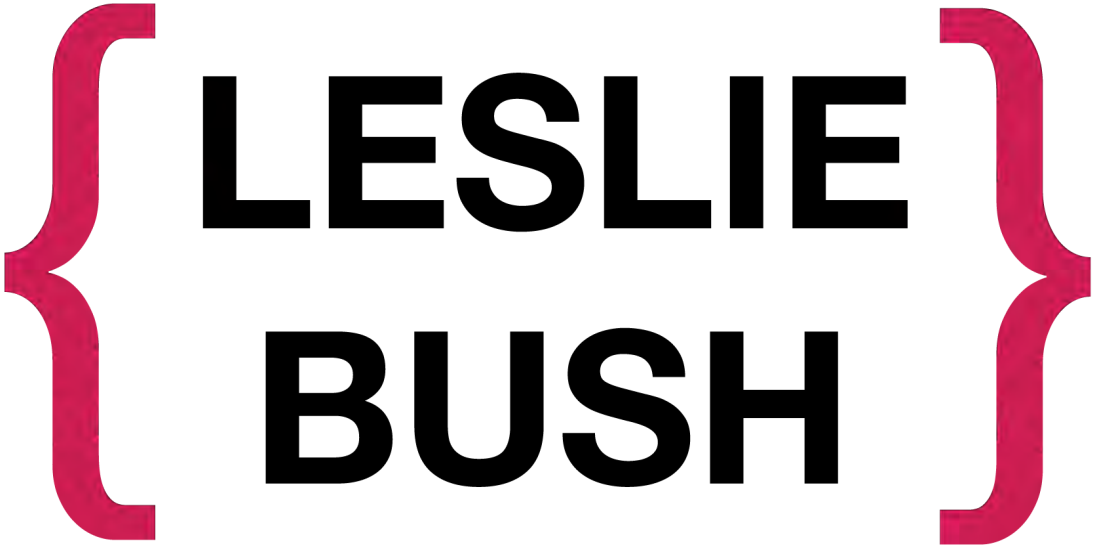

LESLIE
BUSH

{ table of contents }

{ about me }

Hello, my name is Leslie Bush. I'm currently a Sophomore Industrial Design student at the Georgia Institute of Technology in Atlanta, Georgia.

I have a strong passion for furniture design via digital fabrication techniques, and am seeking an internship or co-op with a design firm that will help me develop skills in design ideation, concept development, design for manufacturing, and prototyping.

After receiving my degree, I would like to start my own domestic design/build business that transcends the gap between the uniformity of mass-produced products and the humble beauty of artisanal goods.

Enclosed in this portfolio is a sample of my studio work for your perusal.

Please feel free to contact me at:

Leslie Bush
{ 770 } 841-2753
lmsbush@gmail.com
www.coroflot.com/lbush

{ what inspires me }

{ skills }

Design Skills

Sketching, Marker Rendering, Woodworking, Model-Making, Laser Cutter, 3-Axis CNC Machining, Soldering, Oxyacetylene Welding, MIG Welding, Hot Metal Forging, Cuttlefish Jewelry Casting

Software Skills

Proficient in:
Adobe Creative Suite 4: (Photoshop, InDesign, Illustrator), Windows and Mac OS Operating Systems, Microsoft Office (MS Word, Excel, PowerPoint), Apple iWork Suite, WPM: 75+

Knowledge of:
Adobe Creative Suite 4: (Bridge, Flash), SolidWorks 3D CAD Design Software, Photoview 360, AlphaCAM, Google SketchUp, HTML, CSS

SELECTED WORKS

wabi sabi lamp

{ wabi sabi lamp }

a bio-inspired lighting device

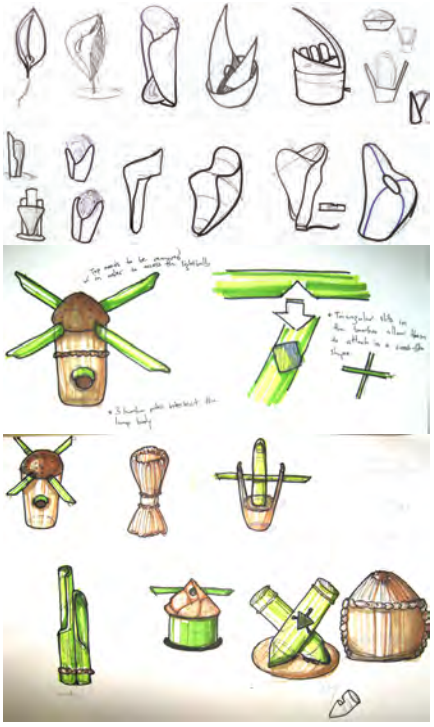
The Wabi Sabi Light explores the materiality and structure of lantern-like light fixtures, and their resulting light dynamics. Emphasis was put on the lampshade itself, and how with carefully selected materials, the body becomes illuminated with a soft orange glow when a bulb is inserted.

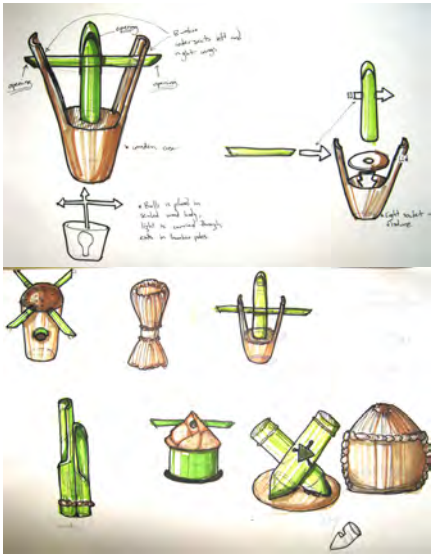
The term Wabi Sabi is derived from the Japanese world view and aesthetic concept. The philosophy of Wabi Sabi is inspired by things in nature that while asymmetrical, rough, and flawed, posses a simple beauty.

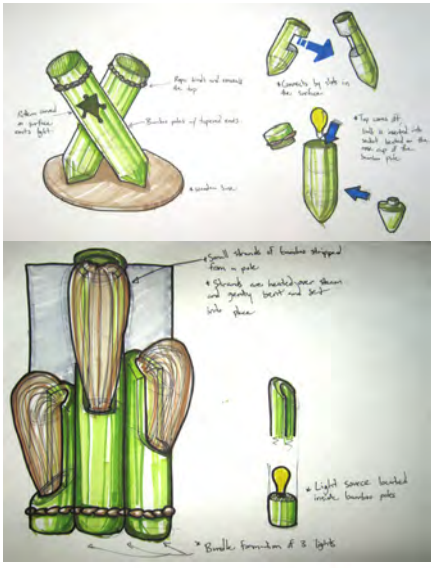
Using handcrafted paper with exposed fibers conveys the irregularity of nature. The light brown color of the paper surrounding the light bulb emits a warm, full glow when filtered through the paper. Synthetic materials would not be able to reproduce the organic and comforting ambiance the Wabi Sabi Light aims to create.

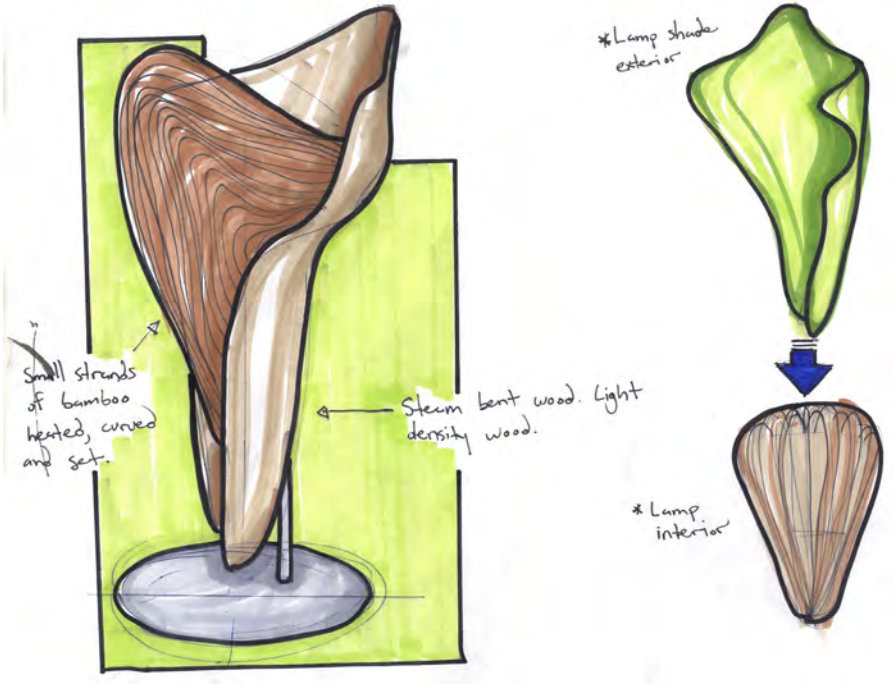
Inspiration was taken from mollusks. These creatures retreat to their shelters if threatened. The shell acts as a sort of shelter where one feels content and at home.

