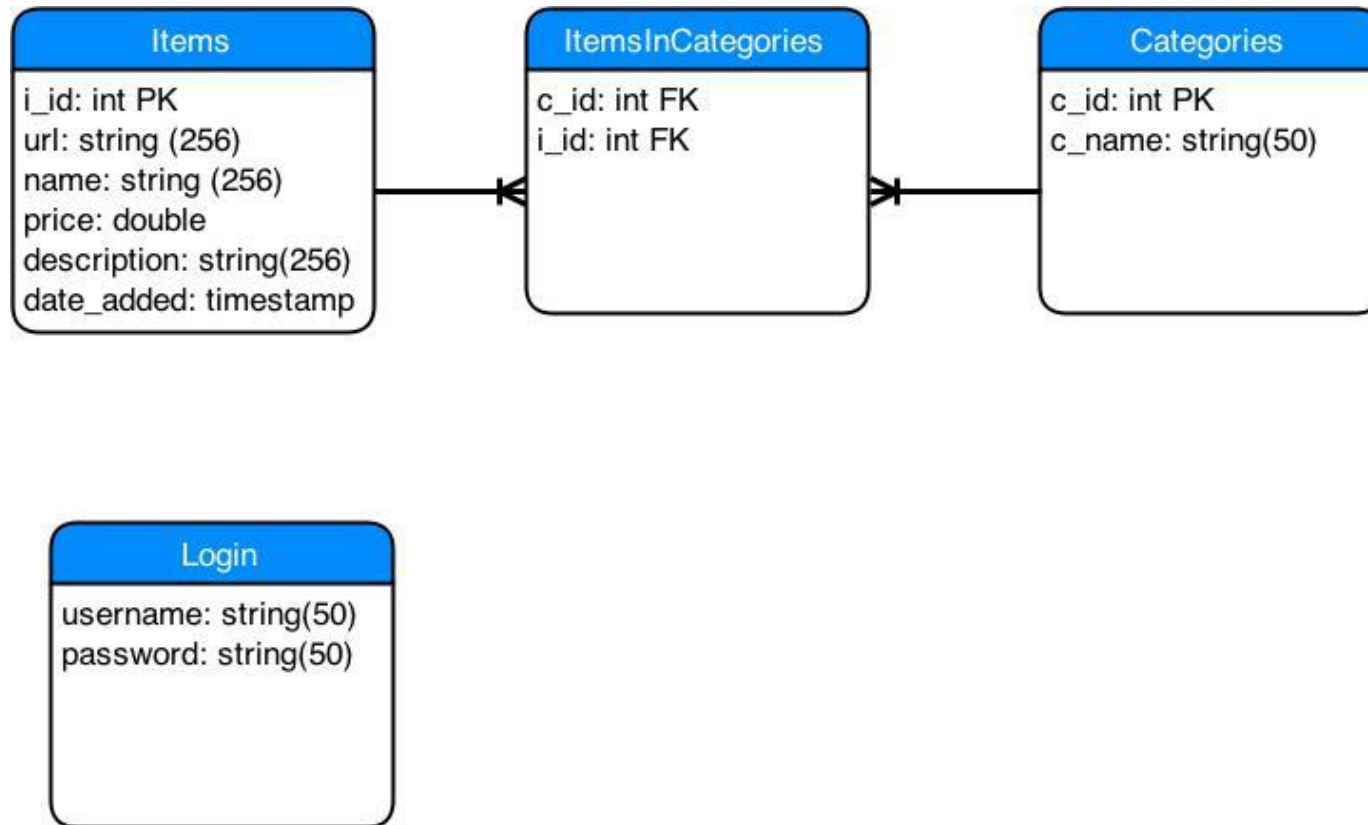Members' names: Dou Mao, Shangyuan Niu, Yevhenia Stets, Lillian Wang

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Section: 201

Part 1: Database Design

Conceptual ER Diagram (entities and relationships, see Lectures 17 and 18)

In this part, please copy and paste your ER diagram for your database below (you can make your ER diagram using any tool of your choice). Make sure the relationships between each entity are clear and well thought-out. Don't forget to indicate what kind of relationship each arrow represents. Your database description should go on the next page.

Items

i_id: int PK
url: string (256)
name: string (256)
price: double
description: string(256)
date_added: timestamp

ItemsInCategories

c_id: int FK
i_id: int FK

Categories

c_id: int PK
c_name: string(50)

Login

username: string(50)
password: string(50)

Database Description

Tell us what the database does. Make sure that you include enough detail so that we are able to understand what is going on in your ER diagram.

We will have three tables relating to products: Items, ItemsInCategories, and Categories. Items will hold information about each product. This will include the product's ID, image url, name, price, date added and description. Categories currently include only "Cheerleaders" and "Daily Accessories", but there may be more in the future because our client said she wants to expand to other areas too(such as "Dance Groups", etc.). These categories will help us properly display each product in a category when users view each category of product. ItemsInCategories contains the product ID and the category it belongs in. So for example, a "Small Shiny Red Bow" may be in both "Cheerleaders" and "Daily Accessories". This table will establish the many-to-many relationship between Items and Categories tables.

We chose the relationship to be many-to-many particularly because it is possible that a few items may fit multiple categories. Note that "New Arrivals" is technically not a category in the database, because it can just be done using a query for the products with latest date_added timestamps, though we may end up getting rid of "New Arrivals" or moving it to not be in the same menu as the other categories: our group has some disagreements over this. Also note that the audiences for this website are: 1.Cheerleaders because our client already makes a lot of things for them and 2. Regular people who just want some hair accessory that's not a huge sparkling bow, so that's why we have the categories. And the "New Arrivals" is useful because people in the modern society always want to see something new. Another thing: we thought about having user accounts and letting user view their past orders, but with Paypal it is not possible, so there is no longer an orders table.

The login table simply holds the admin account credentials so that the client may edit and update her site as needed.

