Time to Code—CSS Grid, Hands-on

Now let’s take baby steps to building a clone of the famous music app, Catty Music 😁

How to Create the Basic Grid Setup for Catty Music

We will kick off with a very basic `html` document.

```
<body>
   <aside></aside>
   <main></main>
   <footer></footer>
</body>
```

There’s a bit of foresight involved in choosing this structure. You’ll understand very soon.

Also note how semantic the markup is. This is one of the advantages of using the CSS grid. You save yourself the hassles of using redundant container markup.

Now style the document.

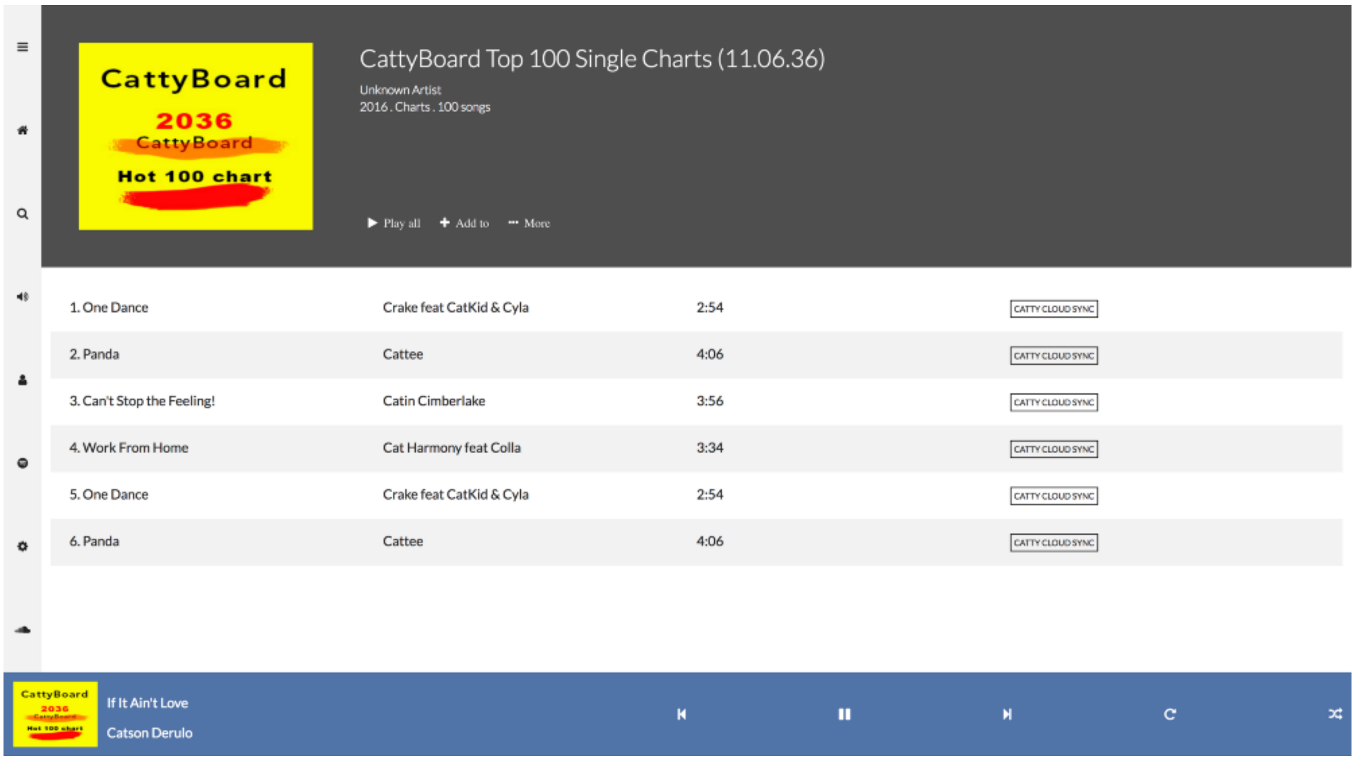
```
body {
   display: grid;
   min-height: 100%
}
```

This will kick off the grid formatting context by making `body` a `grid-container`

Now we can go on to define the row and column structure within the grid.

