

Release Plan

Product: Decentralized Internet

Team: Decentralized Internet

Release Date: June 6th

High Level Goal:

Provide the convenience of modern storage sharing without the need for centralized hosting.

Sprint Plans:

	Sprint 1	Sprint 2	Sprint 3	Sprint 4
User Stories	<p><u>1.1</u> As a user, I want to instantiate a shared network between myself and other users</p> <p><u>1.2</u> As a user, I want to save data to the network so that I can access it later, even if my device is lost</p> <p><u>1.3</u> As a user, I want to be able to access data other people have written to the network</p>	<p><u>2.2</u> As a creator, I want to create a webpage with links to other webpages</p> <p><u>2.3</u> As a publisher, I want to distribute a web page across my network</p> <p><u>2.4</u> As a user, I want to find web pages other users have created</p> <p><u>2.5</u> As a user, I want to re-experience web 1.0</p>	<p><u>3.1</u> As a user, I want the network to be more stable</p> <p><u>3.2</u> As an admin, I want to control how much storage is used by the network</p> <p><u>3.3</u> As an admin, I want to control who is able to read and write my files</p>	<p><u>4.1</u> As a creator, I want to make web pages that read and write from other distributed information</p> <p><u>4.2</u> As a creator, I want to publish those webapps to the network</p> <p><u>4.3</u> As user, I want to access applications other people have put on the network</p>
Infrastructure	<p>Setup Docker to standardize deployment and developer environments</p> <p>Setting up a basic flask</p>	<p>Create and expose endpoints for servers to interact with a web frontend</p> <p>Integrate displaying</p>	<p>Expose fine grained control over fault tolerance, and network stability to the user</p> <p>Allow network to shard</p>	<p>Add support for distributed documents to run javascript that interacts with the distributed storage</p>

	<p>deployment on multiple containers in a shared network</p> <p>Create shared git repository, with automated testing</p>	<p>rendered HTML to the application UI</p> <p>Write infrastructure to allow documents to reference other documents</p>	<p>information so user storage sizes are smaller</p>	<p>Provide ways to ensure consensus amongst nodes to application developers</p>
Spikes	<p>Varying familiarity with distributed systems</p> <p>Compare the cost of using a framework (DynamoDB, Sinfonia, Ray) vs implementing our own distributed kvs</p> <p>Compare the different web front-end solutions for displaying data from the network</p> <p>Different OS issues</p>	<p>Build a new layer on top of the KVS for handling HTML documents</p> <p>Lack of familiarity with HTMX</p> <p>Instability of network as files get larger</p>	<p>No experience implementing permission systems</p> <p>Will need to implement either a paxos-protected directory of where information is stored, or some form of hashing</p> <p>The network will need to adapt to varying levels of instability</p>	<p>Create some apps to be run as a demonstration of it's capabilities</p> <p>Debug apps being developed, and the underlying system</p>

Product Backlog:

Sprint 1	Sprint 2	Sprint 3	Sprint 4
Creating the network with multiple nodes	Displaying files on the network	Sharding	Improved Network snooping functionality
Storing files on the network	Viewing files	File Uploads	Dynamically changing networks
Joining a network	Web links	P2P connectivity	Leaving and joining active networks