

REVIEW PACKAGE

HTML / CSS

- Understanding key styles such as positions, width, height, backgrounds, colors, borders, and more.
- Having the ability to search for styles you haven't seen before, reading up how it's used, and applying it.
- Understanding the differences between child and parent relationships for html (EG absolute positions of an element in another element)

JAVASCRIPT DOM SCRIPTING

- Understanding what getElementById() does and using it to change an element's style and attributes (such as id, src, etc)
- Understanding what createElement() does and using it to populate the HTML document
- Understanding what addEventListener does and the different kind of interactions possible (such as click, keyup, keydown, mouseup, mousedown, mousemove)
- Understanding the ability to an element's html/text using its innerHTML
- Having the ability to search up different events or attributes, read about them and applying them

JAVASCRIPT BASIC VARIABLES AND CALCULATIONS

- Understanding what a variable is and how it is used to assign elements/integers/strings for efficient purposes
- Understanding what basic math calculations (such as addition, subtraction, multiplication, division) are and using them to change the elements UI
- Understanding how variables and calculations work together to create different data for the elements to update

JAVASCRIPT FUNCTION SCRIPTING

- Understanding how to script functions by components to make application expandable and efficient
- Understanding how to separate parts of a repeated script out to make application more efficient
- Understanding how to pass arguments into a function for dynamic purposes

JAVASCRIPT INPUTS

- Understanding the different kinds of attributes an input has and the different types of inputs that exists
- Being able to both use and change input attributes for scripting and calculations

JAVASCRIPT CONDITIONS USING IF/ELSE

- Understanding how to use if/else to make multiple outputs/calculations

GITHUB

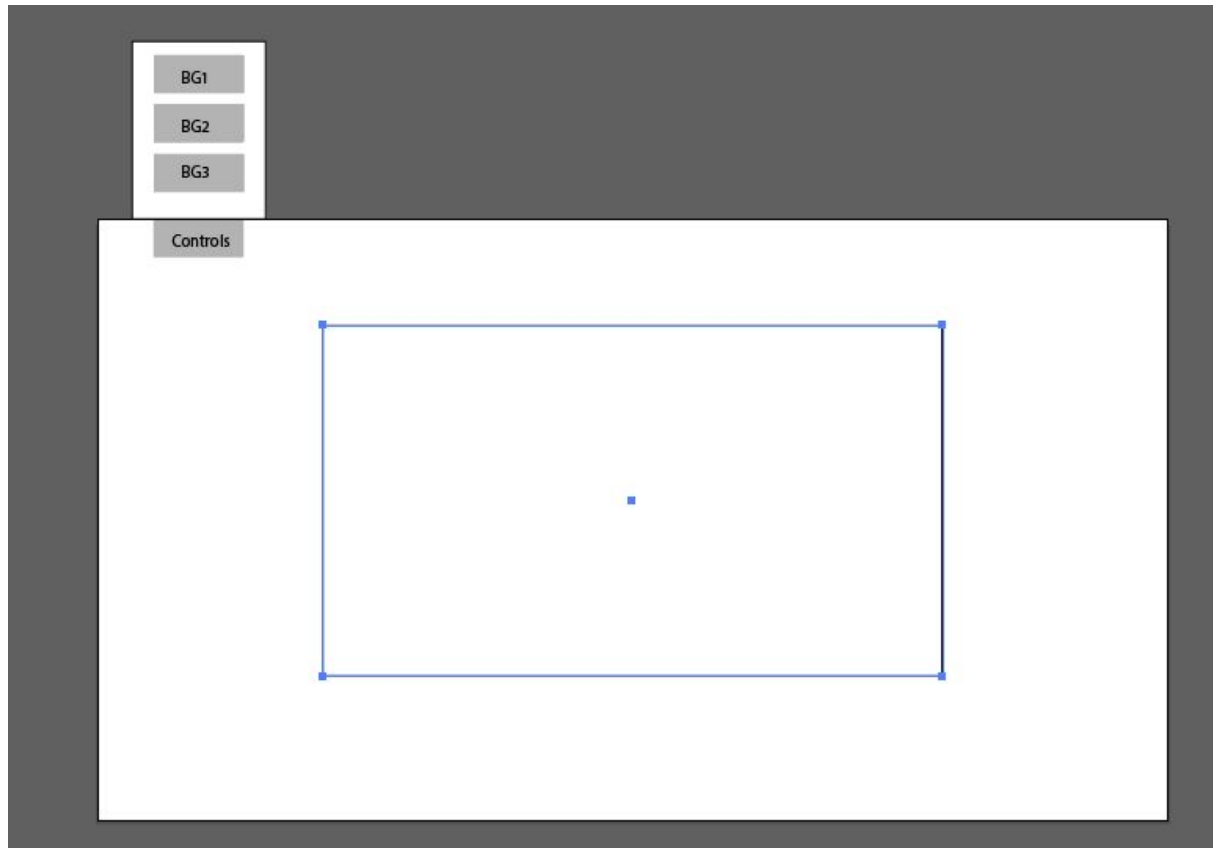
- add/commit/push and make your site available