Part 2: Website Layout

Content Organization

This should be an improvement upon the table you used in **Design Journey Part 1**

Main navigation (List your site's navigation here)	Sub category (List any sub categories of under the main navigation)	Content (List all the content corresponding to main navigation and sub categories)
Home	None	A photo slider for product images. Three boxes for categories below the slider. Mouse can hover over each box and then the description of each category appears on the box.
Gallery	category1:Cheerleaders category2:Daily Accessories category3:New Arrivals	There are three plus signs next to each category on the left side of the page. The plus signs are for expanding the content of each category. Category 1 includes products for cheerleaders. Under each product will be its name, price, and the add to cart options. Same thing for the product of daily accessories and new arrivals. When the user hovers over an item image, a "view details" text will appear, so when the user clicks on the image, they will be taken to the individual product page.
Individual product page	None	Users can click on a product in a gallery, which leads to an individual product page with a larger image of the product and more information about it.. We will use a PHP form that allows users to select the ribbon color and quantity. There will also be a message box so that customers can include a custom message with questions or comments about their order placement. After

		selecting the options, users will add the product to their cart.
Contact	None	The user can leave feedback to the web owner. We may not implement this since our client's contact information (email / phone number) will be on the footer of every page.
Checkout / View cart	None	Users will be able to view the contents of their cart and proceed to checkout. This page is in Paypal site, so we only send appropriate information to Paypal API and it will keep track of the cart for us and handle all the money things. **Note: last time the TA who graded us said we should not use Paypal but we went to the professor and he said we definitely could and should.**
Login	None	Admin only- only Jamie should use this to add, delete, or edit products. After logging in, she will be

Navigational Structure

Explain how users will move between pages. What kind of navigational aids will you have? Will there be a menu bar? A drop-down menu? Tabs? Will you have this available across all your pages?

Tell us why you chose a particular navigation scheme over other possible choices, how the overall navigation of your site will work, how the various pages will be linked, and how the the navigation categories make sense from a user's perspective. You may find it helpful to include a diagram of your site map here.
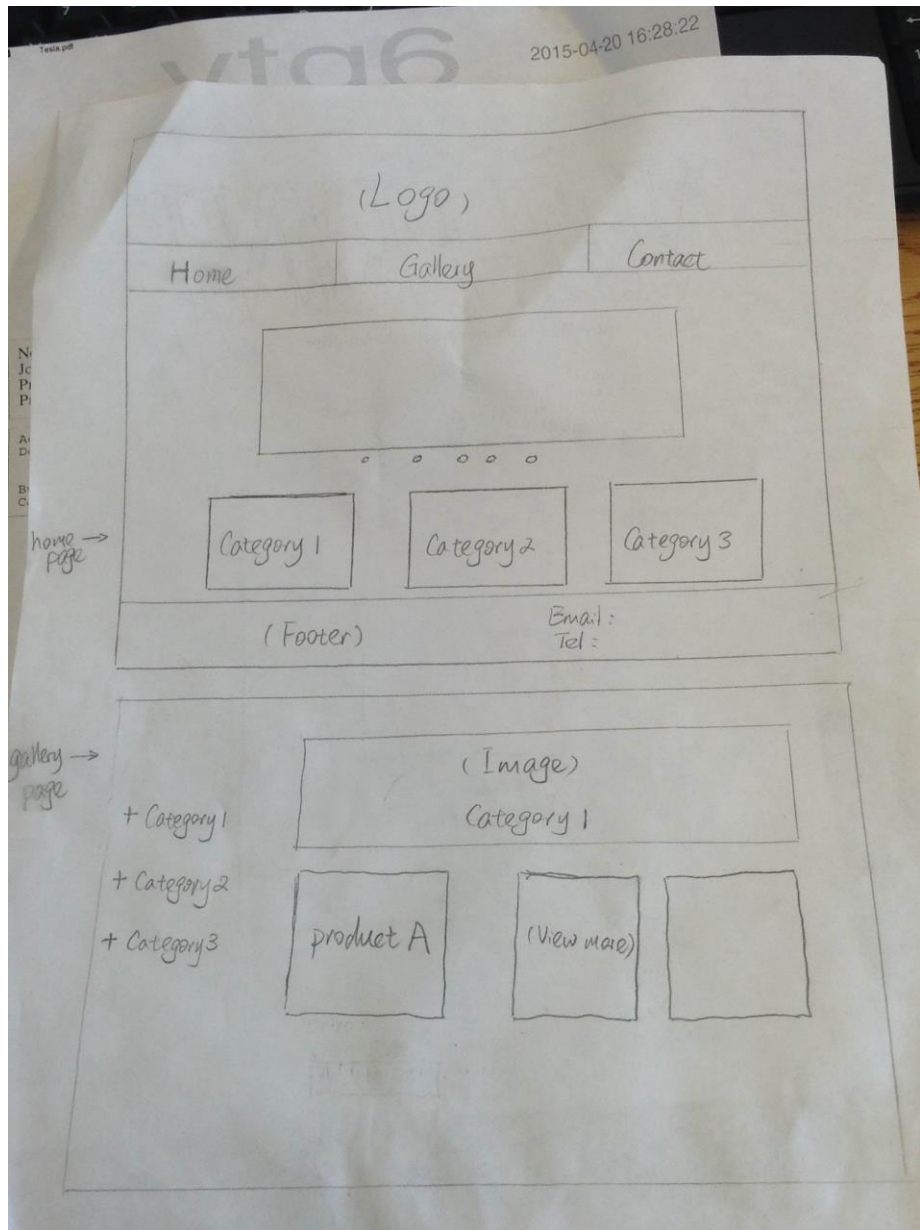
Nav bar: we plan to have a horizontal menu bar that will have the following tabs: home, about, gallery, contact. Under the gallery tab, the user can select which gallery they want to see or simply go to the gallery page by clicking the gallery tab. We chose this navigation scheme because it is both highly visible and seems the most intuitive. This type of navigation is extremely common, so users should be able to quickly understand how our site works. Users can quickly see what options they have and navigate to their desired page. Of course, we will user test this design to see whether there are any improvements that can be made.