How to create the Rows and Columns for Catty Music

Creating the rows and columns is pretty easy. The final design we are gunning for is this:



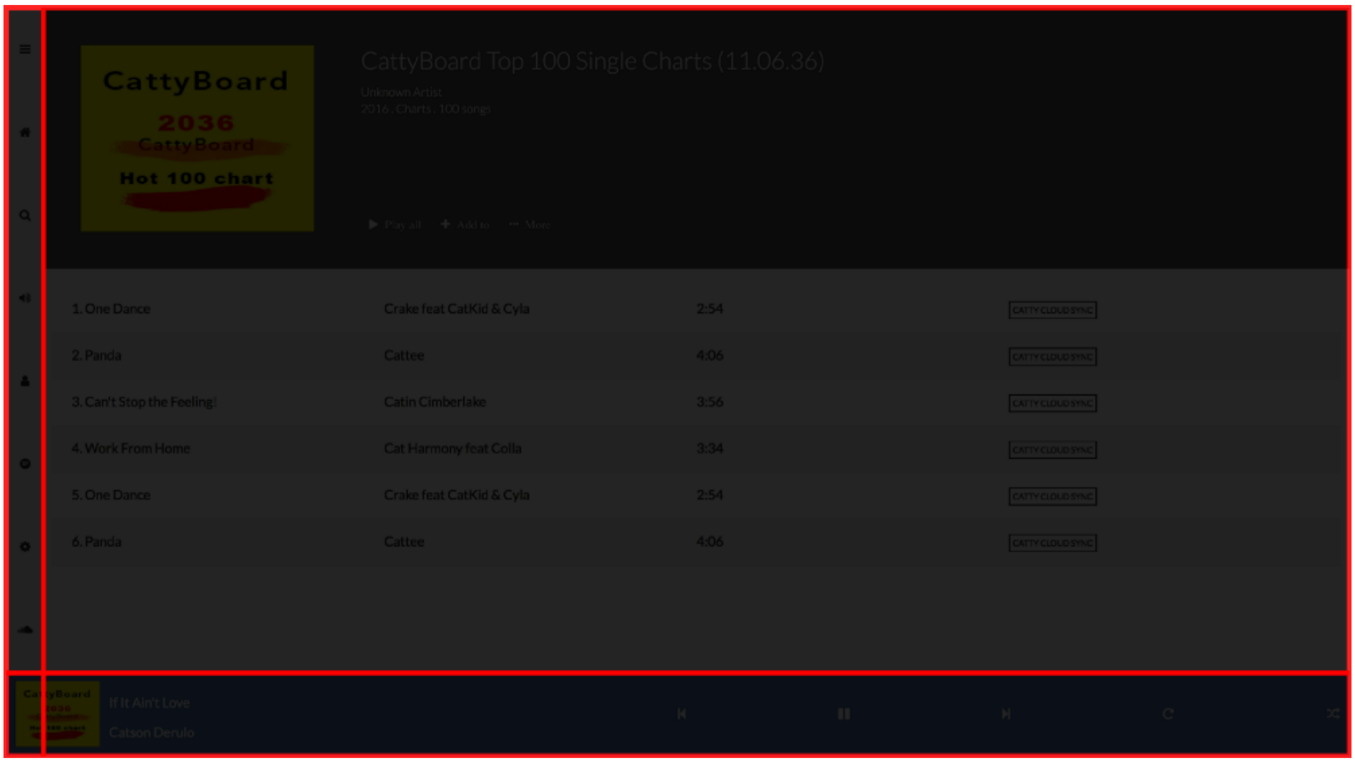
CattyBoard Top 100 Single Charts (11.06.36)

Unknown Artist
2016 . Charts . 100 songs

1. One Dance	Crake feat CatKid & Cyla	2:54	CATTY CLOUD SYNC
2. Panda	Cattee	4:06	CATTY CLOUD SYNC
3. Can't Stop the Feeling!	Catin Cimberlake	3:56	CATTY CLOUD SYNC
4. Work From Home	Cat Harmony feat Colla	3:34	CATTY CLOUD SYNC
5. One Dance	Crake feat CatKid & Cyla	2:54	CATTY CLOUD SYNC
6. Panda	Cattee	4:06	CATTY CLOUD SYNC

If It Ain't Love
Catson Derulo

However, the initial grid setup we need is a grid of 2 rows and 2 columns.



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Here are a few things to note about the column setup

1. The first column must have a fixed width—say, 50px
2. The second column must fill the remaining width in the grid.

On Row Setup:

1. The second row must have a fixed height—say, 100px
2. The first row must also fill the remaining height within the grid.