{ wabi sabi lamp - **ideation sketches** }

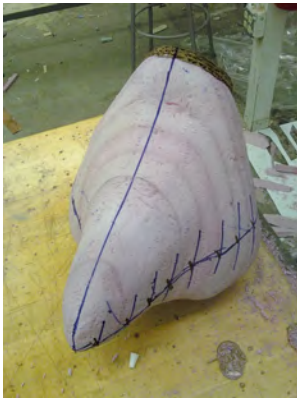








{ wabi sabi lamp - **process** }



Pink foam was sculpted to the desired shape for the lamp shade

A small file was used to create ridges on the surface of the pink foam. The copper wire was then laid within these ridges and taped into place. The overlapping wires were soldered. Once all wires were secured, the tape was then removed. A heat gun was used to melt and shrink the pink foam until it was small enough to exit the wire frame.

Two inch strips of soft handcrafted paper were cut and applied in an overlapping fashion to the wire frame using Mod Podge Adhesive/ Hardcoat.

Papyrus paper was cut and sectioned, then bent to create the shell-like form that encapsules the lamp shade. A single wire was used to hook the shell to the lamp.

ENCHANTING LUXURY

ART DECO-INSPIRED SALT AND PEPPER SHAKERS

{ enchanting luxury }

salt and pepper shakers

Inspiration for the Enchanting Luxury salt and pepper shakers came from the stylings of Streamline design, a parallel art and design movement to the Art Deco style.

From the booming twenties to the 1950s, American products were adorned with sleek, minimalistic curves and ridges, strong horizontal or vertical orientated speed lines, and smooth surfaces, features heavily influenced by advances in aerodynamics at the time.

People were enthralled by all products and designs which inspired feelings of prosperity and futuristic achievements.

Carved from cherry wood, the bright and smooth finish emulates the showy and glamorous finish of most streamlined consumer products.

IDEATION

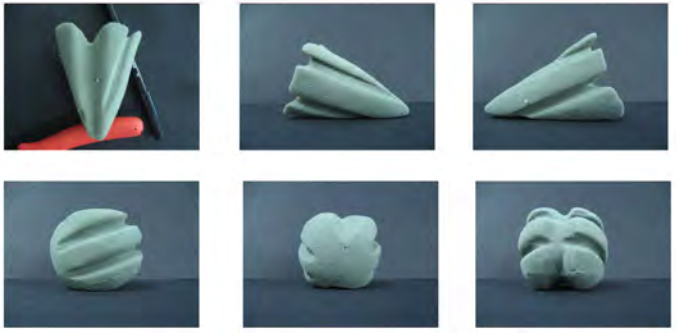
STREAMLINED DESIGN

salt and pepper form study | **leslie bush** @ clint zeagler studio | ID@GT | fall 2010

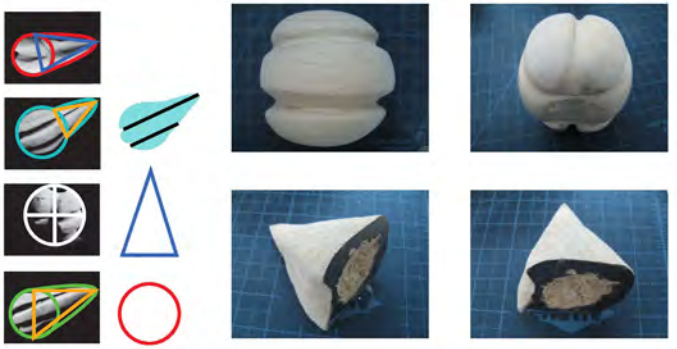
{ enchanting luxury: salt + pepper shakers - **process** }