Home page: The slider on the homepage is clickable. Each image on the slider is one product from 1 category. After clicking on 1 image the user would be directed to that category. The reason that we put a slider on the homepage is that we think the slider would make the page look more interesting.
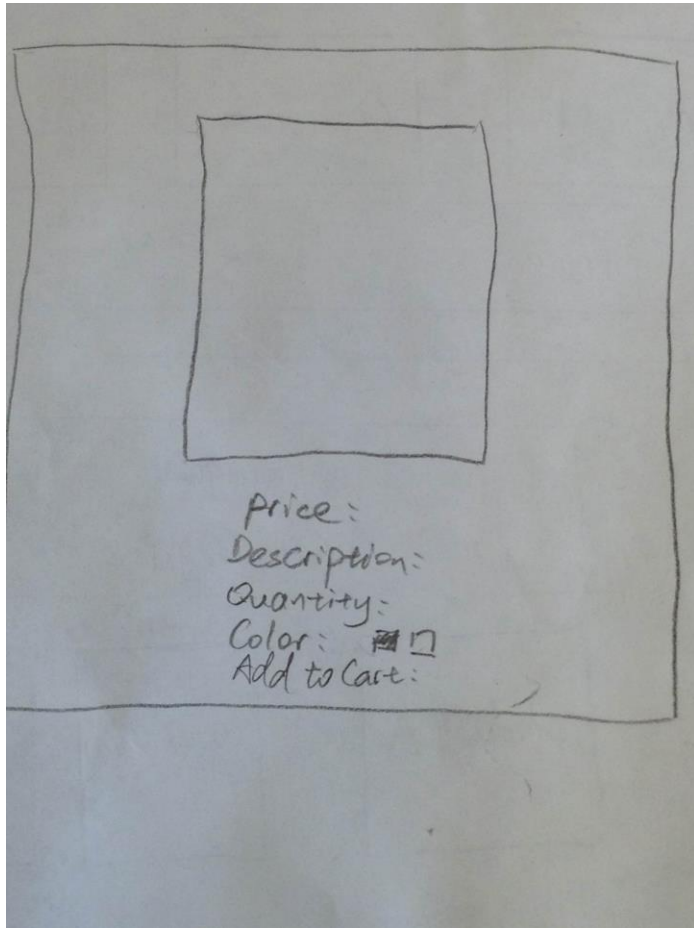The user can also click on the category boxes under the slider to go to each category.

Gallery Page: There are three plus signs next to each category on the left side of the page. The plus signs are for expanding the content of each category. The user can click on the plus sign to go to that category. The reason that we put the plus sign there is that each category might have a long content and we don't want the user to scroll all the way to the bottom to find the product they want. When the user hovers over an item image, a "view details" text will appear, so when the user clicks on the image, they will be taken to the individual product page.
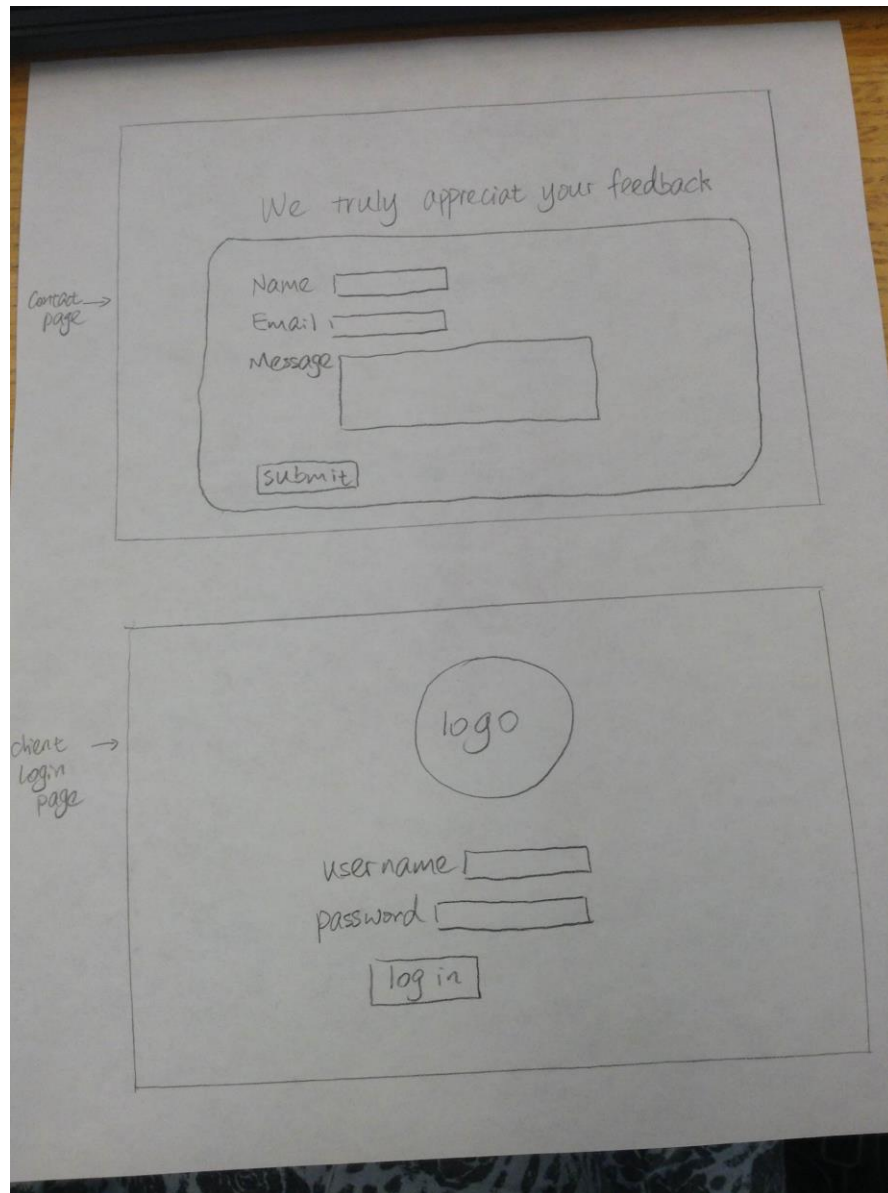
Footer: in the footer we have the email address of our client Jamie. The link is clickable and it direct the user to the outlook to send email to her. This footer will be on every page.

home page and gallery page

Price:
Description:
Quantity:
Color:
Add to Cart:

individual product page

We truly appreciat your feedback

Contact page →

Name
Email
Message

submit

client Login page →

logo

username
password

login

contact page and login page for Jemie

Part 3: Interactive Functionality

What interactive features will your site have? What PHP and Javascript elements will you include? Describe how the interactivity meets the needs of the clients/target audience.

1. PHP features for add and retrieving information of the products from the database. Since the client wants the site to display all the items and to allow customer to make their order. And the client herself should be able to add, delete, and update information of her items.
2. Javascript for slide shows that promotes certain featured product on the homepage. This makes the website more aesthetically pleasing and can easily attract customers to certain best-selling products.
3. PHP features for sorting and classifying products into corresponding sub-categories. This is also crucial for users to find the product they want.
4. PHP features for searching products. Customers should be able to search for certain types of items they want. This also meet the client's needs to sell products since searching functionality makes it more convenient for customers to get what they want.
5. Javascript feature for checking form input. This is crucial for all the forms, ie, searching forms and contact forms.
6. PHP functionality for paypal api. Since all the payment will go through paypal, so we need to implement the paypal api to make that work using php, or maybe some ajax, depending on what needed.
7. PHP features for admin login. We cannot let everyone modify the information of the products. Only the website owner, our client, should be able to do that. So admin login system is needed to restrict certain crucial operations and make them for admins exclusively.

