BOUNDINGS

Fold • Unfold • Design Untold

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Good afternoon, today our team will present our project development shifting from Project 1 to Project 2. When approaching Project 1, our team's main goal was to create a fun and playful piece that users could enjoy interacting with while simultaneously performing as a multifunctional and adaptable furniture system. Taking inspiration from the 60s, we were drawn to designers such as Verner Panton and Joe Colombo for inspiration as we played with color, shapes, and scale in the early stages of the project.

Later on, we moved forward into incorporating these elements along with the functions of origami to produce iterations that were able to collapse and be stored away in order to optimize the limited space of the site.

When moving on to Project 2, we heavily focused on research and testing of different materials that would help realize the project's goal of modularity and foldability. We looked for a material that held the properties of paper such as thinness and flexibility but was strong enough to hold a person's weight while also being durable and hopefully environmentally friendly. From our research, we decided to take inspiration from inflatable designs such as projects from Quasar Khanh and his line of inflatable furniture from the 60s.

By creating an inflatable piece, we could adhere to these desired qualities through air control, providing users the freedom to inflate and utilize the piece or store it away at any given time. It also allowed us the ability to explore more playful designs by experimenting with asymmetry, layers, and the use of positive and negative space. Through this, we moved into developing a two-piece furniture system constructed of singular modules that could be combined into singular units: a lounge chair and a dual coffee table with cushions.

The lounge chair was fashioned from a dodecahedra where we split the shape into two separate modules that served individual functions but could come together to create a singular figure.

The coffee tables function as any other coffee table but with the added characters of cushions that can be slid under the table and be used as seating or footrests.

Now we're at a stage where we're considering the best approach for inflating the project as we've thought of using built-in air pumps, portable air pumps, air valves, and oral inflation valves while also keeping in mind how any of these components could potentially affect our design.

Moving forward, as we transition into the integration of our project alongside the class as a whole. Because the nature of our design is quite flexible and of a smaller scale compared to other projects, our vision for the site is to utilize our design to create strong dynamics between each group project by providing more interactions in which users have the flexibility to construct more instances for seating, lounging, and storage.

Because people come in different shapes and sizes, the key factors affecting ergonomic-based products comfort, safety, efficiency, and adpatability. are When using standard products daily to increase one's productivity, we as students often find it difficult to complete certain tasks when the surrounding environment or products add to distractions and mistakes. Therefore, designing and utillizing ergonomic products helps us acheieve our goals by bettering our physical and mental capabilities leading to increaseed workflow. Ergonomics to us is being able to use a space or object and feel comfortable no matter your size or condition. So when designing, we aim to create a place or product that is accessible and easyy to use for everyone. Somewhere where your size does not limit or

hinder one's personal goals or lifestyle.

















































































































Table Iteration

















Gem Couch & Table Section

Gem Couch







Gem Couch Plan

















11'-6"

Cushion Iterations







Test Model Tint colored Transparent Plastic





Gem Couch & Table Plan





Gem Couch & Table Section



11′6″























Test Model Vinyl Plastic

Test Model Vinyl Plastic

























Chair with Sleeves











1:1 Structural Frame







Gem Couch with Rods







Integration Drawing