MODELING AND PROCESS

Final foam model



Extracted Geometries to create the final salt and pepper shakers



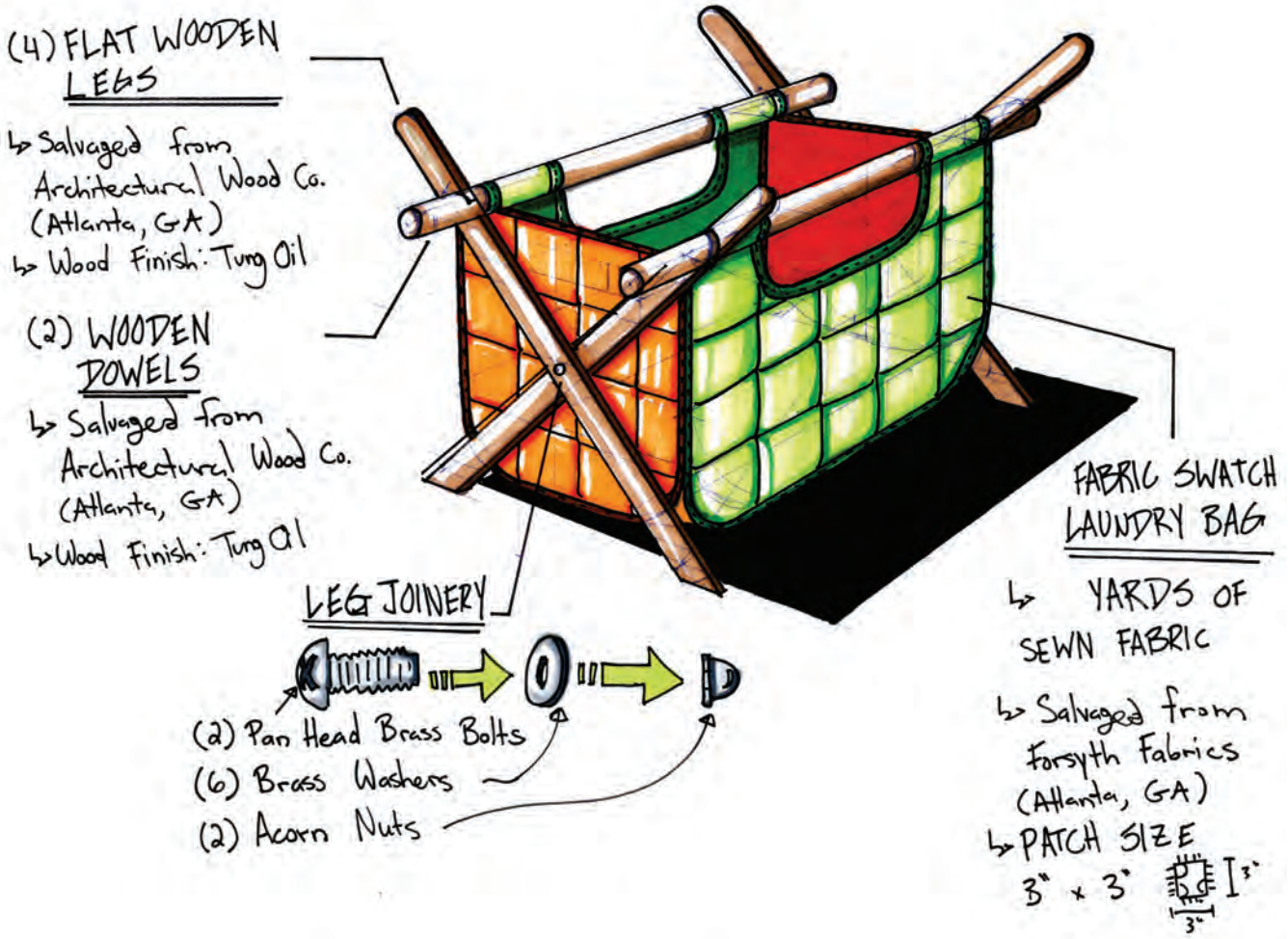
{ material rescue }

travel tote laundry bag

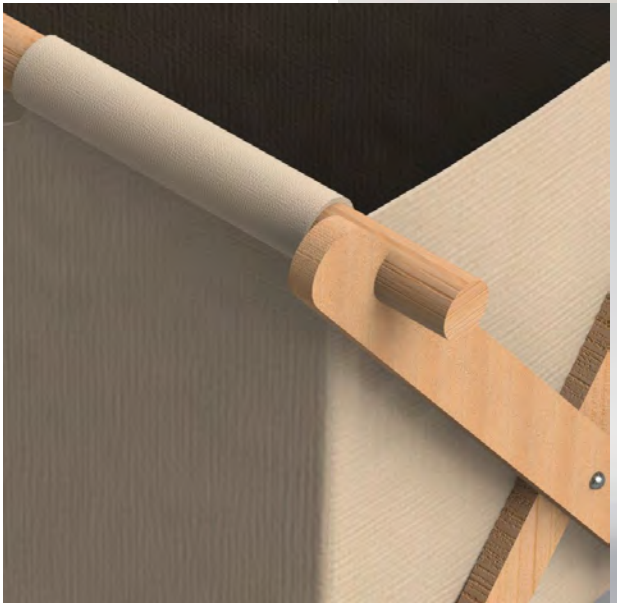
by leslie bush + regina chung

{material rescue}

concept development

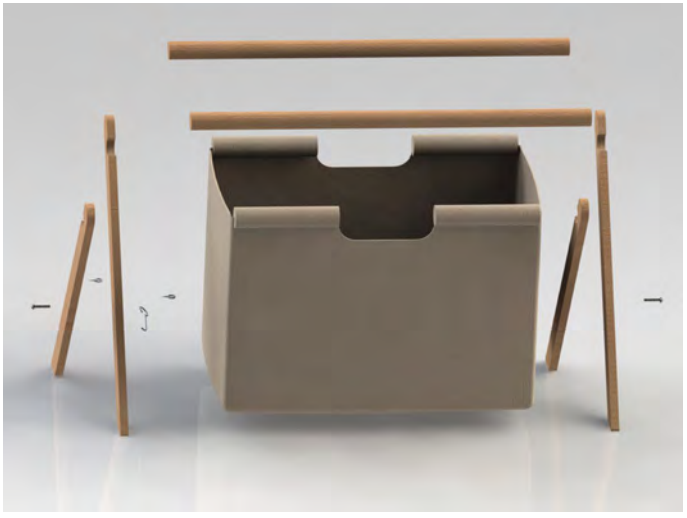


{material rescue}
final concept



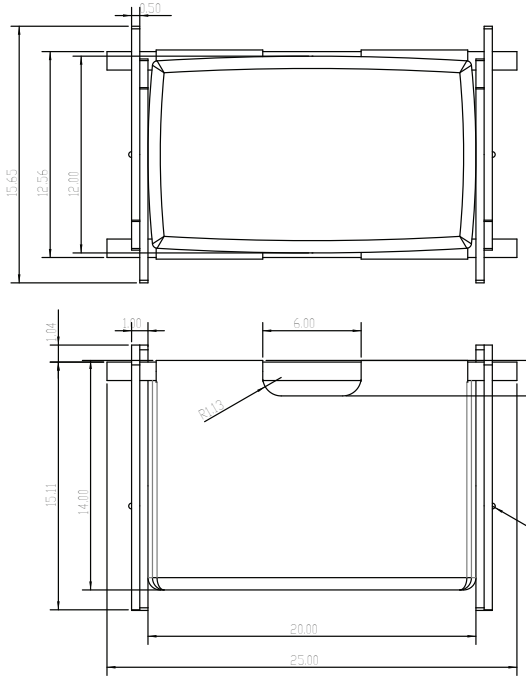
{material rescue}

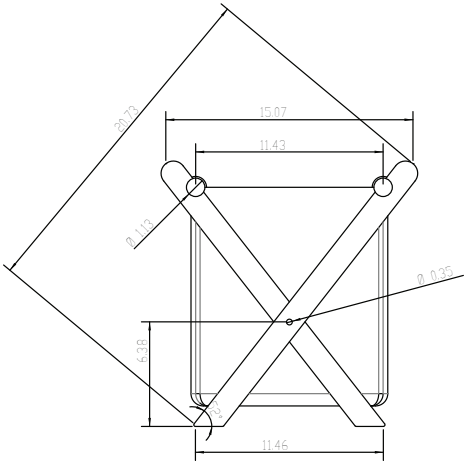
orthographics + measured drawings



bill of materials

* (4) flat wooden legs
* (2) wooden leg stringers
* (2) wooden dowels
* (1) bag composed of 3″x6″ fabric swatches
* (1) eye nail
* (1) eye nail with attached hook
* (2) screws
* (6) washers
* (2) nuts
* (2) wooden dowels





{material rescue}
user interaction

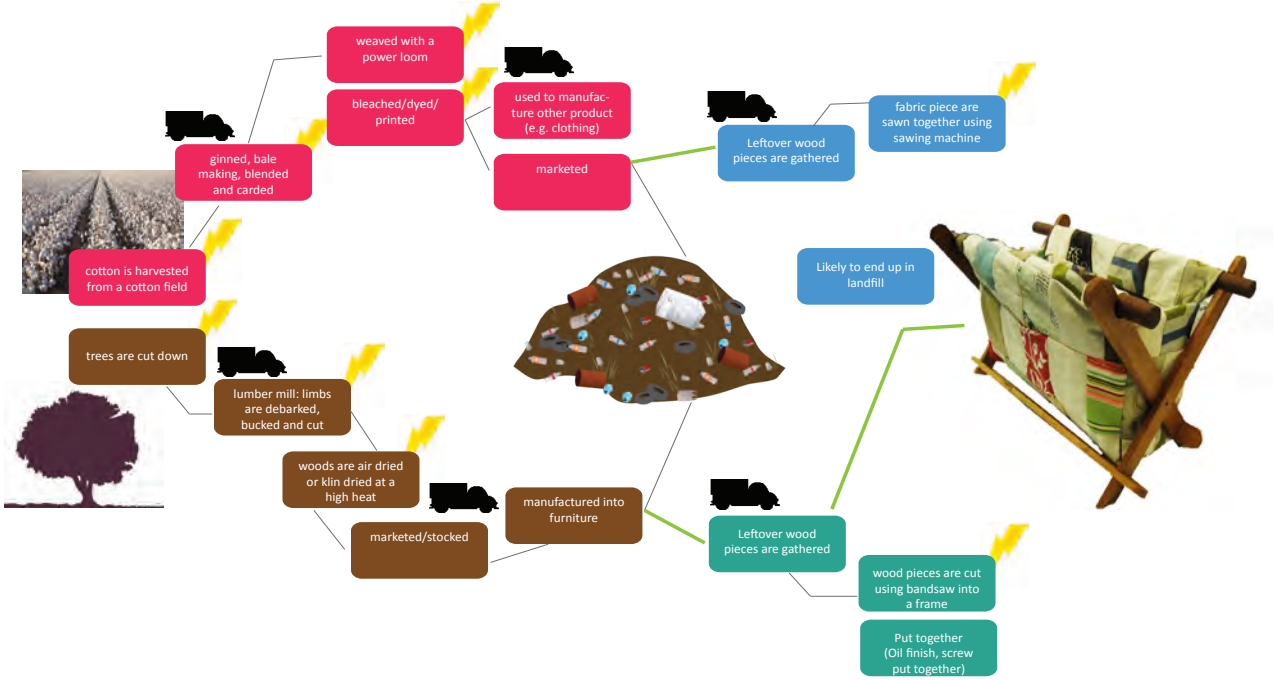







{material rescue}

design statement + life cycle



The Travel Tote Laundry Bag is created using swatches/scraps of textile from fabric stores and scraps/leftover pieces of timber from the furniture store. Since textile and wood pieces cannot be recycled into a reusuable material, we extended its life by utilizing the leftover pieces which would have gone to the landfill otherwise. Laundry bag has no emmision during its life and it is an item that every household would have.

