<u>**Instantiacrate First Prototype**</u>

Type - Conceptual Prototype, Testing Idea
Audience: General (Classmates)
Context: Observed Interaction & Interview
Test Time: 15 Minutes (depending on construction timing)

Summary
We have several assumptions moving into this project that need to be tested through prototyping, research, and interviews. This first prototype will test a rough user interface and process for customers to purchase a design instance through our platform in order to test assumptions around:
- What type of products would users want to purchase?
- What level of customization would they want with the product?
- What interface cues are needed for them to feel engaged in the purchase/making process?
- Does this model help them reimagine value as it pertains to digital/physical goods?
- What level of making do customers want to have (product assembled for them by maker, product fabricated by maker and assembled by user)?
    - If the former, what type of instructions are needed for maker to assemble.
    - If the later, what type of instructions are needed for the customer to assemble

Through this first round prototoype, we will use a design already created by Audrey for a laser-cut hanging planter that fits standard sized planting pots. We will purchase all the materials needed to make the planter, laser-cut out the individual parts, and create a set of instructions for assembly. We will also create a rough paper (or digital) wireframe prototype for the purchasing experience.

During the user test, users will be directed to "purchase" the hanging planter through the platform and have 2 choices of materials to make it from. They will also then decide if they want to assemble the purchase themselves (simulating a purchase from makerspace of just the parts) or have the maker (the test-giver) assemble it for them. Observations will be made about the UI purchasing process, users choices regarding assembly, and time taken to assemble to product with given instructions (either by user or test-giver/maker), as well as satisfaction with the overall experience.

What Questions Experiment is Addressing/Answering
We hope to use this setup (with small refinements) for two different types of user testing that will inform the work moving forward:

- Test the User Interface
  - Understand how much customization users want to have and how different material choices should be reflected in the UI (digital model that updates as new materials clicked, ability to pan around object etc.)
  - Understand what information users need about the product (time to construct, time to assemble, price options, maker center options etc.)
  - Understand if the platform must be web, web/mobile or some other combination from a customer's perspective.

- Test the Overall Model from Customers Point of View
  - Understand how much control users want over the creative process (assemble it themselves, let makers assemble it) and how much they would be willing to pay for assembly
  - Understand what sort of assembly instructions are required for users/makers to put the piece together
  - Understand what sort of interchangeable parts can be used to standardize assembly for both users and makers (no special tools required, standard screws or fasteners etc.)
  - Understand how much time/effort users would be willing to put into assembly or how much money they would be willing to pay to not have to assemble

What are the Measurements for Success
- Cognitive walkthrough and observation of users using the UI with the tasks of choosing, customizing, and picking assembly level of the design
- Qualitative feedback on ease of use
- Post-test interview on UI and what they would like to see, what can be removed, what should be improved
- Post-test interview on whether users would use this platform, price points at which they would not want to use it, types of products they would want to be available
- Post-test survey with rating scales and multiple choice questions about features/functionality user prefer and what they want to see added for UI

How can I tell if I did or didn't Achieve Success
- Would user purchase an instance on this system and have it made at a local maker center?
- Can users easily and successfully navigate the choosing, customizing, and purchase of the digital instance?
- Can users assemble the product with provided instructions and simple tools?
- Do users understand value differently after going through this process, as it relates to verified physical instances of a digital work?
- Does this interaction help users to rethink economic values and systems currently in place and how emerging tech like the blockchain could change these systems?

- Can users think of any other types of value systems or exchanges that could be integrated?