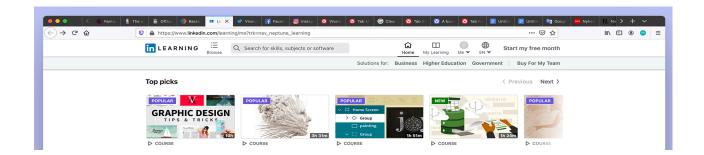
Design Document

Stigmee

Overview

The core value of Stigmee is the ability to fork relevant lists of URLs



We all have too many tabs open in our browsers, yet assembling them can take between 15 minutes and 15 hours, it's valuable curating work that's lost when we close a browser window, yet that could be shared to save other people time. The process of mutualizing each other's pathways to save time is a form of stigmergy, it is basically what Waze uses

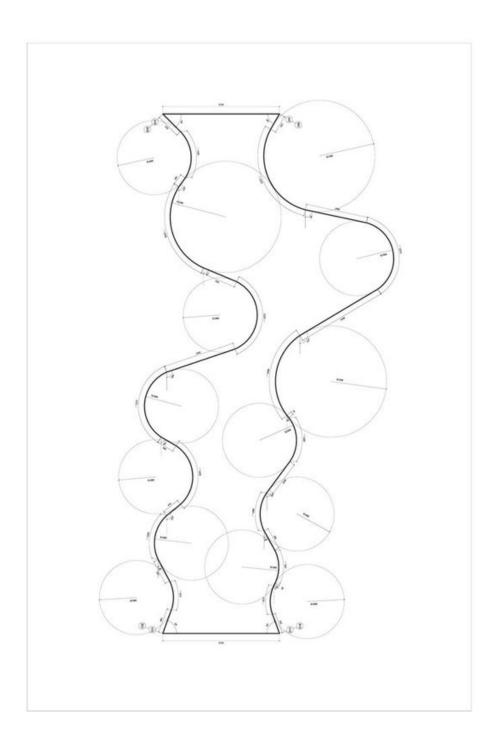
Still, nobody wants 55 tabs to invasively open in their browser. So sharing relevant collections of tabs is not enough, the experience must be **contained**.

A simple way to contain a relevant collection of URLs once it's been forked is to display it as a landscape in Web 3D. We call the abstract collection of URLs a "strand" and if it is both relevant and viral then it is a "releviral strand"

The releviral strand is the central value proposition of Stigmee. It allows the development of a stigmergic search engine. In the same way that Waze, being automatically curated by individual drivers (stigmergy), ended up doing better than Google maps, Stigmee, being automatically curated by individual Stigmeers (web stigmergy) could end up doing better than Google.

The Strand

The strand is the relevant collection of URL



(abstract representation of the strand: here in portrait mode for mobile operating systems)

The whole value of Stigmee lies in the ability to share releviral strands, namely strands that have been curated by human beings to be relevant and viral. Stigmee must make it very simple to

- create a new strand
- curate it fast
- share it
- fork it from someone else
- create a barycentric (average) strand based on other strands

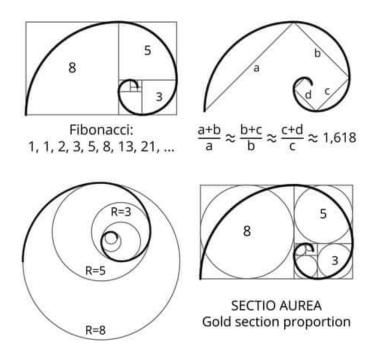
Note that the barycentric strand is akin to sexual reproduction in biology: blending strands to create a new offspring that may be more releviral, so survive more.

The Island

Procedurally generated star islands are the Stigmer's workspace. They are just sandy with minimal textures and skins, but the more you use them the more you unlock new shaders (ie. Cel Shading, Watercolor etc) and new areas. Below is a first example of how the island should look like, but the proportions are not perfect yet. The Island carries rivers, which carry strands, which carry single URLs, and the proportions between all levels must be optimal.



This first version of the island is not made in the right proportions yet: the rivers and strands should already be visible from above. What we want is that the island be procedurally generated from a golden ratio design from above (ie. the island should look like a golden ratio'ed ideogram from above) and then endowed with a procedural height map (e.g. Simplex noise, Golden Noise), with the rivers then mapped as gradient descending on the heightmap.





Gamification

Opening a new workspace, curating it and finding it followers should be rewarded. Rewards are of three types

- Macro-reward (every 10 to 100 hours)
- Meso-rewards (about every 1 hour)
- Micro-rewards (about every 1 to 10 minutes)

The point is that once you've opened a domain or even a whole Island, you may unlock parts by producing more releviral strands. The experience should reward you for keeping increasing the relevance and virality of whichever URLs you are assembling into strands.

Ultimately the reward may be monetary (ie. the "Stigmee Liquid", the regular token used to reward relevirality) and it may be psychological (you unlock new areas, skins and objects the more you browse and curate) or even both (e.g. an NFT, which reward is both emotional and financial)

Commercials

Say you assemble a relevant strand on "the best wireless headphones of 2022". This strand is just an abstract collection of URLs, but the way it is represented in the game engine allows for the smart use of commercial space. You want ads to be **non-invasive** in Stigmee, it is extremely important. In a minimalistic, zen-garden-like island with no vegetation, ads can be trees and groves, but they do not just shove their content in your face, you must click on them. They are a free gift of beauty to the user, but if they want to interact with them, then they unveil something like "this beautiful blossoming cherry tree is offered to you by Sony".

Context

Global knowledge is doubling faster and faster (about every 3 years now) and we need new ways to flow it between individual netizens.

The Neuralink philosophy consists of investing into Direct Neural Interfaces. The Stigmee philosophy consists of investing in the untapped potential of our natural ways of learning.

Stigmee attempts to solve an essentially logistical problem: delivering series of URLs to the appropriate workspaces. Nowadays users don't browse the Web for single addresses, they rather assemble relevant collections of URLs, which can take anywhere between 15 minutes and 15 hours of browsing, and which is uselessly lost when they close a given curated window.

The whole point of Stigmee, just as it is already the whole point of Waze, is that whenever a Stigmer travels a certain path it is anonymously stored to help other users take a shorter one to what they exactly need.

Goals and Non-Goals

Goals:

Offer a stigmergic web browser in web 3D

Gamify the curating of collections of URLs

Share relevant and viral collections of URLs

Existing Solution

Only individual blocks already exist, Godot and the Chromium Embedded Framework essentially. Regarding the database there is no ready-made solution to assemble, curate, share and store stigmergic collections of URLs, so this stigermic engine of Stigmee will have to be implemented from scratch.

Proposed Solution

Alternative Solutions

Testability, Monitoring and Alerting

Open Questions

Detailed Scoping and Timeline

- 1) release a MVP for desktop use, with the database stored locally
- 2) achieve a cross-platform version with a server-side database
- 3) present a 3D homepage mapping the top 1 000 000 websites (à la million dollar homepage) but in 3D, to be able to sell plots in this persistent world as NFTs
- 4) ICO and NFT minting: sell plots in the persistent world, launch the "Stigmee Solid", the maximalist cryptocurrency based on "Proof of Power" (proving one has offered a certain amount of computing power to simulate mathematical and physical problems), not premined and with a fixed supply.
- 5) Launch the "Stigmee Liquid" rewarding the relevirality of strands and their non-invasive advertising revenues
- 6) Release a Virtual Reality version