

## Day 3: UX Enhancing Transitions

### Goal

To demonstrate responsible usage case of CSS keyframes.

### Learning Objectives

By the end of this exercise the student will be able to make subtle page transitions with CSS keyframes.

### Introduction

One of the things your instructor will emphasis throughout the course is good user experience design. The experience visitors have when they initially visit your website can dictate whether or not they stay/ever return. This exercise goes over an example of using keyframes to **choreograph** subtle effects to make a good first impression! This is especially true for mobile users, who are accustomed to subtle animations as they move from app to app. Your website is no different, how content comes into view would help you retain mobile users.

For this exercise you'll be building a image gallery that brings a row of images into view shortly after the previous.

### Setup

- Create a new directory called **css-keyframes-workshop** and create a new HTML file and CSS file (index.html and main.css respectively).
- In the html file, make sure you have the basic HTML structure:

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title>title</title>
  </head>
  <body>

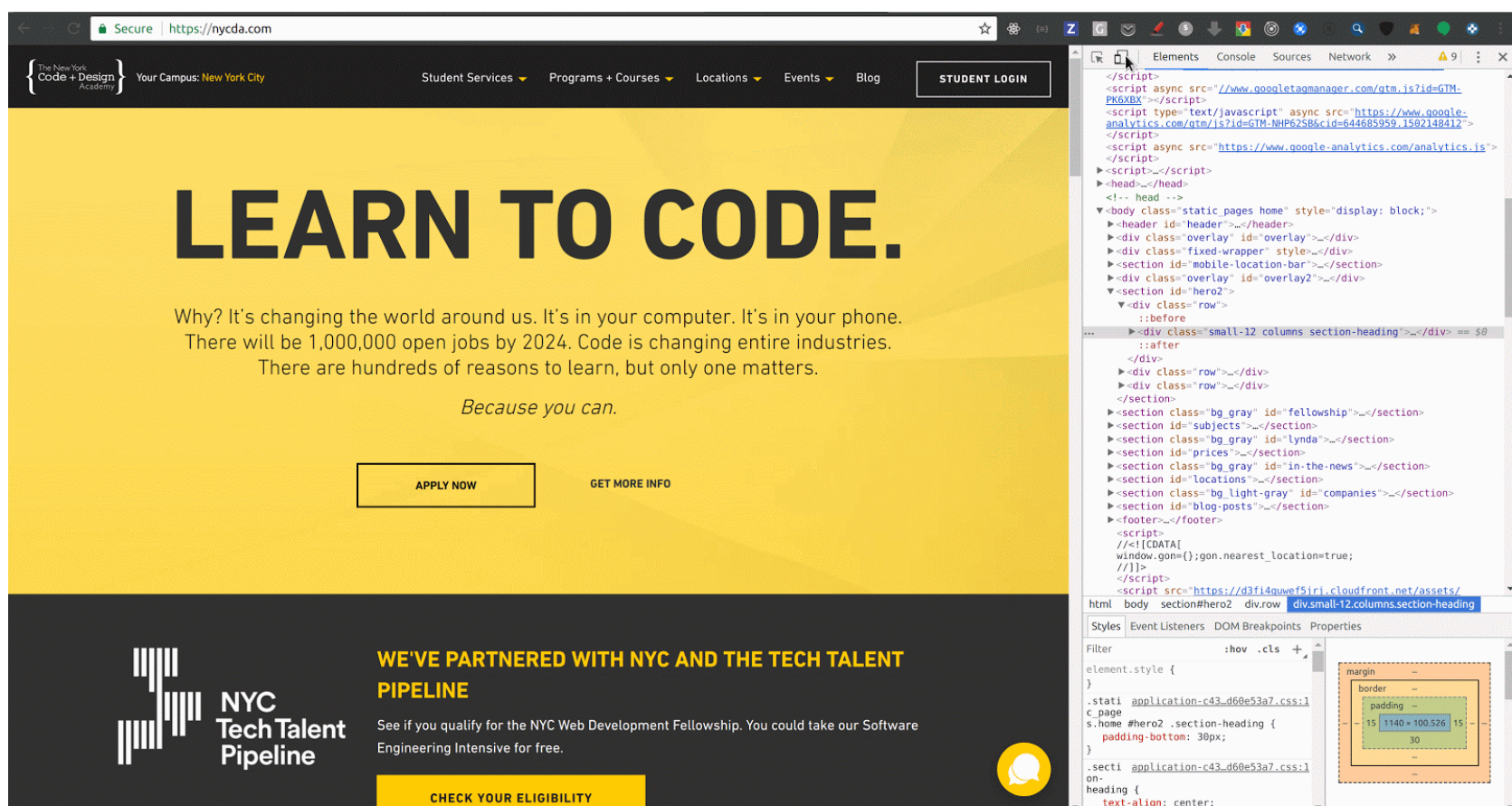
  </body>
</html>
```

- Add this meta tag to the head of your HTML file, it will make it easier to control what your page looks like on mobile phones. `<meta name="viewport" content="width=device-width, initial-scale=1">`
- And link your CSS file in the **head** with: `<link rel="stylesheet" href="main.css">`



## Instructions

- Let's create an image gallery with 12 image tags. 3 images in a row. You can make images fall inline with some CSS - display: inline-block;. You can use [placeholder.com](https://placeholder.com) for nice square placeholder images.
- Using media queries you can make sure your gallery is **responsive**. Here are several tips to do so:
  - Use media queries to adjust the width and height of the images at various screen sizes. This along with inline-block should be enough.
  - Using percentages over pixels might work in your favor.
  - Constantly check each change you have done through the mobile simulator in chrome.
- Preview what your grid looks like on mobile using the chrome developer tools. Here's what the mobile preview option looks like:



- Now that your grid of images is set up, make sure to wrap each row in a `<div id="row1">`. Of course making sure to change row1 to row2, row3, etc.
- Next up make a keyframe called **fadeIn** that starts at 0 opacity and ends at 1 opacity.
- Next use CSS to set row1 to 0 opacity. Now your page should only show 9 images. But there should be a space where the first row was.
- Now apply your keyframe to row1 with a 1s transition time. You should use the forwards keyword to make sure the element doesn't revert to being invisible.
- Awesome! Now the first row transitions in. But this doesn't really show off how fluid this can be. Try applying the same process to row2 but double the amount of time the animation takes. Row2 should also get its own keyframe that starts at 0 opacity then 50% through it's still at 0 opacity, then 100% it has 1 opacity.



- Now you should find that row2 takes a second to appear after row 1 appears. If you continue with this pattern for row3 and row4 then you should have a slow waterfall effect when the page loads. Which is still a little jarring. Try cutting all your animation times down to multiples of 0.3s - (0.3, 0.6, 0.9, 1.2).

### **Bonus:**

If you managed to tame the waterfall, try to add a different effect instead of fading in. Maybe make the image flip into view with a slight bounce. Remember to keep it subtle, it's about an appealing user experience. *You can be responsible and still have fun!*

### **Reference:**

<https://medium.com/@brandongregory1981/making-css-animations-feel-more-natural-1f50df3ccd85>

### **Completion requirements**

- Complete Workshop by end of a lot time limit.
- The completed gallery has:
  - 12 pictures arranged 3 in a row.
  - each row transitions view one after the other.
  - properly utilized keyframes for transitions.
- Group review session for feedback and questions.

