

The name of my library is called [tiles.js](#).

This library aims to enable users to easily display content in the form of “tiles”, which are customizable rectangular blocks which can hold content of different types, such as images, text, links, etc. Developers have the option of sorting and customizing the tiles, including things like color, size, position, opacity, etc. End users will be able to interact with the content in the tiles, depending on what developers have put there. There could also be things like customizable buttons which can be mapped to different functionality. Developers would use this instead of writing their own code because its often frustrating to get the CSS and HTML code just right to align different blocks in the way that you intend to. I hope that with this library it cuts down on the frustration of dealing with the structure of the page and allow developers to focus their time on producing the actual content that would go on there.

For this alpha release, I have implemented a simple tile system which allows users to create tiles and add images inside. The tiles also indicate that they are being hovered over, and the developer can choose what happens when each tile is clicked. Tiles can also be sorted if some comparison function is given.

My alpha release is deployed at: <https://csc309-alpha-release.herokuapp.com/>. The page just has a basic use case of the library, which uses the library to create some tiles and some tiles with images. The tiles show a visual indication when they are being hovered over, and the developer can specify what they want the tile to do when it is clicked. There is also a demo where tiles can be shuffled and sorted, which may be useful if some developer decides to have some tiles that have some sort of ordering that can be compared (like prices of items, for example). The developer can also specify the highlight color of the tile.

The objects stored are relatively simple right now. I just have a simple object that stores the specific attributes of a tile, an example would look like this:

```
{
  id: '0',
  innerText: 'sample tile',
  backgroundColor: 'white',
  boxShadow: '0 0 3pt 2pt black'
}
```

These attributes describe the look of the tile, and are stored in an array which is specific to each instance of the library. Currently, the API calls that developers have access to are listed below:

`initCanvas()`: initializes a canvas for tiles.

`addTile()`: adds a tile with attributes that can be specified by the developer.

`shuffle()` and `sort()`: shuffles and sorts the tiles in a particular canvas.

The next features I will be working on will be a way for the user to arrange the tiles themselves. This means that a user should be able to drag and drop to switch around the positions of the tiles on the screen. I will also be trying to add more features like small animations, perhaps hiding a tile and showing it again (so it could be used for card games?). I will also be working on coming up with a more intuitive positioning system so that developers can more easily specify the layout of the tiles. Lastly, I will try to come up with some sample tile templates which may be useful for developers to use instead of defining their own tile every time.