Beall Student Design and Butterworth Product Development Competitions

Workshop #2
Pretotyping
January 26, 2022





Welcome!







Butterworth Competition













The Beall Competition

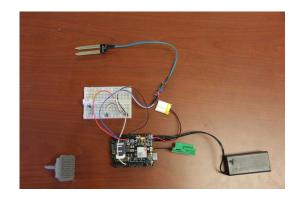












Competition Summary

- Promote excellence in product design and development among Engineering, ICS and UCI Students
- Open to <u>all</u> UCI students (Graduate and Undergraduate)
 - Butterworth: Must have 1 ICS student
 - Beall: Must have 1 Engineering student
 - Teams must be entirely comprised of matriculated UCI students





Competition Summary

- Each competition will award a 1st, 2nd, and 3rd place prize.
- Specialty prizes will be announced in Winter 2022 that may include:
 - Best prototype
 - Best UX/UI
 - Best Customer Feedback
- \$40,000+ total in Cash Awards!
- The top team will get preferred application to Wayfinder for the summer 2022 cohort.





Competition Due Dates

- 1. Intent to Enter (ASAP)
 - https://tinyurl.com/bbcompintent22
- 2. Concept Paper & Product Specifications (March 6, 2022)
 - Template will be on the website
- 3. Product Specification Midpoint Review (April 8, 2022)
- 4. Final Product & Business Case Due (May 15, 2022)
 - Template will be on the website
- 5. Demo Day (May 20, 2022)
- 6. Awards Night! (May 25, 2022)





Schedule (part 1)

Qtr. & Week	Day	Date	Time	Event			
F8	Monday	11/15/2021	5:30-7 pm	BB Comp Kick-Off			
WINTER BREAK							
W2	Wednesday	01/12/2022	6-7:30 pm	BB Workshop #1			
W4	Wednesday	01/26/2022	6-7:30 pm	BB Workshop #2			
W5	Wednesday	02/02/2022	6-7:30 pm	BB Workshop #3			
W6	Wednesday	02/09/2022	6-7:30 pm	BB Workshop #4			
W7	Wednesday	02/16/2022	6-7:30 pm	BB Workshop #5			
W9	Wednesday	03/02/2022	6-7:30 pm	BB Workshop #6			
W 9	Sunday	03/06/2022	11:59 pm	Concept Papers & Product Spec Due			
SPRING BREAK							

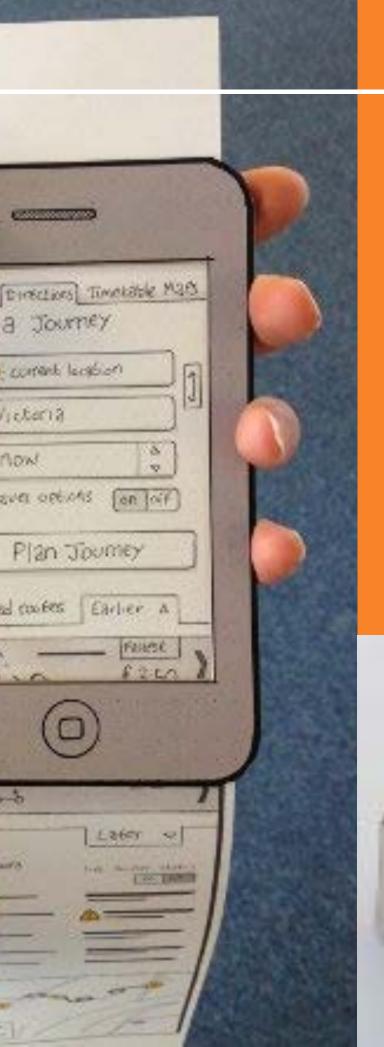
Schedule (part 2)

