

Figma prototype:
still frames from selected spots within animation

In general:

Video as inspiration–

<https://www.youtube.com/watch?v=eu2pBpQolKE>

Feature: Gradient/opacity change with scroll

Method of implementation:

Various options for libraries: <https://www.cssscript.com/tag/scroll-animation/>

https://threejs.org/examples/?q=ocean#webgl_shaders_ocean

<https://www.liquid.fish/current/threejs>

Implement using very long image

<https://uigradients.com/#VisionsofGrandeur>

JS library– <https://www.cssscript.com/animate-on-scroll-scrollerful/>

Could work for color changing as demoed within text

Feature: Timer

Method of implementation:

<https://foolishdeveloper.com/create-a-simple-stopwatch-using-javascript-tutorial-code/>

Feature: Depth tracker

Method of implementation:

- Takes in time passed
- Use an average weight and density
- Use an average kick speed

30 frames a second

Set a timer that goes off every 30 milliseconds and executes a piece of code

Questions–

How to fall faster when negatively buoyant? (conditionals?)

Positively buoyant <20 ft

Neutrally buoyant 20ft < x < 50ft

Negatively buoyant >50ft

Have count increase at faster increments?

Accounting for scroll up??

Feature: Animated fish

Method of implementation:

Three.js

<https://codepen.io/monchito/pen/RPEqvo>

Note this code^^

Also this video could be helpful

<https://frontend.horse/episode/making-a-fish-swim-with-three-js>

More research required for this

Feature: Breathe up countdown (cannot scroll), countdown on screen

-triggered by “begin” button

Method of implementation:

<https://stackoverflow.com/questions/4770025/how-to-disable-scrolling-temporarily>

General questions:

How will I make this accessible?

Does it need to work on an iphone?

Facts to include

1. Negative buoyancy:
 - Formatting: Happens at 50 feet
 - “ Neutral buoyancy should be at around 1/3 of the depth of your total dive, but no less than 10m (32ft). Check how to establish your own neutral buoyancy. Freefall should begin about 5-7m (16-22ft) after you reach neutral buoyancy, so you are already adequately negatively buoyant before you stop all movement.
 - For example, if you are diving to 30m (98ft) and are neutrally buoyant at 10m (32ft), consider setting a dive alarm at 15-17m (49-55ft) or, if you don’t have a dive computer, count the line markers until you are roughly at the correct depth to begin freefall”
 - <https://www.deeperblue.com/guide-to-freefalling-in-freediving/>
2. Mammalian dive reflex:
 - Formatting: First 10 feet, pop up, fade away, into bubbles??
 - Content:
 - <https://sites.dartmouth.edu/dujs/2012/03/11/the-mammalian-diving-reflex/>
 -

3. Breathe up:

- Formatting: Right when webpage opens
- “We will begin with a breathe up. The purpose of this is ... When you are ready to start, press begin.”

Have that ripple away^^^