

Target Users

- People who want to enjoy a simple space travel in sci-fi movies on the web.

Features

- Numerous lines move outward on the screen, creating an effect of flying towards a point.
- The direction of the flight is determined interactively by the position of the mouse pointer.
- User can start/stop flight with mouse-click.
- Responsive to the change in the size of a window.

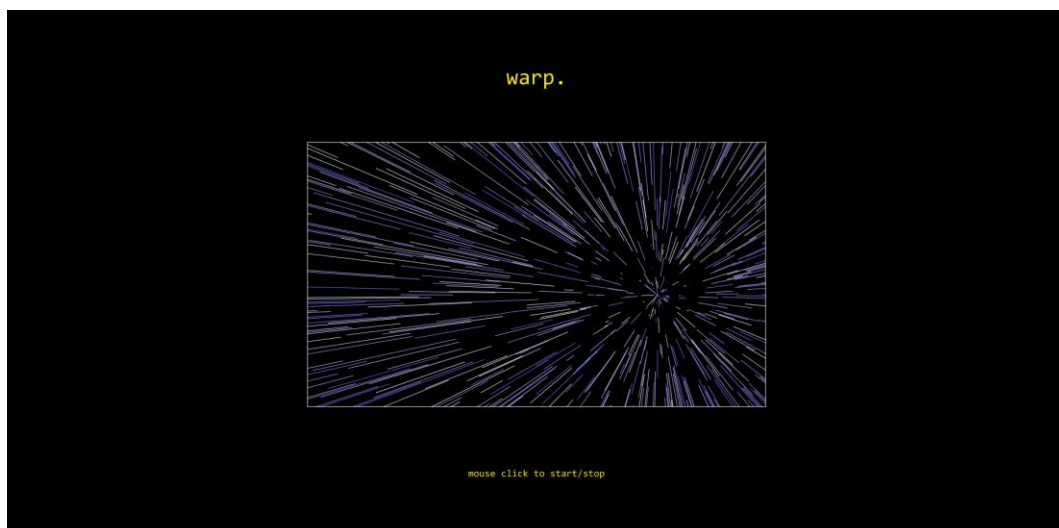
Visual Concepts

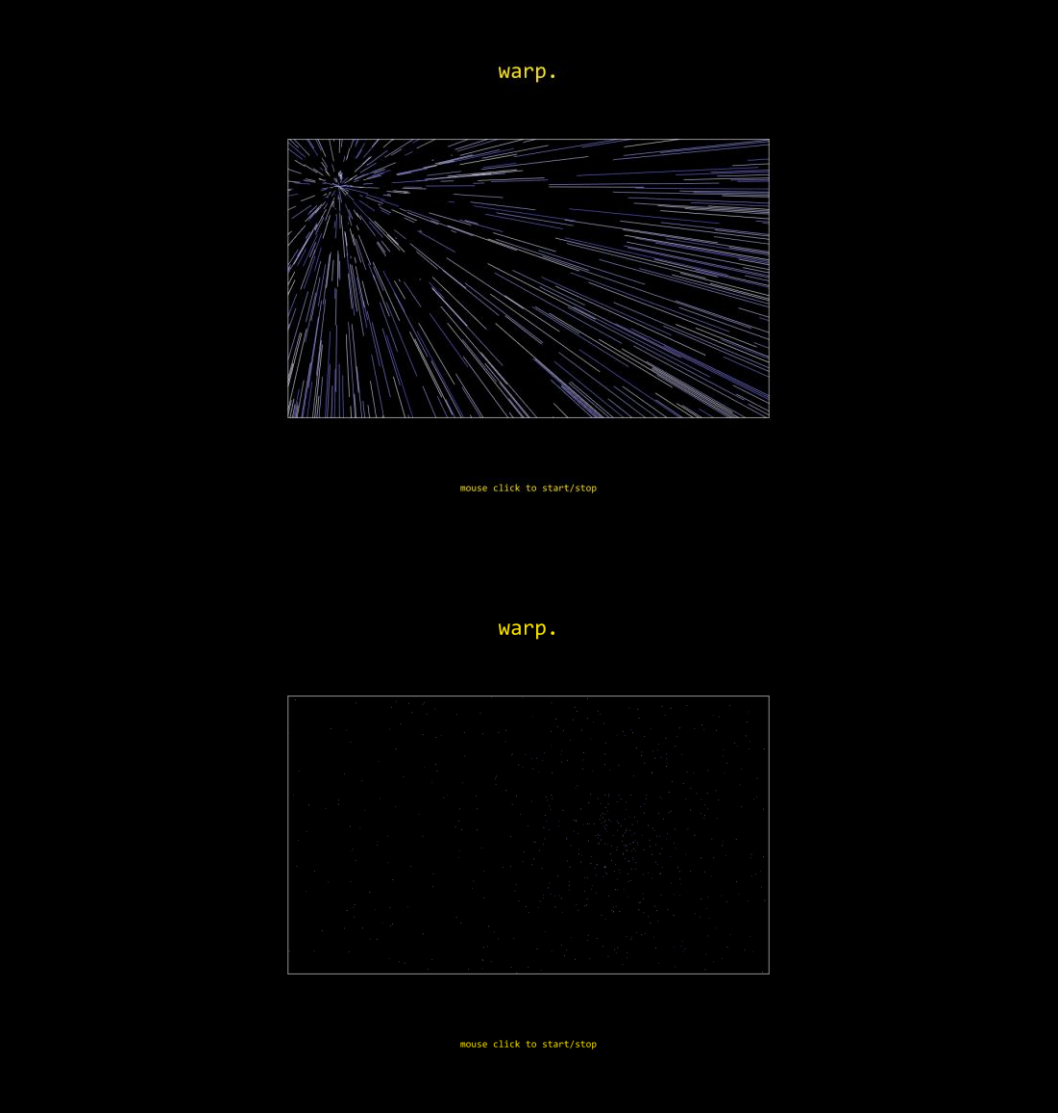
- Jump to hyperspace, traveling through universe