PHP Interactivity

For each piece of PHP interactivity that you plan to implement, describe what the interaction is, how you will implement it, and which pieces of PHP code are required to complete it. You can describe these in terms of functions if you like, but only if you want to. If there is overlap between PHP and JavaScript interactivity, describe the interaction both here and in the JavaScript Interactivity section on the next page.

1. PHP features for add and retrieving information of the products from the database in order to display all the items that's on sale and allow customer to create their order. This would be done by using mysqli through php to communicate with the database, and to add retrieve, update, and delete through executing corresponding sql queries.
2. PHP features for sorting and classifying products into corresponding sub-categories. This also requires us to use mysqli to send and get information from the database via different kinds of queries.
3. PHP features for searching products. This would also be done via database operation. We will construct our queries to filter results that do not match customers searching criteria. Only those match the criteria will be displayed.
4. Admin login. This will be implemented using session variables to save all the login information. The password will be hashed.
5. Paypal: in order to accept payment for the customer's order, we will link our shopping cart to Paypal's Express Checkout API. We will have to ensure that our implementation of the PHP shopping cart will work with the API by reading more about the API.

JavaScript Interactivity

For each piece of JavaScript interactivity that you plan to implement, describe what the interaction is, how you will implement it, and which pieces of PHP code are required to complete it. You can describe these in terms of functions if you like, but only if you want to. If there is overlap between PHP and JavaScript interactivity, describe the interaction both here and in the PHP Interactivity section on the previous page.

1. Slide shows - on the main page, we will have large pictures of the client's products and cheerleaders wearing the products. Users can click through the slides and even click on the slides to view that exact product.
2. Form checking- we will use Javascript in addition to PHP form checking to make sure user inputs are squeaky clean.
3. Filtering products- in addition to PHP, we may use Javascript to help the users filter products (by color, size, price, etc.)

Compared to the first milestone, did you make any changes to your plan to use the existing libraries (e.g. editor.js, jQuery Cookie, Image Sliders, jQuery) for the site? If so, write down the libraries, what you have to do to incorporate those libraries, and how much of your own code will satisfy the project requirements. If there is no change, write down N/A.

- We plan on using a jQuery plug-in (http://www.jssor.com/) for our image slideshow. We will import the library at the beginning of each page that needs it. This is a relatively minor piece of code used to make the site more aesthetically appealing and does not affect the overall functionality of the site.
- We may also use jQuery cookies to track the user's shopping cart. We have not yet figured out the details of this implementation and are currently investigating the most efficient way to implement a shopping cart functionality.

Part 4: Additional Comments

If you feel like you haven't fully explained your design choices, or you want to explain specific functions in detail, do so here. You can use this space to justify your design choices or ask other questions about the project and process.

We have a few concerns about our information architecture. We are not sure whether or not we should have individual product pages (for example, separate product listings for "Big Red Bow", "Big Blue Bow", and "Big Green Bow") or if we should just have one page called "Big Bow", where users can select between red, blue or green before adding the product to their cart. To us, both options seem viable, but we're not sure if we should choose one over another. If we use the latter option, then we will not need to implement a "custom bow" section.

We are also unsure whether or not we need a contact form or whether having our client's contact info in the footer is enough.

In the php functionality part we included a search function. But this may or may not be in our final version since it depends on the expected number of types of the products. We have to make sure about that after we contacted the client next time. If there are only a few type of products, search bar will not be needed.

Design Journey Part 3

Group name: Kitty

Members' names: Dou Mao, Shangyuan Niu, Yevhenia Stets, Lillian Wang

Members' NetIDs: dm577, sn522, yvs4, lw444

Section: 201

Part 1: Necessary Information

1. Please provide us your login username and password
(if your site has multiple login systems, please specify which username and password corresponded to which login system)

Username: jjett

Password: cheer4cornell

NOTE TO TA: OUR WEBSITE CAN BE FOUND AT www/FP
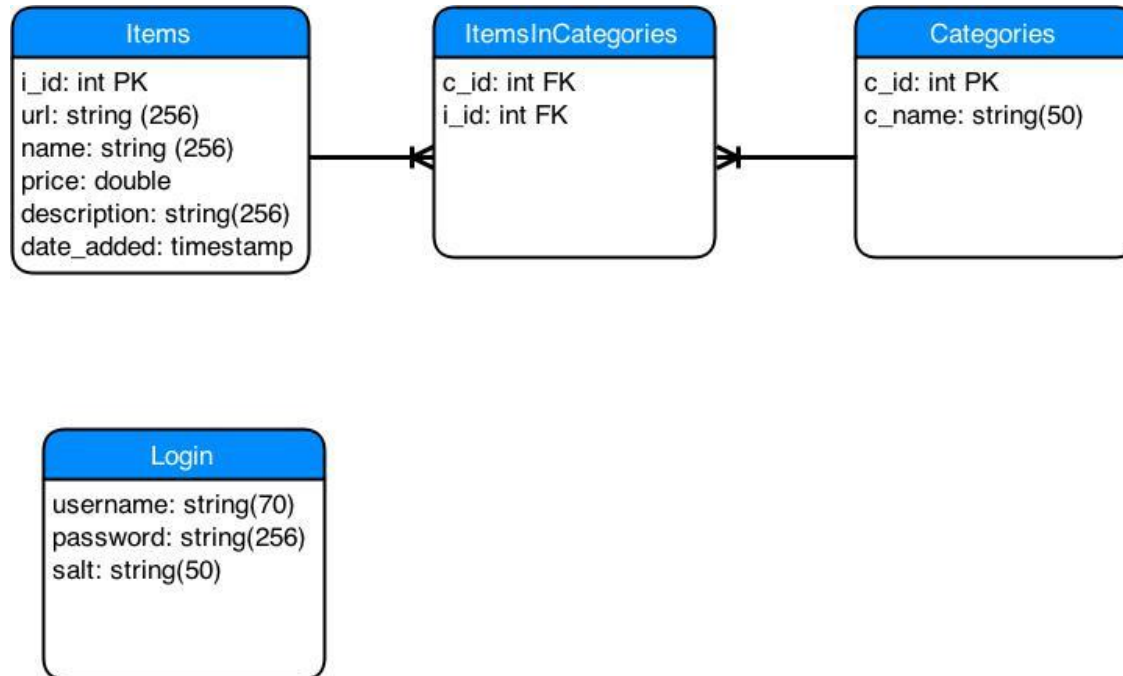
2. Please provide us your DB login username and password

Username: kitty

Password: kittycat

Part 2. Database Revision and Implementation

Include your physical ER diagram here and describe any changes you made based on feedback from the previous milestone. Also describe the physical ER diagram (tables, fields, keys, and relationship, please see lecture 17 slides 10 and 21).

