

## Project Description - Tiny Pond

For this project, I wanted to create a small, playful, and calming world where people could contribute and interact with a shared little ecosystem. I've always loved summer and the feeling of warm, sunny days by a pond, so even in the middle of cold winter, I wanted to make a space that reminded me, and hopefully others, of that feeling. The idea was simple: let users create critters, give them names, colors, and short messages, and watch them move together in a small, whimsical pond. Each critter has its own unique movement and personality: frogs hop around, tadpoles swim in gentle circles, fish zigzag, and bugs flutter unpredictably. The goal was not only to make the pond feel alive but also to make it meditative, so that simply watching the critters move can be relaxing and a little magical.

The project is also about taking simple data and turning it into a collective, visual experience. Every critter created by users is stored on the server in a JSON file, so the pond grows over time as more people add their contributions. I added a stats panel under the pond to provide an overview of the community: the total number of critters, how many of each type exist, and how many include messages. This gives a sense of presence and activity in the pond, reinforcing the idea that it is a shared space. Watching the numbers change as new critters are added adds a quiet, playful rhythm, which complements the visual movement and contributes to the relaxing atmosphere.

On the technical side, the backend is built with Flask and Python, handling the saving and loading of all critter data. The frontend uses HTML, CSS, and JavaScript to render the pond and animate the critters. Fetch requests allow the front end to send new critters to the server and retrieve the updated collection, so the pond updates dynamically whenever someone adds something new. Jinja templates were used to organize the pages, making it easier to manage the layout and the different interactions. The design choices, like the movement patterns to the soft color overlays, were made to make the pond visually soothing and whimsical, encouraging users to take a moment to pause and watch.

Overall, this project is meant to be a gentle, meditative, and interactive experience that blends art, simple data visualization, and interactivity. It allows users to contribute creatively while enjoying a calm, playful environment. For me, it is a way to bring the warmth of summer into the cold of winter, and to create a space where anyone can relax, watch, and feel a small connection to a whimsical world filled with little moving creatures.