{ bespoke seating device - *in progress* }

Project Objective

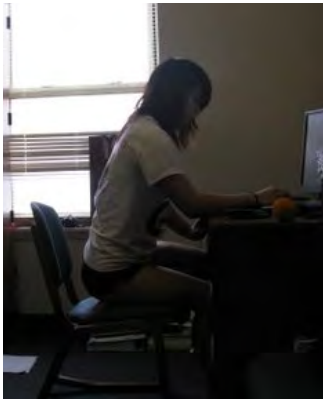
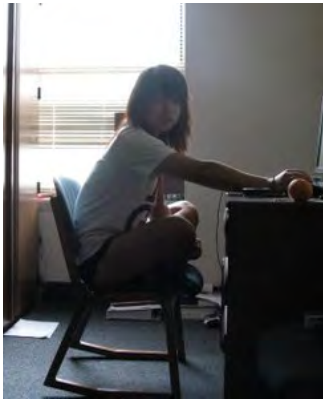
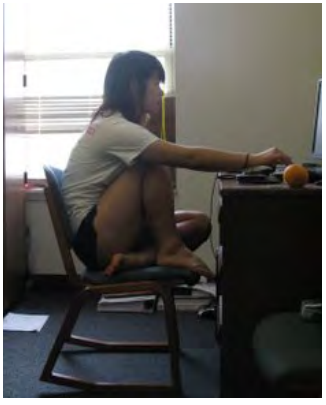
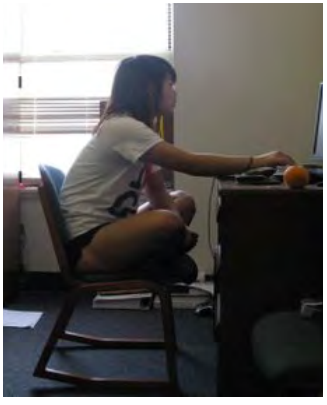
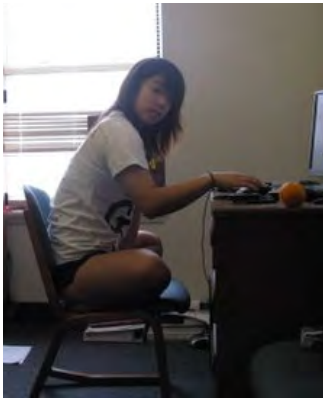
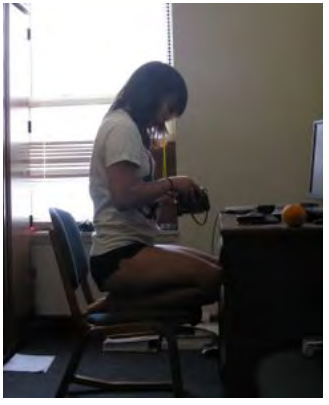
The main objective is to successfully design and build a seating device based on specifications from your client.

An exercise in human factors and user-centered design, this project tests your ability to cater your design process to a client by meeting their physical and emotional needs, as well as producing a fully-functional product that acts as both an appearance model and a working prototype.

Frequented Work Spaces

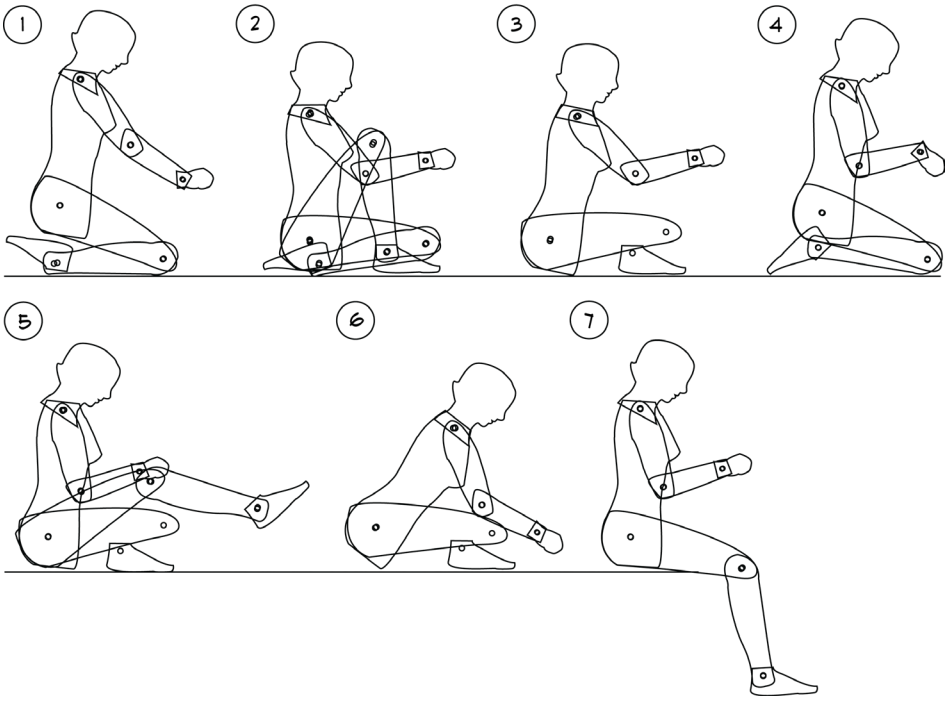
- Boyfriend's Apartment (Room or Kitchen)
- CULC
- Her Apartment (4th Street Apartments)
- Single Bedroom
- Works at Desk or Floor
- Desk: Math, Physics, Sending Emails
- Floor (uses a yoga mat): Modeling, Sketching, Creative Work



