

# CSS Transforms Lab

CSS Transforms allow us to have movement on our pages without having to write automation code in JavaScript. We simply let the browser do that work for us.

## Showing field focus

1. Browse to your site. Look for an input field with a class of `form-control`. Notice that it has an inset shadow that makes it look like it was depressed into the page and when the user focuses into it, glows blue to help them know where they are on the page.

This is great but it may be nicer if we transition the glow.

2. Edit `site.css` and find the style for the `form-control` class.
3. Add a transition property to it. You want to transition the `box-shadow` property with zero delay, one full second duration, and an ease-in-out function.
4. Save and refresh your site. Focus in and out of an input to see the transition. Once you get it working, change the duration to something faster like 0.25 seconds.

All new elements added with a class of `form-control` will automatically get this style. Cool, right?

## Adding a toast

Toast notifications have been shown to be effective cross-platform ways to communicate to the user. It is a message that appears on the page, covering part of the content. Toasts will typically fade in and move on the page so as to draw the user's eye to it. They're fairly unobtrusive but also unmissable. Let's make one!

5. Open `checkout.html`. Add a div at the bottom with a class of `toast`. Just make it's content say "Your order has been placed." for now. We would populate that with JavaScript if we were to finish this out.

6. Add this to a `<script>` tag at the bottom of your `<body>`

```
const toggle = () => t.classList.toggle('showToast');
const t = document.getElementsByClassName('toast')[0];
document.getElementById('go').addEventListener('click', toggle);
document.getElementById('close').addEventListener('click', toggle);
```

Don't worry about all the JavaScript details. All you need to know for now is that this'll turn on or off a class of `"showToast"` when the user clicks a `"go"` button or a `'close'` button.

7. Now comes the fun. Add a `toast` class to your CSS file. It should make ...

- the background color some shade of green,
  - the text color white,
  - it absolutely positioned with the top and right at 0,
  - the width 250px,
  - the minimum height 50px,
  - and to make look nice, give it a border-radius of 10px and 20px padding.
8. Check it out. Your toast message should look very, very different.
  9. We should hide it until it is needed. Add a style to translate it to the bottom of the screen. 500 in the Y direction should do the trick. We should also make it transparent by setting the opacity to 0. If you refresh now, you should no longer see it.

## Making it appear when needed

Remember that clicking the "go" button will add a class of "showToast" to your toast message. If you override the opacity and transform properties, you can make your toast message appear.

10. Add this class to your CSS file:

```
.showToast {
  opacity: 1;
  transform: translateY(0);
}
```

11. Run and test. You should be able to click the button and your toast will magically appear!
12. Bonus!! Put in a 2 second transition on the toast class in order to make your toast message fly up into view and fade in from fully transparent to fully opaque. This will look really nice and will grab the user's attention!
13. Extra bonus!! In your toast message, add a span or button in the upper right corner. Give it an id of "close". It should work to close the toast.

## HTML Tables Lab

When users check out, they should be able to see the contents of their shopping carts. And since it is tabular data, a table would be an ideal way to display it. Let's add a cart table in this lab.

1. Open your checkout page.
2. Somewhere near the top add a table.