Qtr. & Week	Day	Date	Time	Event		
SPRING BREAK						
S2	Friday	04/08/2022	8:00 am-5:00 pm	BB Midpoint Review		
S3	Wednesday	04/13/2022	6-7:30 pm	BB Coaching Session #1 - Orientation		
S5	Wednesday	04/27/2022	6-7:30 pm	BB Coaching Session #2		
S7	Wednesday	05/11/2022	6-7:30 pm	BB Coaching Session #3		
S7	Sunday	05/15/2022	11:59 pm	Final Product & Business Case Due		
S8	Wednesday	05/18/2022	6-7:30 pm	BB Coaching Session #4		
S8	Friday	05/20/2022	8:00 am-5:00 pm	BB Demos & Final Presentations		
S9	Wednesday	05/25/2022	5:30-7 pm	BB Awards Ceremony		

Cynthia Kirkeby



Cynthia Kirkeby is an entrepreneur with a design and manufacturing background that includes physical and virtual products in a variety of industries such as furniture, pet products, education, technology, and home decor. Cynthia holds six issued patents and has additional patents pending.



Pretotyping

Low Fidelity Prototyping





UCI BEALL BUTTERWORTH
COMPETITION
2022

Where it started

Manifesto by **Alberto Savoia**

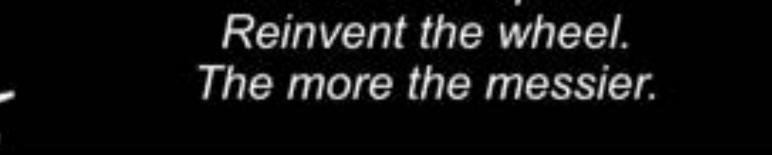


Unleash the Innovators Manifesto



Innovators over Do over Take over Commitment over 200% over Why not? over Pretotype before you

Don't finish what you've started. Failure is an option. Reinvent the wheel.





The Pretotyping Manifesto

Innovators beat ideas Pretotypes beat productypes Building beats talking Simplicity beats features Now beats later Commitment beats committees Data beats opinions

Don't finish what you start Failure is an option Scarcity brings clarity The more the messier Reinvent the wheel Play with fire