{ bespoke seating device - **client observation + demands** }

CLIENT: OLIVIA PAN
HEIGHT: 5 FT. 5 IN.
AGE: 19
COMMON POSTURE STUDIES



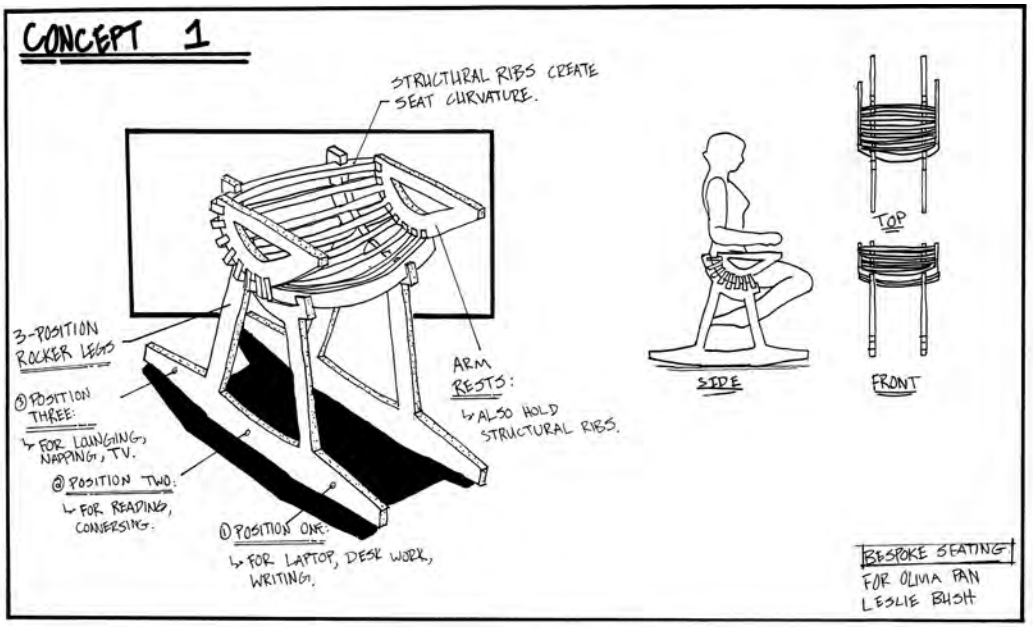
Client Observational Research

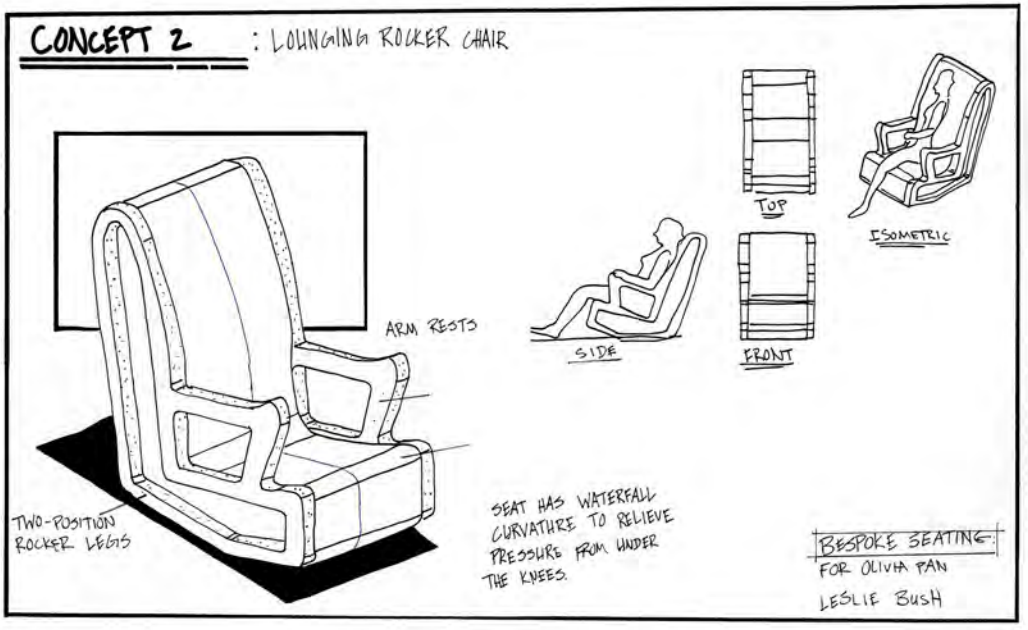
- Sits in Indian Style, Half Indian Style, Sitting on Knees
- Likes to use floor as a workspace
- Likes to spread materials out on the floor

Client Desires for Chair

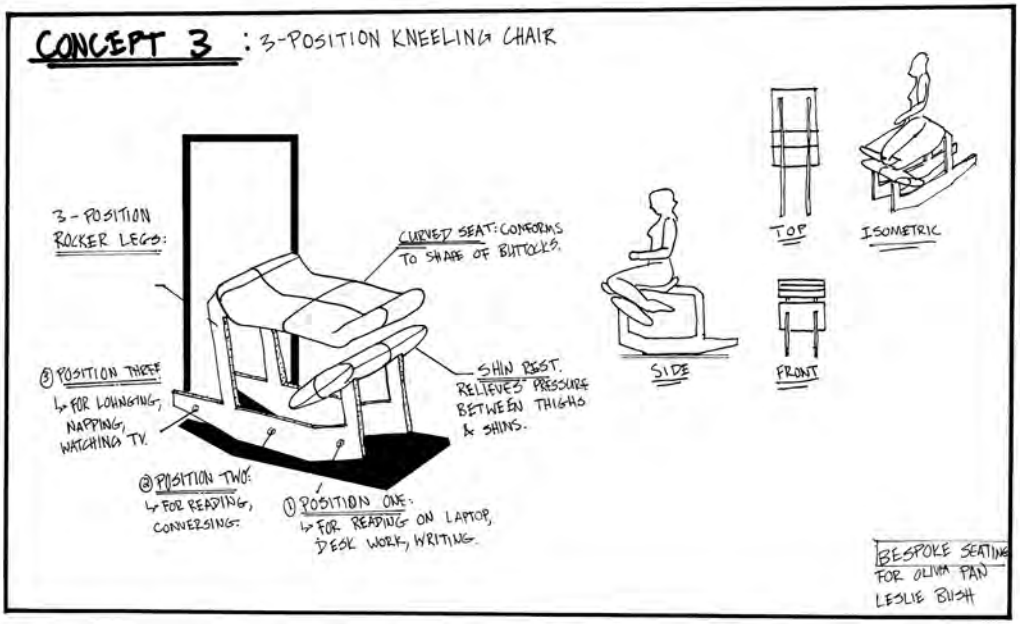
- Chair can fit multiple environments (Bedroom/ house chair, Both work and leisure chair)
- Wide enough to sit cross legged or Indian style
- Indian Style seating span – 24 inches
- Buttocks Support
- Back Support
- Arm rests, only if collapsible or can be put out of the way
- Either good for floor work or desk work
- Doesn't like cushions or upholstery because it's difficult to clean, can be easily damaged
- If possible: A Headrest
- If cushions are necessary, make them easily removable
- Possibly legless
- If legless, can be folded, stacked neatly, space saving
- If chair has legs, wants them at a low elevation

{ bespoke seating device - **conceptual sketches** }





{ bespoke chair - **conceptual sketches + models** }

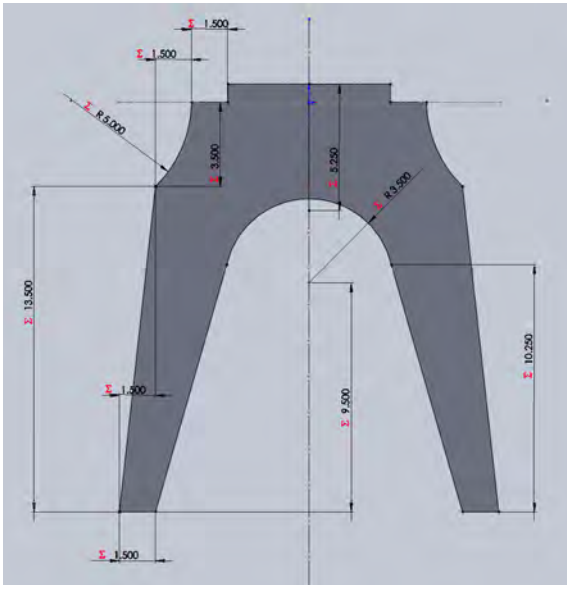


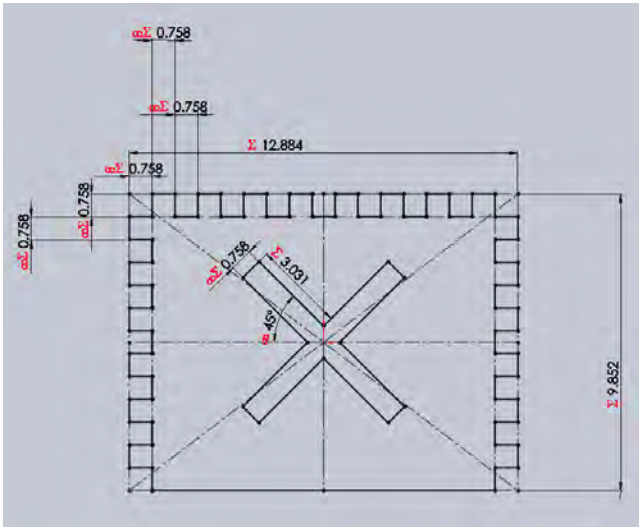
{ spartacus end table - **parametric design project** }

A parametric, equation-driven solid model was created using SolidWorks 3D CAD software.

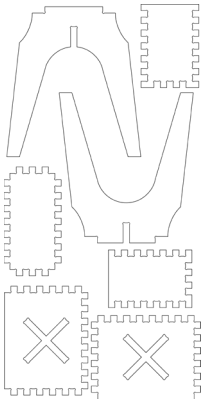
The dimensions of this table are driven by a specified material thickness. As the material thickness increases, the scale of the table updates accordingly, and every dimension is scaled up by a given factor.