BOOTSTRAP

- Understanding how the grid system works and being able to assign different columns to different resolutions

REVIEW - HTML/CSS/BASIC JS

In this applications there are 2 components



As you can see the controls are out of screen, and a `<div>` with a thin solid border is dead centered.

The first part is to make simple styles and interactions.

1. When controls is clicked on, slide down the controls component
2. When BG1/BG2/BG3 is clicked on, change the middle `<div>`'s background image to a default image associated to the 3 buttons

REVIEW - SIMPLE CALCULATIONS AND VARIABLES

The second part is a bit tricky, but your job is to make it so that the background position changes based on your arrow keys on your keyboard. (THE DIV DOESN'T MOVE)

So when you use

- the left arrow key, the background position moves left by 10px,
- right arrow, moves right by 10px
- up/down -> 10px

The background position resets back to 0/0 when you change backgrounds via the <buttons>.

REVIEW - FUNCTIONS

Of course, try to separate your applications by functions, it will be helpful in the future.

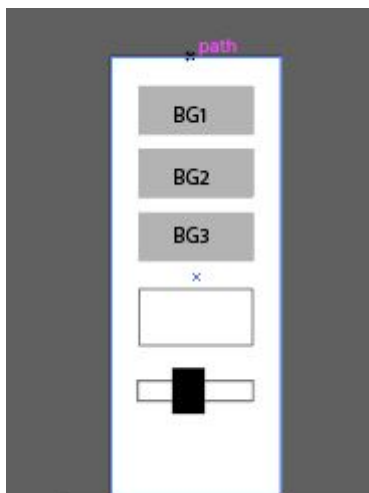
Create a

1. StoreBackgroundURL(str)
2. ChangeBackground()
3. MoveBackground(left, top)

And anything else you think will be useful.

REVIEW - INPUTS

Make 2 inputs, make an <input> with type range, and an <input> with type text inside controls



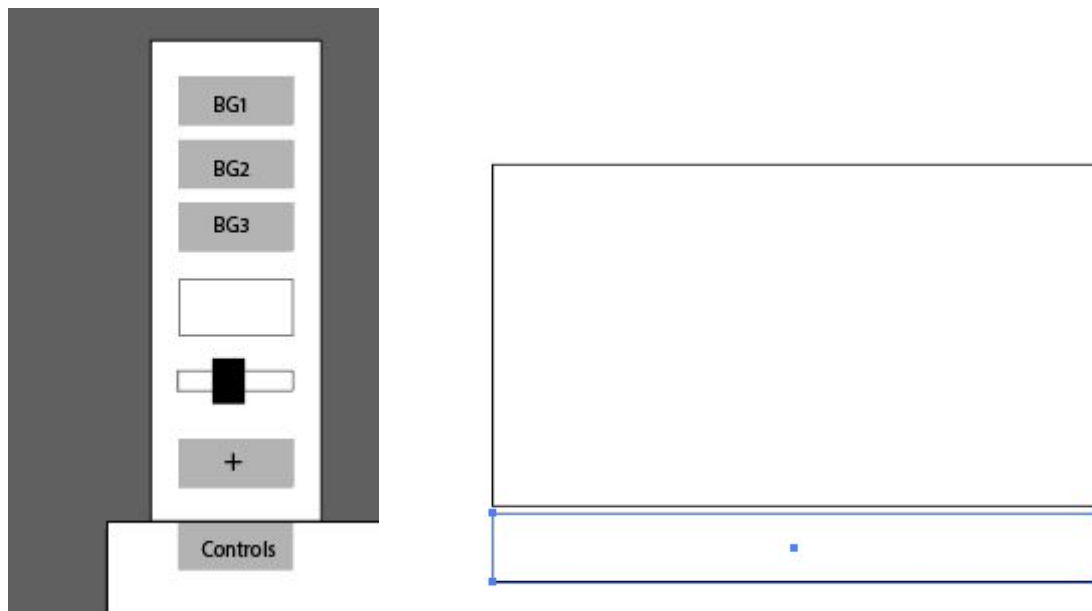
The range <input> has a min of 1 and a max of 100. When the value changes, change the width of the <div> corresponding to the value of the input. So If it's slide all the way to the left, the width is 1vw, middle 50vw etc.