Items	ItemsInCategories	Categories
i_id: int PK	c_id: int FK	c_id: int PK
url: string (256)	i_id: int FK	c_name: string(50)
name: string (256)		
price: double		
description: string(256)		
date_added: timestamp		

Login
username: string(70)
password: string(256)
salt: string(50)

We did not make any big changes since we didn't receive any feedback from M2 except for a perfect score. One thing we added however is the salt field in the Login table because we are planning to have the admin's password hashed with salt.

Items: This will hold all the information about each accessory. There will be a unique number that will be the primary key called i_id, a url for the link to the image of the item, the name of the item as a string, the price of the item as a double, the item description as string, and the timestamp date_added that contains the date that the item was added or last updated.

Categories: This will hold any categories we will have., with c_id being a number that uniquely identifies a category, so primary key, and the actual category name as a string.

ItemsInCategories: This table serves to establish a many-to-many relationship between the items and the categories in case that some items may be in more than one category and categories should contain more than one item most of the time, and so the table has item id's and category id's from the other 2 tables as foreign keys.

Login: This table is for admin login, so there will only be 1 entry, but it will contain the username as string, the hashed password, and the salt used to hash it, also as a string.

Part 3: Testing Protocol

How are you going to choose users?
How will they be representative of the target audience? How will you find them? Where will you meet them? Will you compensate them?

Since our target audience would be mostly cheerleaders (Cornell), and also other cheerleaders and coaches from local cities, it would be rather easy for us to contact specific members of the cheerleading community to be our user testers. Since they come directly from our target audience group, they will be pretty representative of the intended audience.

For users who live on campus, we will meet them in community centers or other public rooms that allow discussion. For those who live off campus, we can meet them in cafés downtown, like Starbucks or CTB.

As for compensations, we are not able to offer any monetary compensation to users since we are still college students, but we will send thank-you letters and promise to help them if they have problem related to web-design.

What tasks are you going to have them do? How would these tasks connect with the client's needs?

Task name/id	Task description	Task goal/what's being tested/expected outcomes
First impression	Ask the user to look at the site for 5 seconds and describe their emotional and intellectual reactions	Want to see whether the design communicates client's key site goals to the target audience; want to see if people get the metaphor right away.
Favorite bow	Ask the user to find the name of their favorite bow on the site	This task tests whether users can easily navigate the products page. This also tests whether users can view the products and the product name.
Find Jamie's phone number	Ask the user to locate Jamie's phone number	This task tests whether it is obvious for the user to see the information on the footer.
Contacting Jamie	Have the user fill out the contact form	This task tests the functionality of the contact form. This allows us to see whether or not the form breaks or displays any errors with ordinary user input.
Impression after browsing	Ask the user to describe the feel of the site in a few words	The client asked for a "whimsical, energetic" site design. This question allows us to see whether or not the site design fits the client's needs.

What's your script?

How are you going to welcome them? Reassure them that you're testing the site, not them? Get them to think aloud while they use the site?

No matter where we will meet the user, the first thing we need to do is to introduce ourselves to the users, then shake hands and have coffee(if in a café.) Next, we will briefly state our goal for the testing process, and reassure them that user testing is easy with just a few clicks on the computer. Also, it's really important to remind them to voice all their suggestions, confusion, or other feedbacks to us, and to relax during the testing process.

How are you going to introduce each task? What wording will you give the user? Will you give them any information in advance (probably not -- they won't have it in a real deployment -- but for sketches and early prototypes you might tell them that some things don't work)? How will you remind them to think aloud? How will you decide when to "give up" on the task?

We will introduce each task by offering hypothetical contexts before read out the requirement. The wording will be like "imagine that you have urgent questions and want to contact the seller Jamie Jett, now find her phone number on the website." We won't give them any unnecessary information since the effectiveness of the user testing will be negatively affected. But we will let the users know what the website would be like in its full form. Since our site probably won't be fully functioning during round 1, so it's important to let the user know what's supposed to be where it's not functioning. Users will be asked to voice out their thoughts when they make operations on the website, so we are able to track the flow of their idea. The task will fail if the user cannot fulfill the objective in 30 seconds.

Afterwards, what specific questions or general opinions will you ask for about their experience or the site? How will you thank them?

We will ask again on their general impression on the design of the web site, and whether other extra/unnecessary functions or tools should be added to/removed from our website. After the user testing ended, we will send thank-you letters to users and promise to help with their web-design issues if needed.

Part 4: Testing Note
You should have at least 3 testing users.

User 1

1. Who is your user, e.g., where do they come from, what is their background, etc.?
Rachel is a junior at Cornell. She comes from a small, tight-knit city in Minnesota and grew up cheerleading. She began cheerleading when she was 10 years old and continued through high school. Unfortunately, she has not been able to continue at Cornell due to a demanding pre-med course load, but she was chosen to user test our site due to her background.

2. How does this user represent your target audience/client's needs?
Rachel was a cheerleader for 8 years prior to coming to Cornell. She understands the wants and needs of cheerleaders as a result of her experience and she also fits the target audience (young women).

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - *what are the different solutions you can think of to address the feedback/problem?*
First impression	"Wow, very colorful!" Seemed positive overall, the user liked the colorful and clean design of the site.	Seems good so far- the user feels the site is bright and colorful, which is exactly what the client asked for
Favorite bow	"Sassy Pink Bow for sure, is this even real? I want to buy one". User immediately navigated to the "Products" tab and scrolled down to the bows. Seemed confused that each category didn't do anything	Will implement categories later, as we add products
Find Jamie's phone number	User quickly found the information at the bottom of the page	May also include this information on the contact page, just in case.