FAKE DOOR

PINOCCHIO



Types of Pretotypes

PART 1

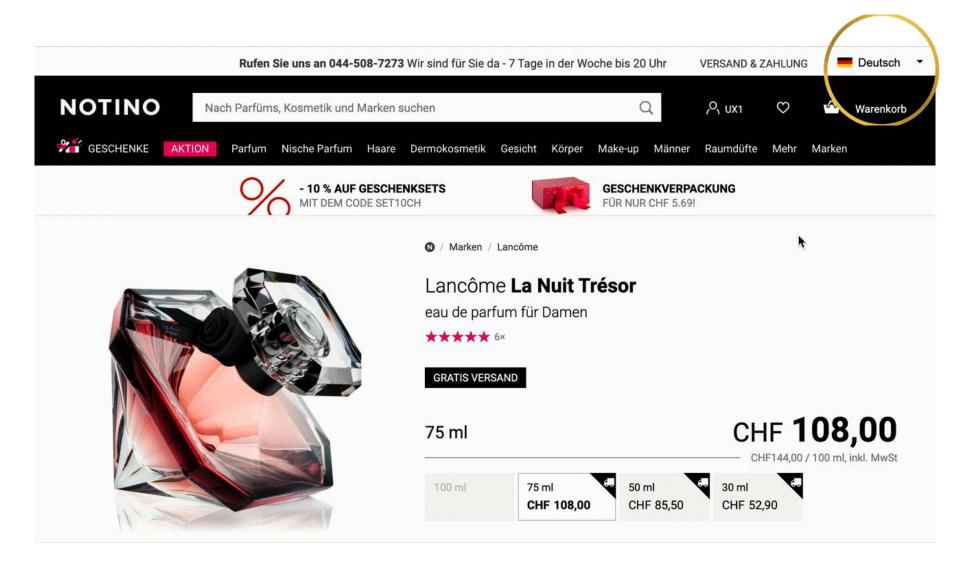


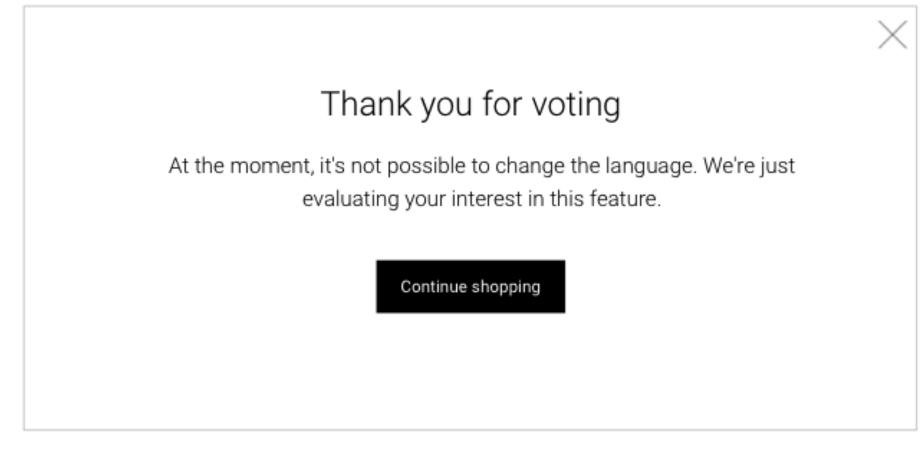
IMPERSONATOR



Fake Door

An offer for a product, feature or service that doesn't exist







FAKE DOOR

What A marketing entry point for an as-yet undeveloped idea.

Why The solution doesn't exist yet and you want to capture an initial indication of interest at next to 0 cost.

When Your idea can be concisely described and presented to potential customers where you would expect to find them, and you are confident you can manage the expectations of enthusiastic customers by following up within an appropriate time-frame.

How Advertising a new product or feature, then tracking click-through and customer response rate to see who would be interested in an offering.

Web tech enables a very robust method that includes: online ads + landing pages + simple response forms. Same approach also works with emails, offline posters and other media.

Where



Pinocchio

Cardboard Pretotype to High Fidelity Prototype



Pinocchio

Cardboard Pretotype to High Fidelity Prototype



PINOCCHIO

What An inanimate (or "dumb") artifact acts as a proxy for the real thing.

Why The solution doesn't exist yet and you want to validate a key design parameter early on.

When Your solution requires a significant switching or behavioral adaptation by customers to develop a new habit OR You expect demand to be sensitive to the appearance or form factor of your solution.

How Use a proxy to validate certain parameters of the product like form factor, features and usability.

Where In the same real-life situation where the innovation will be used.



Impersonator

Adding a new skin to an existing product to gauge interest



IMPERSONATOR

What Use an existing product or service to pose as the new offer under test.

Why Save on development costs while the market interest is not yet validated.

When A test of the value of the solution depends on the customers' ability to interact with a full-scale design, and you need to create a plausible stand-in for the size, shape, color, features, etc. of the solution.

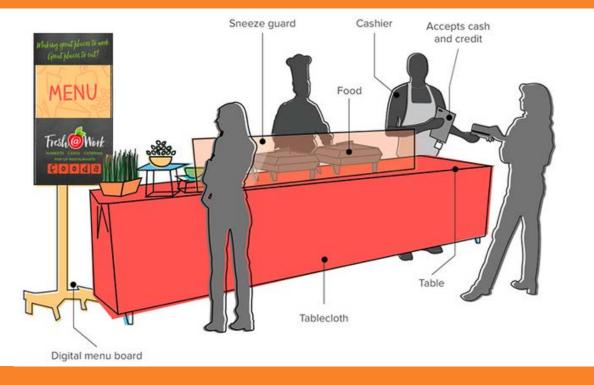
How Apply a new skin to an existing product that can act as a good substitute to validate market interest.

