## **CSS (Cascading Style Sheets)**

The language used to manage a web page's layout and visual appeal is called CSS. Everything the user sees, including fonts, colors, element placement, spacing, and animations, is controlled by it. The theme of the portfolio is glassmorphism, a contemporary design movement.

**Glassmorphism Theme** This effect gives the cards and navigation bar a "frosted glass" appearance. It's accomplished in style. CSS by combining three properties: a subtle border to define the edges of the element, a backdrop-filter that blurs any content behind the element, and a semi-transparent background color.

## How the Demos Work: A Detailed Explanation

- 1. **CSS Grid and Flexbox Layouts**: These demos showcase two essential modern CSS tools for arranging elements on a page.
  - CSS Grid: Display grid is used by the grid demo to make a sophisticated, two-dimensional design of a fake webpage with a header, sidebar, content area and a footer. The splash here is the grid-template-areas which enables the developer to name the various parts of the grid and to layout the parts in a highly intuitive, visual manner in the CSS file itself.



o Flexbox: In the flexbox example, display: flex has been used to make a one-dimensional, flexible row of objects. It shows how flexbox can automatically separate items and how items can be expanded to occupy the available space or restricted to fit into the available space.



- 2. **CSS Animations**: This section demonstrates several animations created purely with CSS, showing its power for creating dynamic user interfaces.
  - Defining Animations: The animations (pulse, bounce and rotate) are specified in style.css through the rule of at-keyframes. In this rule, the changing styles of an element at various points of the animation sequence are indicated. As an illustration, the pulse example applies a transform: scale property in order to enlarge the element and then decreases it back to its initial size in a two-second loop.



- o Interactive Control: The interactive animations are made possible by attaching a click event listener to every animated element to the app.js file. As an element is clicked, the JavaScript code deploys a wonderful trick: it temporarily changes the name of the animation out of the style of the element, and then immediately applies it back. This causes the browser to re-initiate the animation again so that the user can get interactive feedback.
- Responsive Design: The entire portfolio is designed to be responsive, meaning it looks and works great on any device, from a large desktop monitor to a small smartphone.
- Media Queries: This is done through style.css, through media queries. A media query is an exception rule, which is used to apply a certain set of the CSS styles under the circumstances of meeting some conditions, the most frequent of which is the screen width. As an example, the portfolio contains a media query, which focuses on the screen with the maximum width of 768 pixels. The styles within this query may make the main title font smaller or convert a multi-column layout into a single-column layout so that the content could be readable on a small screen.