Contacting Jamie	User filled out the form with fake but plausible information. Form did not break, but user commented on the header being difficult to read	Will change the color/weight of the header to make things easier to read.
Impression after browsing	Overall positive feedback. The user did have two comments: 1. She felt that the header of the page felt was lacking something, but not sure what. 2. The pictures of bows clashed somewhat with the background (purple-tinged bow on an orange-yellow background)	1. We might add a background to the header. While maintaining the colorful / cheerleader theme of the site 2. This will likely be changed as we add in actual pictures of products. We may add white borders around each picture to add a visual buffer of sorts

3. Other notes from this user that will be useful to think about when redesigning.

Minor design considerations: change the header fonts and rework the category selection

User 2

1. Who is your user, e.g., where do they come from, what is their background, etc.?
Cindy is a high school senior from a medium-sized high school in New York City. She is the younger sibling of one of our friends. Cindy is a bit of a fashionista, in that she is extremely interested in keeping up with the latest styles and constantly browses shopping websites in her free time.

2. How does this user represent your target audience/client's needs?
Even though Cindy does not have any cheerleading experience, Cindy is familiar with online shopping and navigating such websites.

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - *what are the different solutions you can think of to address the feedback/problem?*
First Impression	Disliked the site- a lot. She thought it was too bright and disliked the colorful background. Called it "tacky and corny as heck"	Not really sure what to do- the client wanted that kind of feel. Perhaps we can adjust the site so it looks less "tacky" while still maintaining the colorful layout
Favorite bow	"Cute White Bow"- navigated to the products page quite easily. Was confused since clicking on the images (both on the product page and the homepage) did not do anything.	Will implement a product page for item that has a brief description of the bow and the ability to add the item to the cart.
Find Jamie's phone number	Easily found the information at the bottom of the page.	Seems to be the standard in website layouts.
Contacting Jamie	Filled out the form without any problems	Perhaps change the color of the form so it's less "tacky"?
Impressions after browsing	Overall, liked the functionality of the site but not the color scheme. The user compared the site to other shopping websites like	Again, not sure what to do. However, the client wanted to avoid the austere, white background layouts that these sites use, so I suppose this is a

	http://www.anthropologie.com/, http://www.forever21.com/ and http://www.express.com/ and greatly preferred the minimalistic, picture-heavy layouts for those sites.	success.

3. Other notes from this user that will be useful to think about when redesigning.

Perhaps think of other design options that maintain a colorful layout while avoiding a "tacky" feeling.

User 3

1. Who is your user, e.g., where do they come from, what is their background, etc.?
The user Zili is a senior who majors in design. He is professional in graphic design and has a good taste of aesthetic.

2. How does this user represent your target audience/client's needs?
He is not part of the target audience and he was not familiar with online shopping. So he is suitable for testing whether our site is easy for people who are not familiar with online shopping to navigate.

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - *what are the different solutions you can think of to address the feedback/problem?*
First Impression	The website is really colorful.	Making a colorful site is what the client wants and that is our goal as well.
Favorite bow	"Shimmery purple bow". He navigated to the page easily.	We will keep the current navigation bar.
Read the text	He found it a little bit hard to read the text because they were not highlighted enough.	Add a transparent box underneath the site description to highlight texts.
Contacting Jamie	Filled out the form without any problems.	Keep the contact form design.
Impressions after browsing	He thought the color scheme was suitable for selling hair accessories to cheerleaders.	We will keep the colorful color scheme.

3. Other notes from this user that will be useful to think about when redesigning.

Testing Summary and Iteration

What did you learn? About your users? About your site? About yourselves?

We learned that our site is really easy to navigate! So far, users have had no problem finding information they need. All three users easily found Jamie's contact information, navigated the products page without any problems, and filled out the contact form without breaking it. We tested the site with two females (one experienced online shopper, one former cheerleader) and one male, who all found the site comprehensible.

There were some disagreements among our user testers regarding our site's design. Two users enjoyed the colorful layout of the site, while one of them greatly disliked the color scheme. Our site does not follow the traditional formula most shopping websites use (white background with large pictures to add color). We will keep our current design since the client specifically requested a colorful site, regardless if we use "lime or chartreuse… just make it colorful!". We may tweak small things, like adding a box underneath the site description to make it easier to read.

Our greatest challenge so far has been balancing a colorful design while avoiding the gaudy design tropes of web design from the 1990's. While it would have been much easier to have a white background and neutral color scheme, we have enjoyed experimenting with various backgrounds and color combinations!

What are three key changes you made based on the testing, what alternatives did you consider, and why are they appropriate changes?

1. Added a white border around some of the pictures through photo editing to test out whether or not a border may help clean up the product page. We considered enclosing the entire product list with a transparent background, but felt that it detracted from the site. The border around each image seems to have worked, so we will experiment with adding borders through CSS.
2. Made the product boxes on the front page clickable. Previously, the three images below the slideshow on the front page did not link to anything. We did not notice this and fixed it after a user tester mentioned it.

3. Changed the color of the contact form from orange to green. While the orange matched the navigation bar and footer, one user mentioned that it was too much color coordination. We tested out different colors, like blue, gold, and black, but we found that green seems to be the best match. The green matches the background of the site and provides contrast to the nav bar and footer.

If you make any changes to the testing protocol for round 2, tell us what they are here.

Round 2 will test the PHP / SQL functionality of the site. We will ask questions regarding our shopping cart, product sorting, and perhaps have the user test the admin functions of the site.

Part 5: Additional Comments/Questions

If you have additional info/comments/questions about testing or the state of the project, you can put them here. However, you might get better responses in office hours at this point in the semester.

1. We created a separate login page which was only for Jamie. Since other users won't be able to login and then edit the site we didn't put the login portal on the site.
2. We will create individual page to display each item for the next milestone.
3. We will make the plus sign on the product page functional for the next milestone. Each plus sign is used to expand the content belongs to that category. Jamie has a lot of products. We are planning to use the plus signs to make the site more user-friendly instead of forcing the user to scroll all the way down to the bottom of a long page.
4. We will link each category box on the home page to specific category on the product page.Right now the boxes are linked only to the product page instead of a specific category.
5. Right now the user need to refresh the login page to see whether they have login or not. We will save the user's effort of refreshing the page in the next milestone.

