Product
Design

PORTFOLIO

Isabel Basulto

Hey there! My name is Isabel.

"I believe thoughtful design has the power to elevate the everyday life, motivating me to create products that are both purposeful and visually compelling."

https://www.linkedin.com/in/isabelbasulto/

basultomendoi@gmail.com

(734) 545-9065

EXPERIENCE

MiEN Company | Industrial Design Intern
Grand Rapids, MI | Summer 2025
Designed and created CAD models and technical drawings in SolidWorks to support manufacturing, new product concepts, and quality control solutions.

100k Ideas | Industrial Design Intern
Flint, MI | Summer 2024
Worked with a client to advance their small business through the entrepreneurial process, marketing, and design concepts.

LANGUAGES

English *(Native speaker)*
Spanish *(Native speaker)*

EDUCATION

Western Michigan University | *2022-2026*
BFA in Product Design
Minor in Entrepreneurship

SOFTWARES

SolidWorks
Keyshot
Illustrator
InDesign
Photoshop
Figma
Midjourney
Procreate

SKILLS

Prototyping
3D Modeling
3D Printing
Sketching
Rendering

HOBBIES

Sewing
Ceramics
Rugby
Fashion design

Things I've Made:

ZhuZoom

Product: Pet Vacuum Cleaner
Time Span: 4 months
Year: 2024

COVE

Product: Ottoman
Time Span: 3 months
Year: 2025

ToadTumbler

Product: Compost Tumbler
Time Span: 4 months
Year: 2025

01

ZhuZoom

Project Objective: Design a housewares product for the Inspired Home & Housewares Show

Small pets take up a big place in our hearts, and little space in our homes.

Pets provide us with a sense of connection and contentment for which we all long. Ensuring that their living conditions are clean and maintained is a gesture of love that goes a long way.

People want play time. Not dirty work.

From paper bedding to fleece blankets, there is a plethora of evolving products that make a caged pets habitat more comfortable. But, **the process of cleaning up these spaces remains laborious and unpleasant.**

Breaking Down The Steps.

Taking an in-depth view of the cleaning routine of a cage for two guinea pigs. Cages for similar pets are cleaned at least twice a week, and **the process is time consuming and messy.**

Shaking Out Fleece

Shaking out fleece bedding results in hay and droppings getting dispersed inside and around of the enclosure.

Sweeping Waste

Having to sweep thoroughly and repetitively extends the time spent cleaning.

Vacuuming Waste

Hay, waste, and bedding easily clog standard vacuums, reducing suction power and pickup efficiency.

Disposing Waste

Disposing waste from the dustpan and vacuum canister into trash bags multiple times slows down the process.

Cleaning is Challenging.

A survey for guinea pig, bunny, rat, and chinchilla owners gathered responses from 80 participants about the challenges of cleaning pet enclosures.

Sweeping

45% of owners surveyed that sweeping and gathering waste was the most difficult part of cleaning their enclosure.

Disposing

30% of owners surveyed that throwing waste directly into a trash bag was the most difficult part of cleaning their enclosure.

Washing

25% of owners surveyed that washing fleece bedding, cages, and tools was the most difficult part of cleaning their enclosure.

How might we enhance efficiency and cleanliness of pet enclosure maintenance?

Speeding up the cleaning process will encourage owners to keep up with maintenance.

Speed

Ease of use and cleaning efficiency are key to a desirable cleaning product.

User Friendly

Effective cleaning products that support multiple steps in the routine.

Accessible

Name: Abby Martinez
Age: 23
Occupation: Student
Household: 1 roommate and 2 guinea pigs

Devoted Pet Parent

Her guinea pigs aren't "just pets", they're family. Feeding, cleaning, and making their space comfortable is a part of her daily routine.

Time Conscious Student

Gravitates toward quick, grab-and-go solutions that fit into short breaks between classes and homework.

Clean Caregiver

Values tools that make cleaning faster and easier, especially when messes happen multiple times a day.

Practical

Caring

Intentional

A Market

Just For Pets.

The Household Pet Vacuum Cleaner market is valued at $1.2 billion.

While the market keeps growing, there are still **no vacuums that specifically target small animals or enclosure cleanup.**

Improvised, Not Optimized.

Owners are using household vacuums to clean enclosures.

Using a tool for something it is not meant for feels risky and can also end in a mess.

Concept Exploration Through Sketching.

Concept 1: Plastic bag inside vacuum

Concept 2: Plastic bag outside vacuum

Concept 3: Hose vacuum

Form Meets Function.

Moving forward with concept 1 and finalizing the design architecture.

A plastic bag inside of the vacuum keeps the canister clean and all the waste contained when disposing it into the trash.