The text <input> allows users to use their own backgroundImage. Users can type in a link from the web and use that image instead. The backgroundImage will change after the key return is pressed.

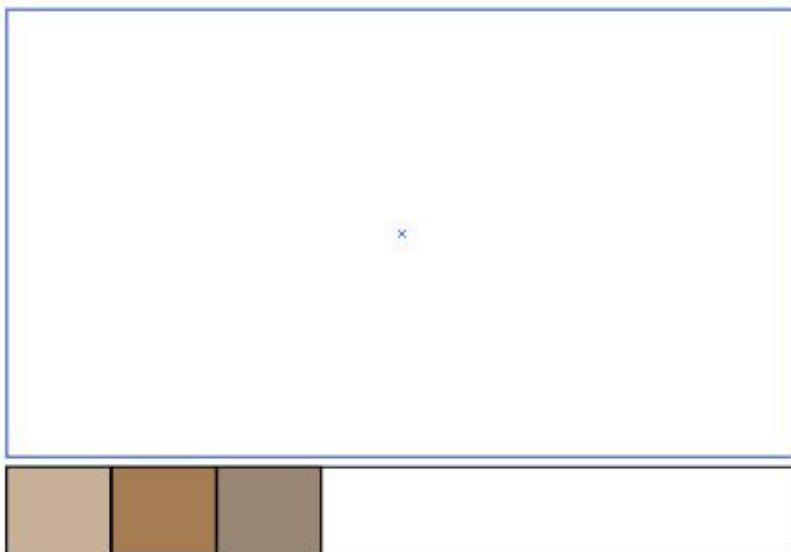
Make a new function ResizeBackground(num), and use StoreBackgroundURL(str).

REVIEW - MORE ELEMENTS

Create 2 more part, a + <button> in the controls, and a thumbnail <div> below the middle <div>.



When + <button> is clicked, it will use the current backgroundImage in the <div> and createElement a <div> with the same backgroundImage at the thumbnail <div>.



REVIEW - BOOTSTRAP

Using bootstrap, make the thumbnails occupy 6 columns in extra small resolution, 3 columns in small resolutions, 2 columns in medium resolutions, 1 column in large resolutions.

REVIEW - CONDITIONS

Create a status <div> that's at the bottom of the screen.

Check whether the words “http://” is inside the text `<input>` using `str.indexOf(“http://”)`, if there isn’t “http://”, then let the user know in a status `<div>` that they need to type in an actual link.

Check if the user made over 20 thumbnails, if the user has 20 thumbnails, then disable the + `<button>`.

Also disallow 5 websites of your choice. So if you choose google, then you’ll check whether the text `<input>` value has the word “google” inside, if it does then let them know this site is banned.

REVIEW - TRICKMEISTER

The last part here is going to test your ability to think outside the box a bit.

Using your knowledge thus far, make it so it’s possible to click on individual thumbnails. After click, change the background image by clicking on the `<buttons>` or text `<input>`.

Make it so it’s possible to change the middle `<div>` background image to the thumbnail that’s clicked

Finally, make it so that we can reset everything by removing all the thumbnails.