Where In the same real-life situation where the innovation will be used or accessed.



MECHANICAL TURK

ONE-NIGHT STAND POP-SHOPS





FACADE

Types of Pretotypes

PART 2



Mechanical Turk

Using simple people-powered techniques to simulate more advanced processes





MECHANICAL TURK

What Use human power to simulate a technology that would take too much money or time to build

Why To postpone costly development until market interest is validated.

When When the final product requires the development of expensive and complex technology, and those actions and outputs could be simulated by humans.

HowUse a realistic interface to deliver target customers the essential experience of a proposed technology, simulating functionality of a complex back-end using human input.

Where In the same real-life situation where the innovation will be used.

One Night Stand

A complete service experience without the required infrastructure





ONE NIGHT STAND

What A complete service experience without the infrastructure required by a permanent solution.

Why Avoid investment in complex infrastructure and validate market interest and actual use.

- The solution is — or depends critically upon — an interactive service experience.

- You expect demand for the offer will be sensitive to the choice of channel, and you need to test a number of possible customer interception points.

- You want to validate a large homogeneous market before scaling up.

How Delivering target customers the essential experience within an extremely narrow geo scope and time frame.

Where In the same real-life situation where the innovation will be used but with limited time and geo scope.

When

Facade

Avoiding the investment in expensive space or equipment while validating interest





FACADE

What

Borrow or rent expensive equipment, space, and assets to simulate a more stable or complex infrastructure underlying your offering.

Why

Avoid investments in expensive equipment, space, and other assets while validating interest.

When

- The solution requires major upfront investment, in equipment, space, or assets.
- You expect demand will vary based on customer confidence in your infrastructure.

How

Delivering target customers the essential experience, while communicating stability and complexity.

Where

In the same real-life situation where the innovation will be used, but with all assets and space borrowed or rented cheaply.