Design Journey Part 4

Group name:Kitty
Members' names: Dou Mao, Shangyuan Niu , Lillian Wang, Yevhenia Stets
Members' NetIDs:dm577, sn522, yvs4, lw444
Section:201

Part 1: Necessary Information

1. Please provide us your login username and password. Remember, your username and password should be hashed.
(if your site has multiple login systems, please specify which username and password corresponded to which login system)

Username: jjett

Password: cheer4cornell

2. Please provide us your DB login username and password

Username: kitty

Password: kittycat

Use of Existing Libraries

As there may have been some changes, please give us the most up-to-date list of existing libraries that you are using for your website (e.g. editor.js, jQuery Cookie, Image Sliders, jQuery). What did you have to do to incorporate those libraries? How much of your own code satisfied the project requirements?

We found ways to accomplish the required tasks without the use of any libraries.

Part 2: Testing Protocol

1. How are you going to choose users?
How will they be representative of the target audience? How will you find them? Where will you meet them? Will you compensate them?

Since our target audience would be mostly cheerleaders (Cornell), and also other cheerleaders and coaches from local cities, it would be rather easy for us to contact specific members of the cheerleading community to be our user testers. Since they come directly from our target audience group, they will be pretty representative of the intended audience.

For users who live on campus, we will meet them in community centers or other public rooms that allow discussion. For those who live off campus, we can meet them in cafés downtown, like Starbucks or CTB.

As for compensations, we are not able to offer any monetary compensation to users since we are still college students, but we will send thank-you letters and promise to help them if they have problem related to web-design.

2. What tasks are you going to have them do? How would these tasks connect with the client's needs?

Task name/id	Task description	Task goal/what's being tested/expected outcomes
Initial Impression	Tell the user to browse the site for two minutes, then ask them for their thoughts on the site	This task teaches us a few things. First of all, we will learn the user's impression on our site's design and layout. Also, it lets us know whether there is anything wrong with the site that we should fix.
Favorite Bow	Ask the user to browse through the different product categories and find their favorite bow	This task tests whether users can navigate through the different categories of products

Add to Shopping Cart	Ask the user to add three different bows to their shopping cart	This will let us see whether Paypal's shopping cart works
Remove from Shopping Cart	Ask the user to remove one bow from their shopping cart	This will let us see whether Paypal's shopping cart works
Find Jamie's Facebook Page	Ask the user to find Jamie's Facebook page	This task tests whether users know to look at the footer for social media links

3. What's your script?

How are you going to welcome them? Reassure them that you're testing the site, not them? Get them to think aloud while they use the site?

No matter where we will meet the user, the first thing we need to do is to introduce ourselves to the users, then shake hands and have coffee(if in a café.) Next, we will briefly state our goal for the testing process, and reassure them that user testing is easy with just a few clicks on the computer. Also, it's really important to remind them to voice all their suggestions, confusion, or other feedbacks to us, and to relax during the testing process.

How are you going to introduce each task? What wording will you give the user? Will you give them any information in advance (probably not -- they won't have it in a real deployment -- but for sketches and early prototypes you might tell them that some things don't work)? How will you remind them to think aloud? How will you decide when to "give up" on the task?

We will introduce each task by offering hypothetical contexts before read out the requirement. The wording will be like "imagine that you have urgent questions and want to contact the seller Jamie Jett, now find her phone number on the website." We won't give them any unnecessary information since the effectiveness of the user testing will be negatively affected. But we will let the users know what the website would be like in its full form. Since our site probably won't be fully functioning during round 1, so it's important to let the user know what's supposed to be where it's not functioning. Users will be asked to voice out their thoughts when they make operations on the website, so we are able to track the flow of their idea. The task will fail if the user cannot fulfill the objective in 30 seconds.

Afterwards, what specific questions or general opinions will you ask for about their experience or the site? How will you thank them?

We will ask again on their general impression on the design of the web site, and whether other extra/unnecessary functions or tools should be added to/removed from our website. After the user testing ended, we will send thank-you letters to users and promise to help with their web-design issues if needed.

Part 3: Testing Notes
You should have tested your site on at least three representative users.

User 1

1. Who is your user, e.g., where do they come from, what is their background, etc.?
Jasmine Hu is a current Cornell freshman in College of Engineering. She is an international student from Shenzhen, China who has some experiences in cheerleading. Besides cheerleading, she also has 4 years of hip hop dancing experiences. Moreover, she is extremely interested in shopping online and familiar with various e-commerce site like Taobao and Jingdong in China and Amazon and Ebay in the US.

2. How does this user represent your target audience/client's needs?
She has experiences in Cheerleading and navigating through e-commerce sites, which are exactly what we need.

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - *what are the different solutions you can think of to address the feedback/problem?*
Initial Impression	"Wow I really like the design!"The site's theme is really creative, colorful, and energetic. She really liked the orange color. But the font of the description of the site owner seemed not to fit the entire theme.	We changed the font of the description and added a green ellipse as background. That fits the general site theme well.
Favorite Bow	"Cute White Bow"- navigated to the products page quite easily. Then clicked on the "specialty bows" and find the "White Cornell Bow". The whole process took about 30 seconds.	No need to redesign. Current content structure is straightforward enough.
Add to Shopping Cart	She just clicked on the add to cart button after chose her favorite bow. It took about 3 sec.	No need to redesign.

Remove from Shopping Cart	She first clicked "view cart", and then navigate to the remove button in the cart page provided by Paypal.	No need to redesign. Paypal has relatively good cart systems.
Find Jamie's Facebook Page	"Haha this is easy. I've already noticed the facebook icon in the beginning of the testing process. "She directly clicked the facebook icon on the footer. It took about 3 seconds.	No need to redesign, since the convention is to put social network icons on the footer, and it works well.

3. Other notes from this user that will be useful to think about when redesigning.

When we did the user test the tester complained that connection to Paypal is sometimes slow. However by far Paypal api is the only option we know to conveniently implement a shopping cart functionality on our website, so we are not going to make any further changes. After all in most cases it's really fast.

User 2

1. Who is your user, e.g., where do they come from, what is their background, etc.?
Rachel is a junior at Cornell. She comes from a small, tight-knit city in Minnesota and grew up cheerleading. She began cheerleading when she was 10 years old and continued through high school. Unfortunately, she has not been able to continue at Cornell due to a demanding pre-med course load, but she was chosen to user test our site due to her background. She user tested our first iteration of the website!

2. How does this user represent your target audience/client's needs?
Rachel was a cheerleader for 8 years prior to coming to Cornell. She understands the wants and needs of cheerleaders as a result of her experience and she also fits the target audience (young women).