This exercise explored the ability to create digital representations of products with embedded geometric flexibility for easy customization. In addition, the final model was coded for CNC machining using AlphaCAM software.





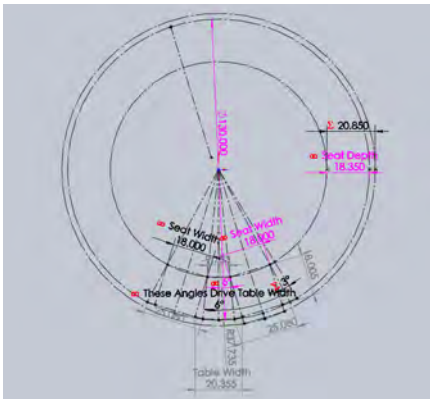
{ spartacus end table - **parametric design project** }

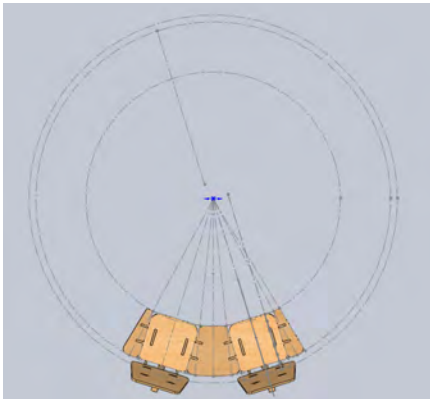


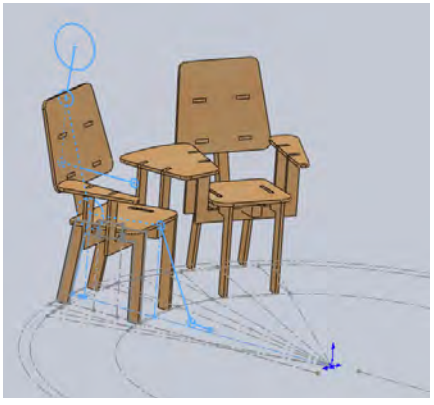
A layout assembly of all nested pieces were compiled and imported into AlphaCAM in preparation for the 3-axis CNC machining.

The end table prototype pieces were milled from 3/4 inch particle board and assembled using only the design's tightly toleranced joinery. No fasteners were needed.

{ affected seating device - **a parametric design study** }







Project Objective

In an initiative to grant consumers with geometrically-robust and customizable products, parametric product modeling aims to integrate flexible design parameters, virtual and physical prototype modeling, and digital fabrication to provide consumers with a unique production experience.

The objectives of this independent study would build upon parametric thinking structures learned in ID 4106 – Parametric Product Modeling, in that a fully flexible 3D model system will be built in SolidWorks, containing nearly infinite user control, while being guided by design-specified constraints.

A highly-specified seating device will be designed and produced in various configurations to suit the desires of the consumer's style preferences, environment, and body proportions in order to validate the flexible properties of parametric thinking applied to product design.

The fully-realized seating device will be on display at the 2012 IDSA National Conference in Atlanta, Georgia.

{ affected seating device - **a parametric design study** }

Configurations Supported

Normal

Lounger

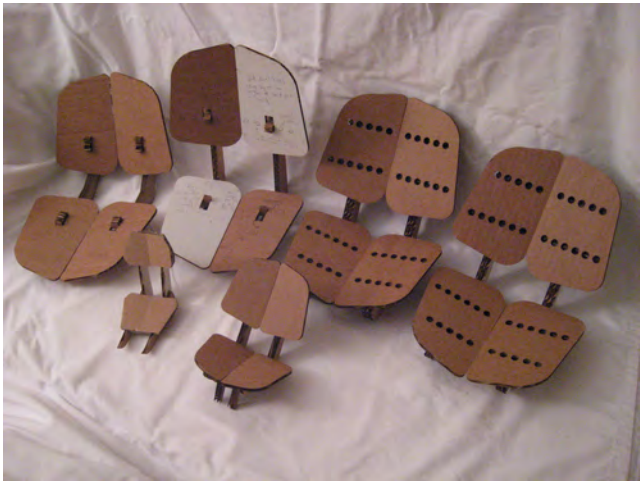
Wide Seat and Table

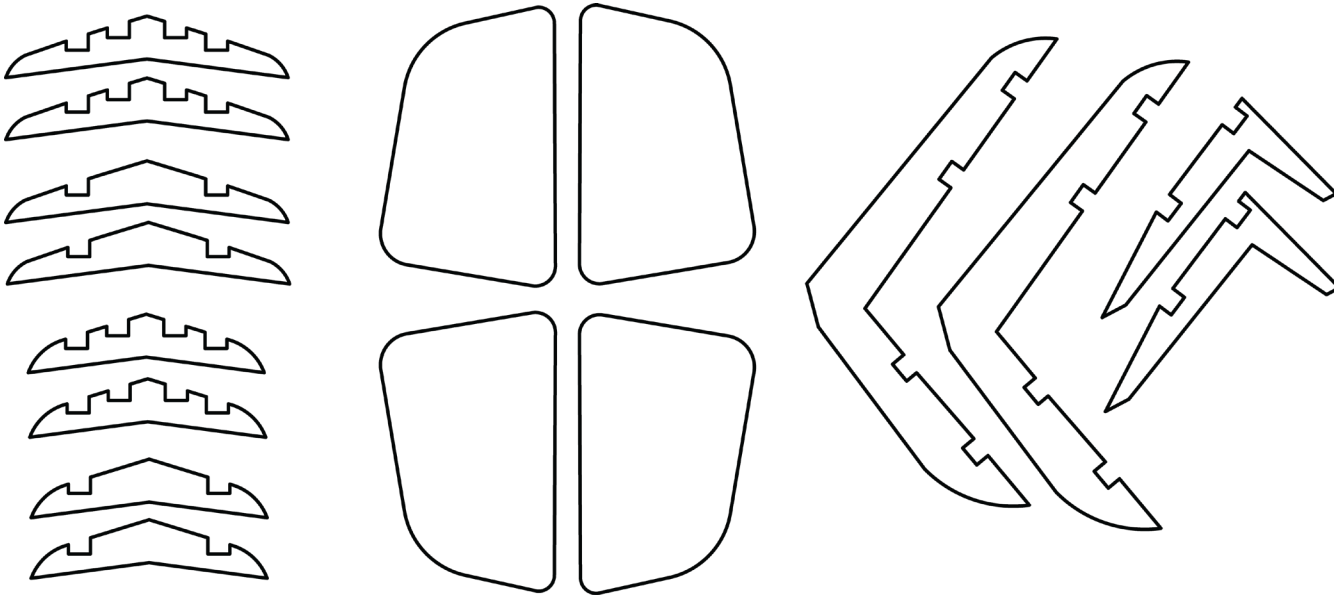
High Chair

{ chevron chair - **furniture design project** }

Project Objective

To create a chair of one's own styling and material of preference. The Chevron Chair was modeled using SolidWorks 3D CAD software and CNC machined on birch-veneered plywood.





