We’re picking up steam now! You should be building pieces of your system (underlying support, back-end stores for the key data, etc.), but before you finalize the implementation details, we need to understand how some parts work first. In a real product, you should spend more time working entirely on prototyping before you ever touch code, but for a real product, you’ll also probably have more time and focus than one 4-credit class allows for.

The goals for this assignment are to:

- Create an appropriate prototype for your system
- Plan out (in detail!) your user testing that will be conducted with this prototype

Part 1: A Prototype

This one is pretty open-ended. We’ve covered several ways to prototype in class. Pick anything from in class, or any other source on prototyping, and create a prototype that will help you inform your final system.

**REMEMBER** that a prototype is NOT an MVP. You have 1 week to complete this assignment because you’re NOT expecting to build a significant working system. If you do have an MVP already, you’re free to use that in your testing description, but must **prototype** something for the first part of this assignment (this one). This should be some feature not already in your MVP (e.g., a context-aware search algorithm).

**Include**: A description of your prototype (including why you used this prototyping method / type), pictures/screenshots of the prototype, and a walk-through of how you expect people to use it.
Part 2: User Study of the Prototype

Now we need to use your prototype for something. For this part, you will design a study that will inform your final system design. You must use your prototypes in these studies (if they’re not helpful here, they’re probably not well worth doing in the first place), but are also free to use anything else you have at your disposal: MVPs, surveys, etc.

**Include:** A *clear* description of the study and justification (what you want to learn from the study, and why this is the right way to learn that), the instructions you will give to participants (NOT part of the length limit for this assignment), and what measures/analysis you plan to use to evaluate your data.

>> Next Up (Part D): Evaluation

The next project phase will involve collecting data! Start on this ASAP if you can. You’ll have week to get feedback from folks in class and beyond. The sky’s the limit, but make sure the data you plan to collect will be valid, and informative for your final design. You will be evaluated on how much you learn, not just how many people you get to participate in your study (and the rigor of your methods/analysis).

Grading

This written report is **limited to a maximum of 1000 words (~2 pages) plus figures**, but will be graded on your ability to clearly address the goals of the project.

This assignment will be evaluated based on the 2 core parts:

- **Prototype (50%)**
  - Clarity of summary/features/motivation
  - Clarity of implementation details

- **Testing plan (50%)**
  - Clarity of description, and details on procedure
  - Clarity and level of detail for your data analysis plan