How it Works

1. Grab a plastic bag.

2. Insert bag inside vacuum canister.

3. Place ring attachment in the canister to pierce bag for air flow.

4. Place nozzle on canister.

5. Vacuum waste in animal enclosure.

6. Remove nozzle once done vacuuming.

7. Remove ring and bag from canister.

8. Dispose all waste in one trip to the trash.

Meet

ZhuZoom.

A mess free way to clean small pet enclosures.

From mess to clean in seconds.

Wide nozzle allows big particles of waste to get vacuumed without getting clogged.

No Contact Disposal.

Waste getting suctioned straight into a plastic bag creates control when having to dump it in the trash and eliminates the action of having to clean a canister.

Curated Colorways.

Thank You.

02

COVE Ottoman

Project Objective: Design a matching ottoman to MiEN Company's BAY Lounge Chair.

MiEN Company:

An educational furniture company.

"MiEN Company makes furniture that works for education. Our innovative furniture creates spaces that promote student **engagement** and **creative thinking**."

School is a space of **learning**, **determination**, and **collaboration**.

With so much going on throughout the day, school should also foster **comfort and renewal.**

Thoughtfully designed spaces can increase productivity by up to 20% by offering seating that adapts to the rhythms of the day.

MiEN's **Bay Lounge Chair** supports focus, recovery, and well-being.

A matching ottoman will complete that experience, enhancing comfort and versatility.

Taking a closer look at MiEN's **VBL.**

MiEN prioritizes a diverse **range of colors** and **patterns**, **playful forms**, and **versatility**.

Defining **form** through sketches.

Meet **COVE.**
The ottoman that blends sculptural form
with everyday comfort.

360 degrees swivel for a full range of movement.

Half-moon base that nests seamlessly into BAY Lounge Chair’s circular base.

Create a **moment of ease**
wherever you are.

Thank You.

03

Toad **Tumbler**

Project Objective: Design an outdoor product that aligns with Toad's VBL, a brand for first-time homeowners.

Designed For **What Comes Next.**

Owning a house is a new phase in life full of exciting yet impacting decisions. And, with the purchase of a new home comes the purchase of a wider set of products for new homeowners.

Toad connects with future consumers by balancing productivity with play.

toad

More Space, **More Waste.**

New homeowners are more mindful of what enters and leaves their homes. **This drives demand for products that help reduce household waste.**

1.3 billion tons

of food are wasted each year.

As people become more eco-conscious, **outdoor composting is becoming more popular** within homeowners.

Compost bins vary in method and design, but **tumblers** deliver superior performance.

Tumblers

Makes the turning part of composting very easy, allowing air in that speeds up the composting process.

Digesters

Partly underground which allows worms to digest compost. **Only covers a small area and can't be spread over the garden.**

Fermenters

Anaerobic composting that uses microorganisms to break down waste. **Requires separately purchased bran and does not produce finished compost.**

Insulated

Heat retaining materials can produce compost in as little as two days, but they **hold limited waste and restricted airflow.**

Homeowners are looking for an **easy-to-assemble** compost bin with **efficient turning**.

Most bins are frustrating to assemble and nearly impossible to turn once full. These difficulties often cause users to give up, abandoning composting altogether.

Assembling an existing compost tumbler to identify **pain points**.

By assembling an existing tumbler, several usability challenges were identified. **An overwhelming number of small nuts and bolts, difficulty aligning panels, and the need for a second person during assembly.**

Clarifying Toad's VBL through **visual exploration.**

Putting together a moodboard to understand Toad's purpose, attributes, and aesthetic.

- **Clever**
- **Vibrant**
- **Quality**
- **Playful**
- **Cheerful**
- **Utility**

Preliminary sketching of **form** and **aesthetic**.

Insights from the product tear-down guided sketches to focus on how the overall shape can make assembly more simple.

Secondary sketches exploring **functionality** and **assembly logic**.

Sketching around different joining systems and mechanisms that work with the final geometrical form.

Toad Tumbler
Introducing
Toad Tumbler
toad

Close vent for moisture and heat build up

Open vent for ventilation, drainage, and sifting

1

Slide in large panels with extended bottoms

2

Grab side panels with screw holes

3

Align and slide

4

Screw into middle section- 2 screws per panel with holes

5

Assemble legs- 4 parts each leg

6

Slide rotating axle through middle panel and leg, then screw in handle

7

Repeat steps 1-4 for small chamber

8

Slide lid on both chambers

Technical **Speculations**

A. Big panels with extended bottom
B. Big panels with screw holes
C. Lid
D. Middle joining section
E. Small panels with extended bottom
F. Small panels with screw holes
G. Rotation rod
H. Handle
I. Stopper
J. Leg frame

CFM **Documentation**

A: High-density polyethylene
Hex: #FFF8F4

B: High-density polyethylene
Hex: #EE8B38

C: High density polyethylene
Hex: #000000

D: Powder coated steel
Hex: #000000

E: Stainless steel

Thank You.