The lay-man's solution.

If you're NOT very experienced with CSS, you're likely to write this:

```
body {
   ...
   grid-template-rows: 100% 100px;
   grid-template-columns: 50px 100%;
}
```

The problem with this is that you have accidentally created a grid whose width and height is a total of `100% + 50px`

We want a total width and height of exactly 100%, so this approach is wrong.

The ‘smart’ person’s solution.

If you’ve got some experience with CSS, then you’re likely to do something much more smarter. Like this:

```
body {
   ...
   grid-template-rows: calc(100% - 50px) 50px;
   grid-template-columns: 50px calc(100%-50px);
```

This is pretty smart. But it’s got one problem—it isn’t very maintainable.

For example, if you have to change any of the the fixed widths, then you must always change the `calc` definition every time .

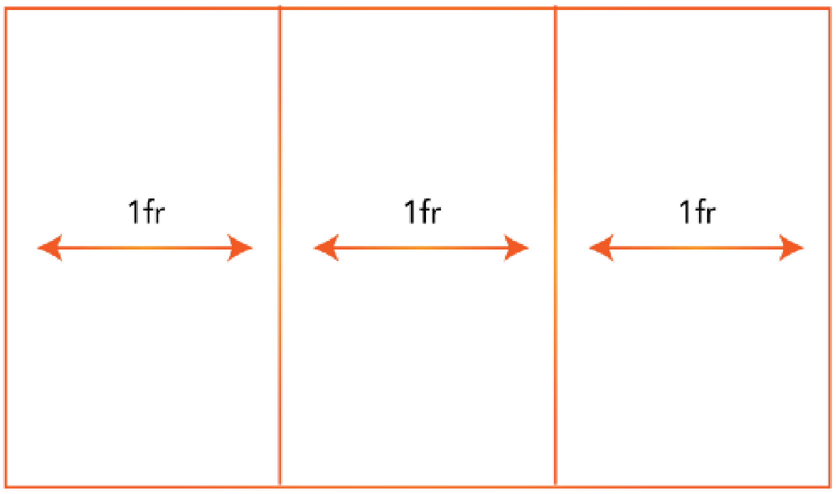
The Efficient Solution

Luckily, CSS Grid has a new unit that solves this problem elegantly.

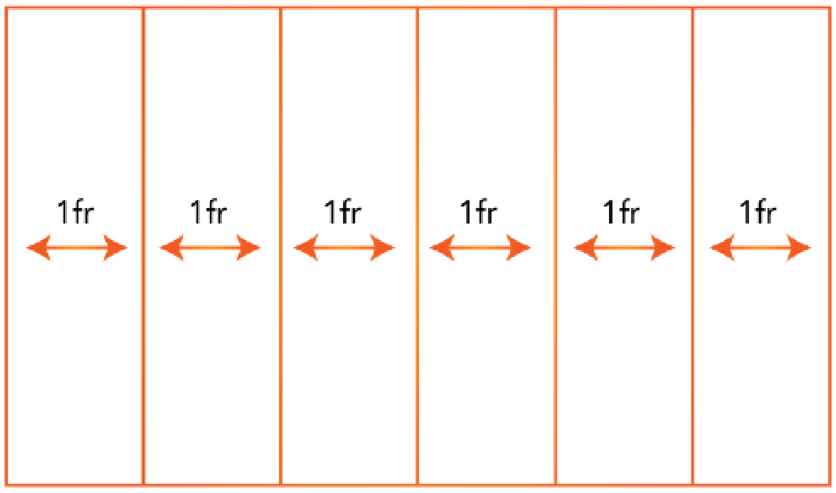
The fractional unit (fr)

The fractional unit solves the problem of automatically distributing space.

If you have three grid columns aligned as shown below, the fractional unit will automatically distribute the space equally.



If for some reason you add more elements—no worries. The fr unit will equally redistribute the space .



Finally, if you have a fixed width element, then you can take up the remaining space with the `fr` unit.

Here's what I mean:

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```
body {
   ...
   grid-template-rows: 1fr 50px;
   grid-template-columns: 50px 1fr;
```

And that is it—done! `50px` will be allocated to the fixed tracks, and the remaning space taken up by the other grid track.

If you're still confused with fr unit, please check out, the CSS Fractional Unit (Fr) In Approachable, plain Language. It only takes 3 minutes to read.