## Your Final Project Idea

The culmination of your time in Education DAO will be your final project, which will be a distributed application (or dapp) running on the Ethereum network (mainnet or testnet) with an interactive web-based frontend.

We'd like to start working on the project as early as possible but, don't worry, this is really a brainstorming exercise to give you an advantage when really digging into your project later.

In the course so far, you've learned about:

* The promise of blockchain and a general overview of the technology
* The problems blockchains hope to solve
* The foundational concepts of blockchain (cryptography and distributed consensus)
* A general mental model for blockchains
* When to use a blockchain
* An introduction to crypto-wallets, including MetaMask.

For this exercise, we'd like you to take all the general knowledge of blockchain and start to think about how you would apply it. **After learning what you've learned so far, do you have any ideas for what you'd like your final project to be?**

If that feels too overwhelming, how about: **What's something that you've been thinking about building a blockchain application for?**

You should not feel pressure from us on this exercise. It is very low-stakes, considering you are very early in the course, but it is an important process and will set you up for success. **While your final project will be graded, this exercise will not be graded.**

This exercise allows you to discuss an idea with others and think through some of the implications or program logic *without having to code anything yet*. Discussing your ideas with instructors, fellows and other colleagues will help you think through the process, identify exciting parts, perhaps surface more challenging areas. It will also help you start to draw a boundary around what you'd like your project to be.

We're going to ask you to setup the Github repo for your final project and populate it with a single document, which will outline the brainstorming and ideas you're working on. This will help you get familiar with the sometimes-challenging Github and the Git workflow and set you up for success later.

Note: If you're having issues with Git or Github, please be sure to revisit the ["Git: The Language of the Development Gods"](https://consensys-academy.github.io/basic-training/M5-git/L3/) section in our [Basic Training course.](https://courses.consensys.net/courses/bootcamp-basic-training) We'll also link to Git and Github resources below.

Last, and more importantly: **KEEP IT SUPER SIMPLE (**[**KISS**](https://dev.to/kwereutosu/the-k-i-s-s-principle-in-programming-1jfg)**).** This is one of the most important software development techniques. It's tempting to want to remake the world with the incredible power of blockchain. However, for this project, it's important to start big and dissolve the ideas down to their most simple, potent essence.

To be sure, the project will be coded in all sorts of amazing languages using awesome blockchain developer tools, but, at this stage, you want to work through the basic problem space and what logic you'll be building. The thinking you do in this step will be a guide, to help keep you moving forward on the right track when things get more complicated. You will be grateful for it later, we promise!

(Note: We'll mention more on this later but **you absolutely do not need to write code for this exercise**, this will all be written in plain language)

## Exercise Parts

The exercise is divided into two parts:

1. **Brainstorm on Your Idea** In the Discord, or during Office Hours or a study session, we want you to share ideas that you have for a final project. Here are a few things to keep in mind when thinking on and discussing your idea with others:

* **Explain in a very simple way what you'd like your project to do.** It's easy to get complicated with ideas, but the real mental exercise is to dissolve an idea down into its essence. When discussing your idea with people, try to find a few concepts underpinning your idea.
* **Walk through a single workflow for the future user of your project.** Once you have a general idea of what you'd like to do, isolate some of the actions a user will take. Write
* **You can have a big idea and only work on part of it for your project.** You'll be surprised how quickly a "simple" idea can get complicated when you're writing software! Once you have a general idea, isolate two or three essential things a user will do. Those will be a great starting point for your project. If you achieve them quickly, you can move on to the other aspects of your idea!
* [**Pseudocode**](https://en.wikipedia.org/wiki/Pseudocode) **is a great tool for this exercise** When thinking through the actions your future users will take, it can help to write out the steps in plain language! Here's a basic example:

**Voting Contract Example Workflow**

1. Users will have to register themselves somehow on the contract

2. They have to identify which campaign their voting on

3. They'll have to submit a vote for that campaign.

4. They can't vote twice for a single campaign

2. **Upload it to Github** Once you have a general sense of your project (**Remember: it should be very simple and not complicated!**), we'd like you to setup a Github repository for your project and submit your project idea in the repository's README.md file.

* Your Github repository and project should be titled education-dao-final-project and, at this point, only has to contain a README.md with your project idea and any notes you'd like to include! (You don't have to stop there, by the way, but that's the minimum for this exercise)
* For those already comfortable with the command line, code editor and git, [Here's a link to the lesson in Basic Training where we walkthrough setting up a new Github project.](https://consensys-academy.github.io/basic-training/M5-git/L3/)
* For those who would prefer to start on Github, then work locally, [please see this excellent tutorial from Github about how to initialize](https://docs.github.com/en/get-started/quickstart/create-a-repo)

Once you've uploaded your README.md to your Github repository, please share the link to your repository with your study group.

We can't wait to hear about your project ideas!