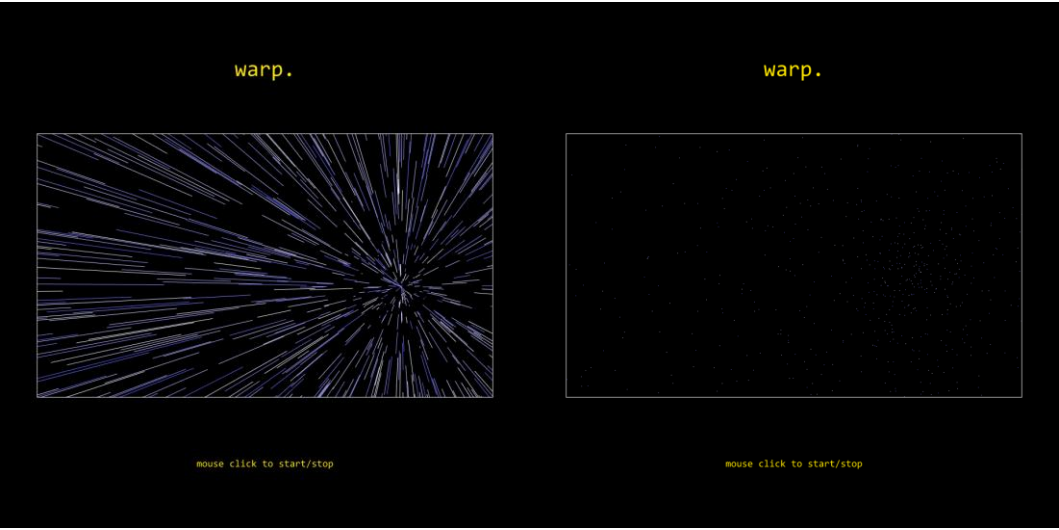
Screen Shots

- Full-size Window



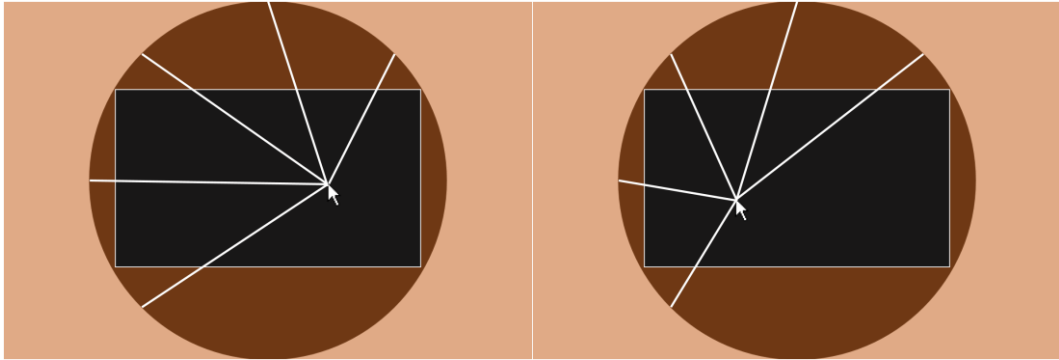


- Half-size Window

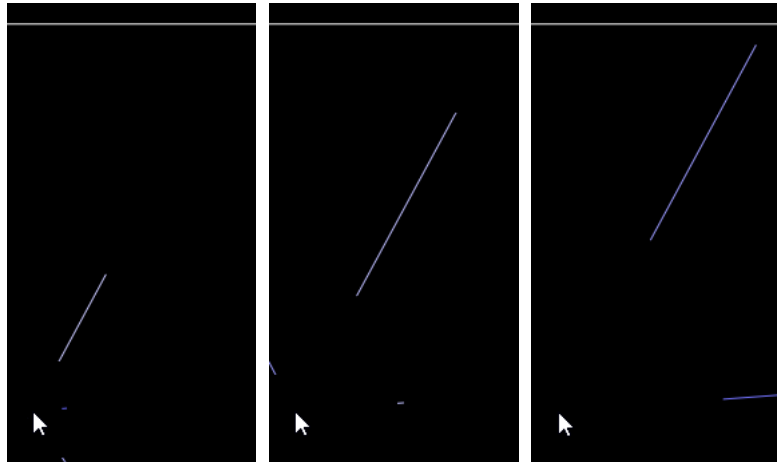


Algorithms & Design

- **Basic algorithm & plan**



1. Draw a large circle to the height of the window.
2. Divide 360 degrees into n and make n points, one for each angle.
3. Create a line by connecting each point to the position of the current mouse pointer.



4. Draw a part of the line according to the state of each line so that the line looks like it is moving outward.
5. Cover the area except for the square that contacts the circle.

- **Data Structure**

- **star_lights**

- Array of StarLights

- **StarLight**

- Class of small visual element, star light.

- Calculate position and status of an element, save them, and draw the element.

- **Functions**

- **point_at(distance, degree)**

- Calculate the (distance, angle) point of the polar coordinate system from which the center of window is origin.

Web Link

<https://editor.p5js.org/chan2ie/present/4McSMPyPU>