{ chevron chair - **final model + user interaction** }

{ CONCEPTUAL WORKS }

{ LG enV2 - **Product Rendering** }

LG enV2

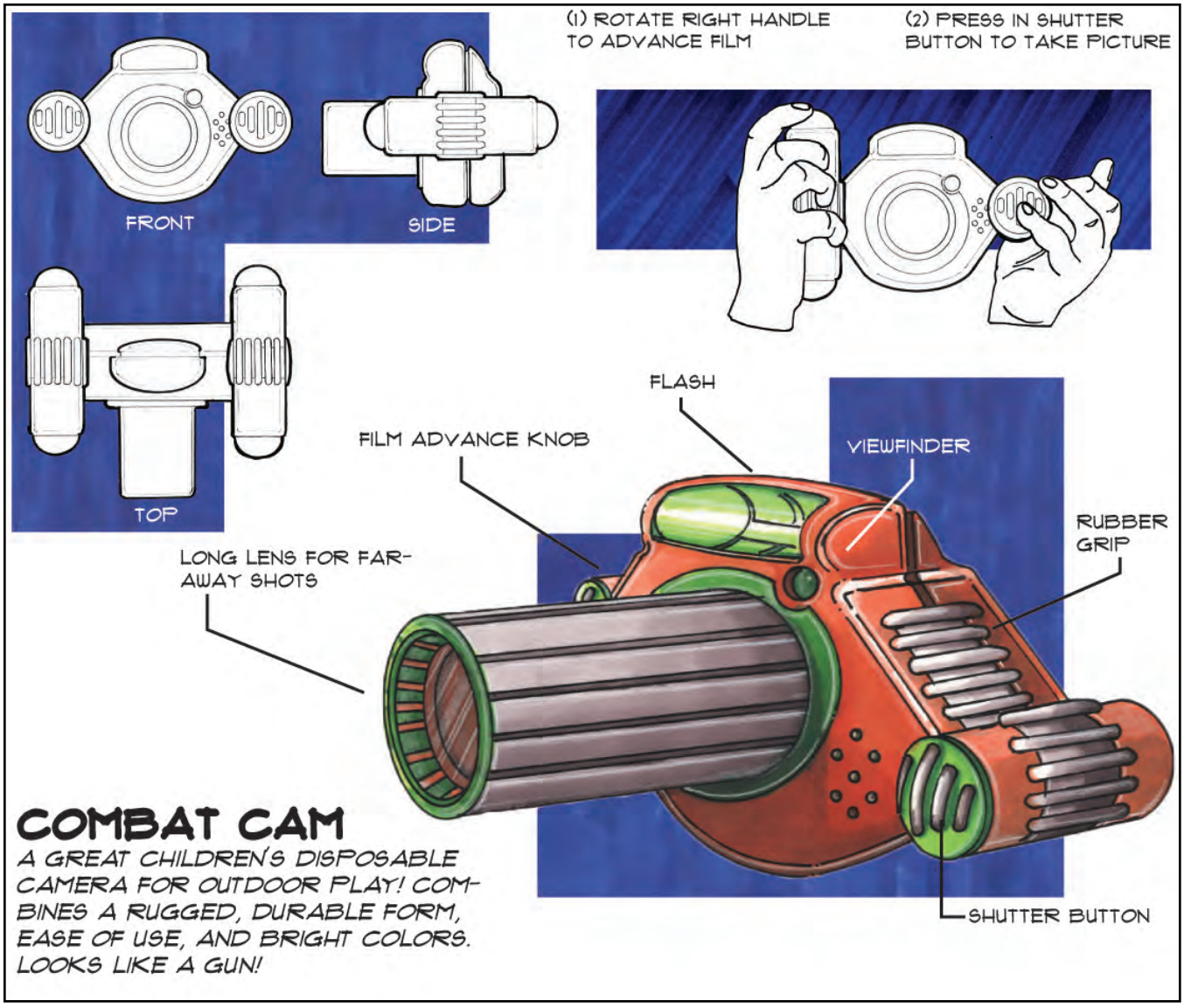
Leslie Bush | Project 9: Operation Illustration | 12/2/10

Introducing LG's latest texting and multimedia-capable cellular phone, the **LG enV2**. As a texting-friendly device, the enV2 contains both internal and external displays and keypads for viewing calls, texts, and pictures taken from the 2.0 megapixel camera.

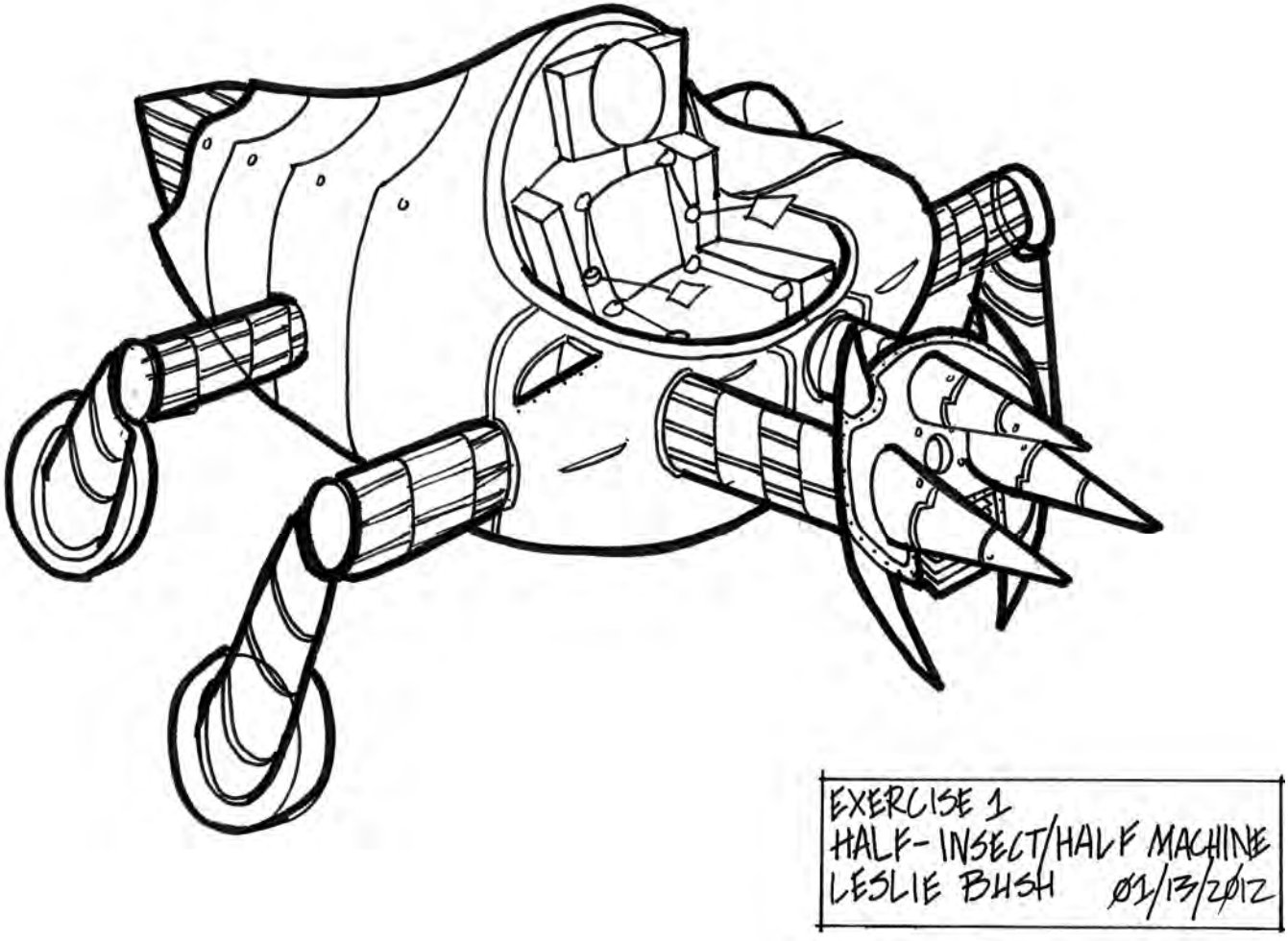
The outer face has a standard keypad. However, when flipped open a full QWERTY keyboard is revealed, making sending long messages a breeze. The larger screen also located on the flip side allows for easier viewing of text messages and high-res photos.