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - *what are the different solutions you can think of to address the feedback/problem?*
Initial Impression	"Vibrant, very bubbly, easy to navigate, well laid out" overall seemed very positive- liked the layout changes. She mentioned that the product descriptions seemed out of place	Changed the color of the description text from black to orange
Favorite Bow	Red and White Zig Zag Bow- went to "Products" tab, then clicked on "Specialty" option	She liked the categories tabs and found them helpful
Add to Shopping Cart	Went around the products, added three bows. Said that it was confusing because there's no way to look at the cart from the nav bar. The user commented that she disliked the default Paypal "add to cart" and "view cart" buttons- they looked too sterile	Maybe add a "view cart" link in the nav bar. Also, change the Paypal buttons!
Remove from Shopping Cart	Did so easily from the Paypal page- however, if you want to remove only one bow, you have to click "update" rather than remove.	N/A- cannot edit Paypal's shopping cart
Find Jamie's	Took awhile- first went to contact page, then saw the Facebook icon on the	Probably will not add social media

Facebook	footer	links to the contact page. Will consider adding an about page in the future, however

3. Other notes from this user that will be useful to think about when redesigning.

Will consider adding an About page later, after the project is due if the client wants one. If she does, we will link to her social media accounts from there

User 3

1. Who is your user, e.g., where do they come from, what is their background, etc.?
John Hui. He is currently studying AEM. He is originally from Pennsylvania.

2. How does this user represent your target audience/client's needs?
The user is not familiar with online shopping. Therefore he is a good target audience for us to test out whether our online shopping website is intuitive enough to new users.

Tasks for user 1	User's reaction/feedback/problems?	Re-design ideas and other notes - *what are the different solutions you can think of to address the feedback/problem?*
Initial Impression	He really liked the color scheme. But he thought that the font needs to be pops out. Also he suggested us to add two decimals after the prices to make them look professional.	We added a transparent box behind the text on the home page. We also bolded the font to make it more pops out. We added 2 decimals after each price. In addition, we made the price to be bigger and use a different font for the prices.
Favorite Bow	Red and Black Layered Bow This user mentioned that it was hard to read the price text.	We moved that bow to be the first one because we want to put bows that are the users' favorite first. We also changed the font size and color of the price text
Add to Shopping Cart	He found the add to cart and view cart buttons immediately	We will keep the add to cart and view cart design
Remove from Shopping Cart	After he found the view cart button he found remove from shopping cart was easy	We will keep the design of the view cart and add to cart button since they are intuitive enough for the users to find the shopping cart page. We cannot edit the shopping cart page.
Find Jamie's Facebook Page	He found the fb button on the footer immediately	We will keep the social media buttons design

3. Other notes from this user that will be useful to think about when redesigning.
N/A

Part 4: Testing Summary and Iteration

1. What did you learn about your users? About your site? About yourselves?

Same as what happened last time, generally the users are satisfied with our content structure. They have had no problem finding information they need. All three users easily found the page of their favorite bow and Jamie's Facebook link. They have also tested the adding and removing functions of the cart, which runs smoothly as expected. We tested the site with two females (two cheerleaders) and one male, who all found the site comprehensible.

According to the users, most of what can be improved are about design. For example, colors and fonts. Jasmine pointed out that the font color of the site description which appears at the center of the home page does not fit the site design theme and John said that the price does not stand out when people are looking at the detailed information of the products they want.

Some of the users complained about the Paypal features, but this is all what we can do so far. This is the first time we've implemented the shopping cart functionality using Paypal Api. It is not perfect but good enough to satisfy our client's needs. In the future, we may further explore other more customizable options.

2. What are three key changes you made based on the testing? What alternatives did you consider? Why are these changes appropriate?

1. We changed the description on the homepage to be white text in a green oval. It was originally in a white, rounded rectangle, with black text but we thought that the white description box would be too boring. We considered various colors but settled on green, since our forms are using the same color.
2. We made the prices of each product easier to see. One user complained that the orange text was too hard to read, so we changed it to black and made it larger. We tried out various sizes and colors and settled on our current combination because it was easiest to see.
3. We changed the buttons for the "Add to Cart" and "View Cart" buttons. Before, we were using the default Paypal buttons, which looked boring and out of place on our website. We considered various button images before settling on orange buttons with white text. We chose these buttons because they fit our website's color scheme and are easy to read.

Part 5: Final Notes to the Clients

1. Describe in some detail what the client will do (or would have to do) in order to make this website go live. What is the deployment plan?

Our deployment plan is as follows:
1. Meet with our client to set up her site
2. Show our client hosting rates for GoDaddy, Bluehost, and Siteground
3. Once she decides on a host and a domain name, we will help her register for a site
4. Upload our files onto the site
5. Test the site with the client and make any last minute changes

2. Include any other information that your client needs to know about your final website design. For example, what client wants or needs were unable to be realized in your final product? Why were you unable to meet those wants/needs?

We believe that we have satisfied the client's needs. We have tried our best to ensure that the website is bright and whimsical and that our site avoids the typical shopping website's appearance. Additionally, we made sure that customers could easily browse the site and look for products. Our navigation system seems to be easy to understand (according to our user testers) and the shopping cart features work. Lastly our client can easily add, edit, and remove products and categories from her admin page.

Part 6: Final Notes to the Graders

1. Give us three specific strengths of your site that sets it apart from the previous website of the client (if applicable) and/or from other websites. Think of this as your chance to argue for the things you did really well (justify the wow factor of your website).

Our website is a fully functioning e-commerce site that allows users to purchase products from our client. We have integrated a Paypal shopping cart and Paypal checkout button so that users can select the products they want, enter a custom message, and then pay for their products. We also implemented an "admin page" so that our user can edit the database without having any knowledge of SQL! Through this admin page, she can add or delete categories and add, edit, or delete products. Also she has the option to directly choose which categories the items belong to and to update that decision as many times as she wants.

2. Tell us about things that don't work, what you wanted to implement, or what you would do if you keep working with the client in the future. Give justifications.

If we were to keep working with the client in the future, we would expand the site further. One of our user testers suggested adding an "About" page so that customers can learn more about our client. Additionally, we think that adding additional admin functions would be helpful. For example, we would add a page where the client could change certain parts of the site, like the site header, background, or even the image slides on the homepage.

We would also refine the design further, based on additional user testing. Most of the users in this round of testing commented on some aspect of our site's design.

3. Tell us anything else you need us to know for when we're looking at the project.
 Enjoy!