Paper Pretotypes

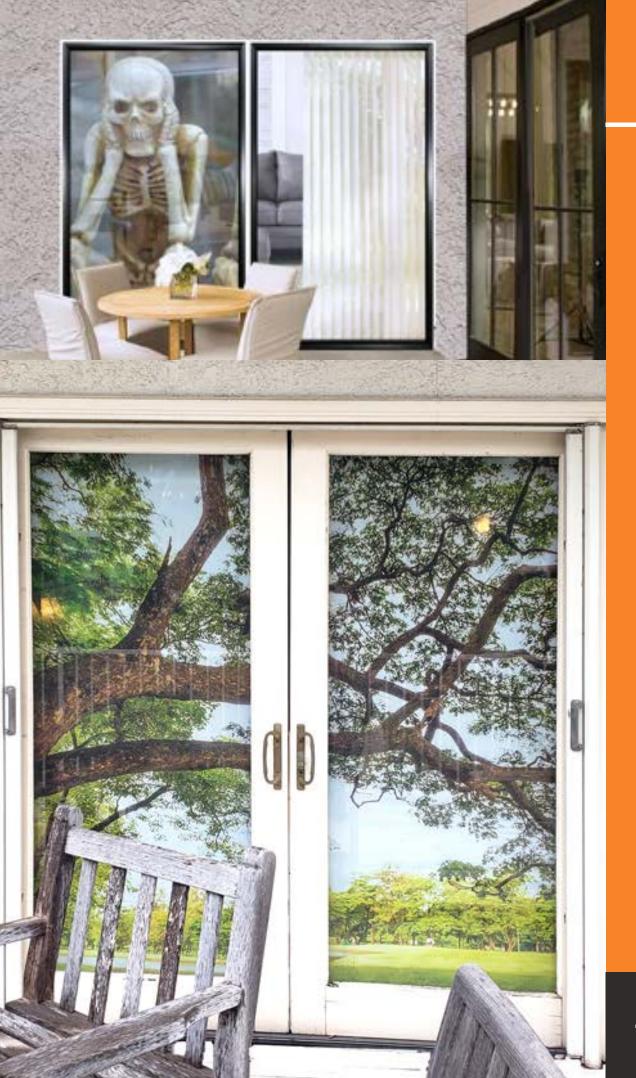


Paper pretotype of a handheld stud finder by Patrick Dugan

Build with paper or cardboard and add electronics







Covert Ink

Pretotypes to finished products



Resources

PRETOTYPING

pretotyping.org

WIREFRAME PROGRAMS

Invision

invisionapp.com

Figma

figma.com

Google Material Design

https://material.io/

Prototyping with Cardboard (parts 1-3)

https://makingsociety.com/2014/11/cardboard-prototyping-1/

Skeptic's Guide to Low Fidelity Prototyping

https://www.smashingmagazine.com/2014/10/t he-skeptics-guide-to-low-fidelity-prototyping/

PRETOTYPES

Feel free to

CONNECT





Resources

- ANTrepreneur Center
- Beall Applied Innovation
- Beall Center at Merage Business School
- Wayfinder
- Library
 - https://guides.lib.uci.edu/c.php?g=333594&p=2249561
 - https://guides.lib.uci.edu/entrepreneurship





RESEARCH

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Engineering Students Win Big in 2021 New Venture Competition



Engineering Students win big at the 2021 Merage New Venture Ant Tank Finale Competition

June 9, 2021 - The Merage School's Beall Center for Innovation and Entrepreneurship conducted its virtual live "Shark Tank"-style final round of this year's 17th annual New Venture Competition on May 27, 2021. The top ten teams walked away with cash and prizes valued at more than \$100,000: three of the winning teams included Samueli School of Engineering students.

The grand finale was broadcast via Zoom where the finalists competed for the grand prize in a 3-minute fast-pitch, facing a panel of five distinguished judges from Orange County's startup ecosystem. Although the judges considered specific criteria when evaluating concept papers and pitch decks, they ultimately chose the winning teams based on which pitches they would most likely invest their own money in.

Here are the winning teams that count Anteater Engineers as members

MoodCloud earned a tie for first place in the Consumer Services category (\$5,000). MoodCloud is an app that combines artificial intelligence with the world of lifestyle and health management. It enables its users to express themselves and view exactly how their day-to-day lifestyle has a long-term impact on their health

REMSYS tied for first place with MoodCloud in the Consumer Services category (\$5,000). The team's goal was to create a résumé management system designed for college students. The program would alleviate the hassle of managing multiple résumés when applying to various jobs.

StyloSonic took home first place in the Life Sciences category (\$7,500). StyloSonic is a miniaturized handpiece that uses ultrasound/photoacoustic imaging to provide key periodontal metrics. The tool aims to assist dentists and periodontists with accurately diagnosing gingivitis in the early stage and to reduce the rate of advanced periodontitis.

The UCI New Venture Competition is open to all UCI students, staff members and researchers as well as community members. This year, 100 concepts were initially submitted in February. The competition and entrepreneurship program are dedicated to cultivating the entrepreneurial mindset and launching student startups in Orange County.

New Venture Competition '22 merage.uci.edu/nvc

UCI Paul Merage School of Business

Beall Center for Innovation & Entrepreneurship

Next Steps

- Intent to Enter:
 - https://tinyurl.com/bbcompintent22
- Workshop #3 on February 2 at 6:00 PM (IN PERSON at ISEB 1010)
 - https://bbcomp22workshop3.eventbrite.com
- Share with your friends and fellow students
- Stay up to date at https://bbcomp.tech.uci.edu
- Concept Papers & Product Specifications are due on March 6, 2022
- Schedule office hours for help (<u>bbcomp@uci.edu</u>)
- Get started!!!
- Also, check out https://merage.uci.edu/nvc to find out more about the NVC.





Thank you!