1. Speaker
2. External LCD Screen
3. Camera Key
4. Ringtone Volume Controls
5. Key Pad
6. MUSIC Key
7. SEND Key
8. Directional Keys
9. OK Key
10. CLEAR/Voice Command Key
11. END/POWER Key
12. Headset Jack
13. Micro SD Card Slot

{ combat cam - **children's toy camera** }



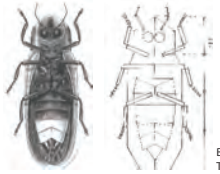
{ half insect, half machine - **conceptual sketch** }



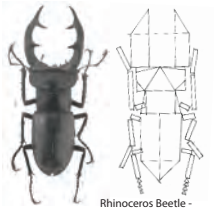
{ half insect, half machine - **concept development + refinement** }

Rock Crawler Vehicle

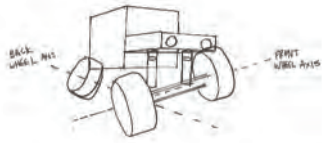
Safari Truck

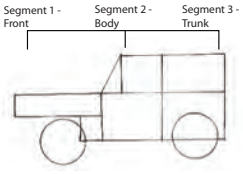


Beetle - Top View

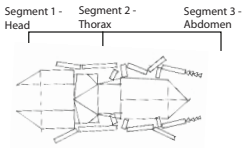


Rhinoceros Beetle - Top View

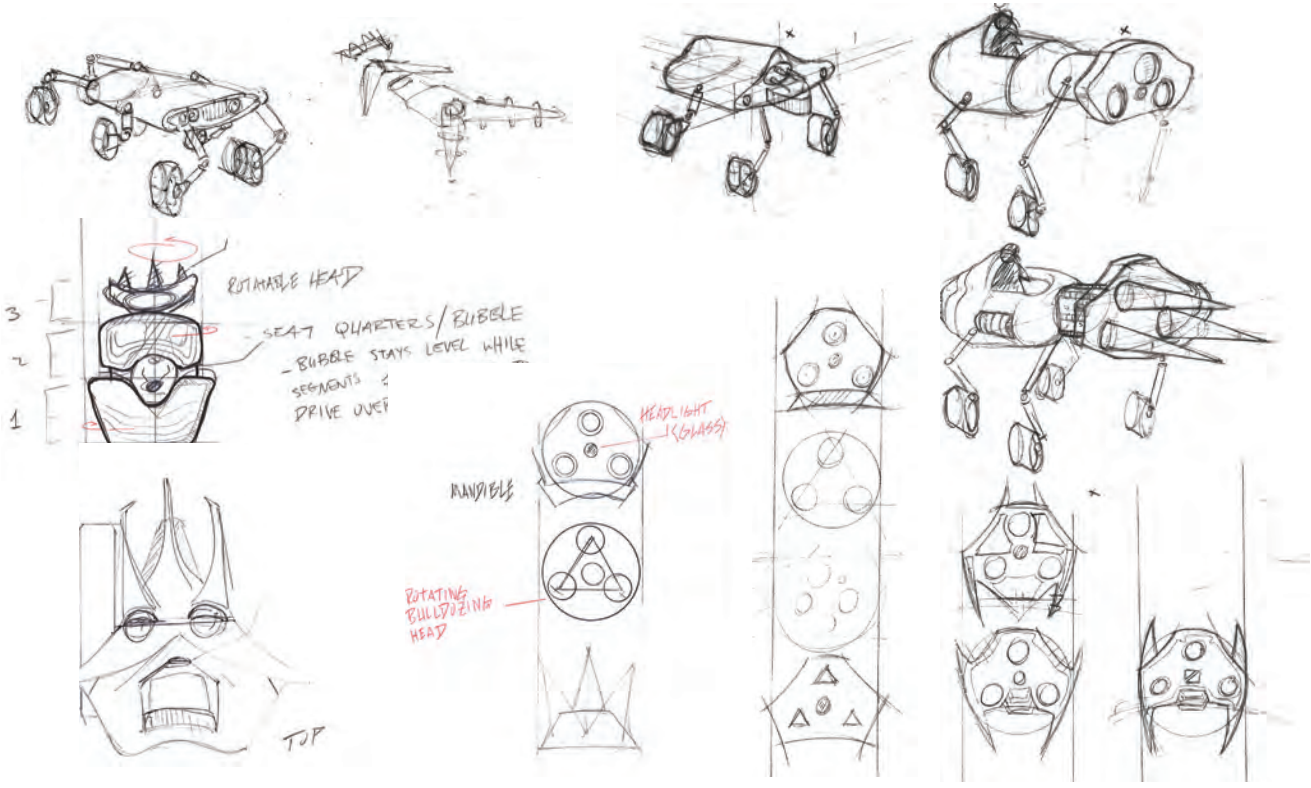




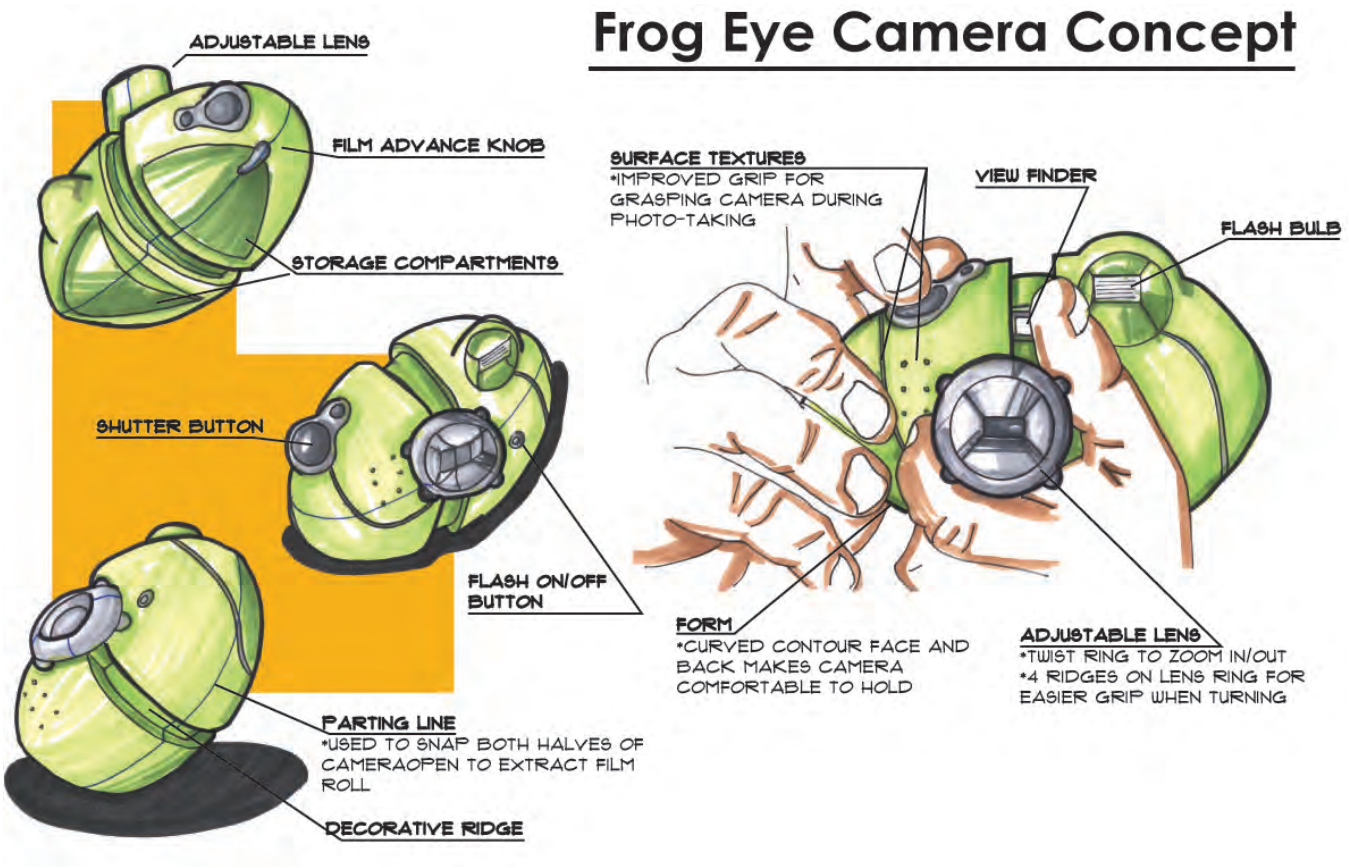
Rhinoceros Beetle - Side View



Exercise 1 | half-insect/half-machine — concept refinement



{ frog eye camera - **disposable camera concept** }



{ thank you }