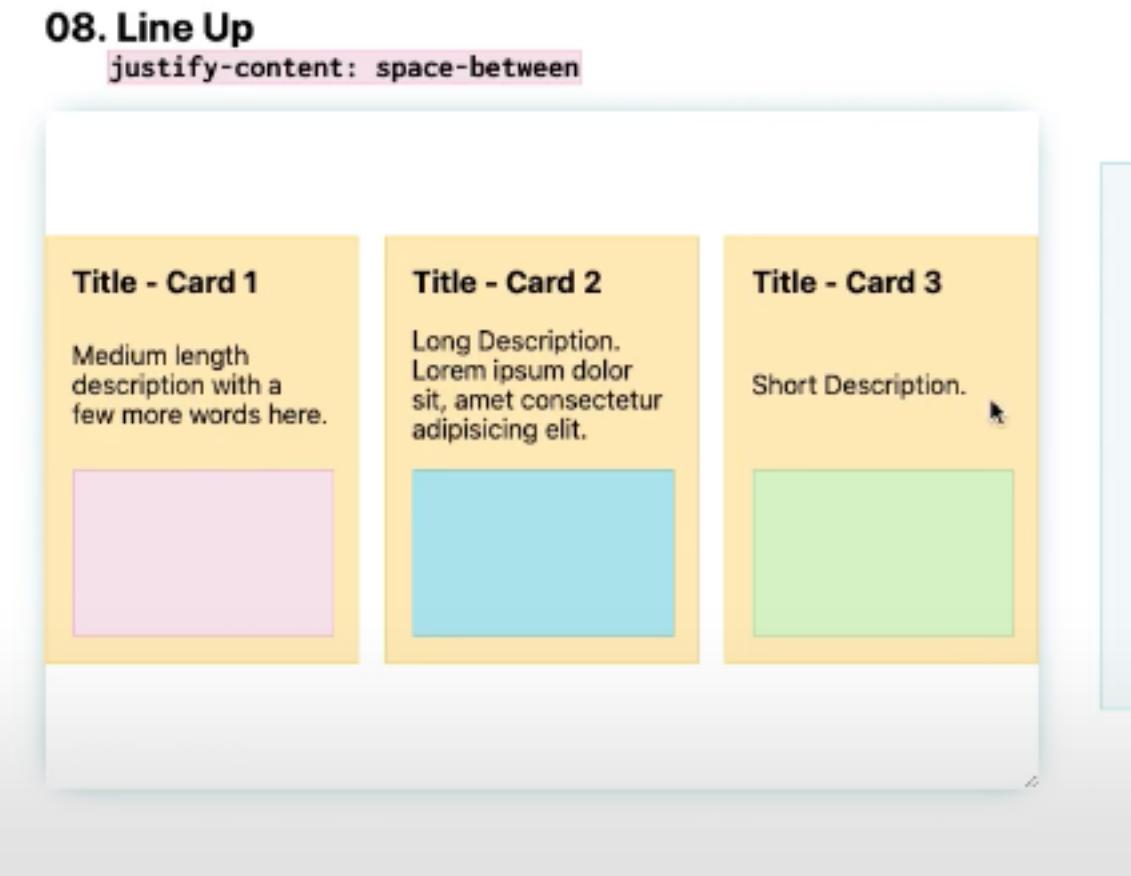


## Design Patterns for simple layout

Have to use css grid.

### Multi Column Layout

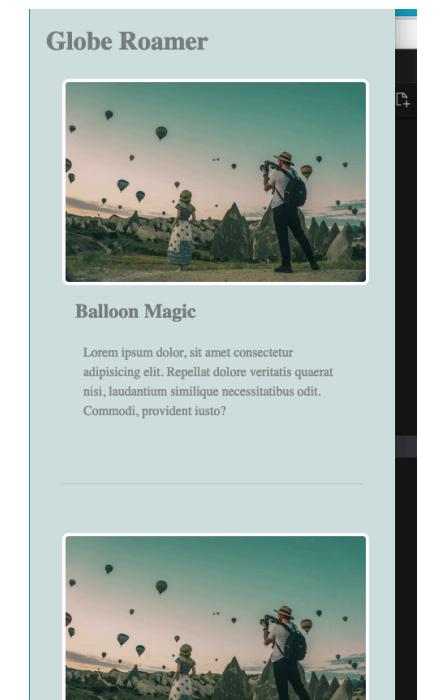
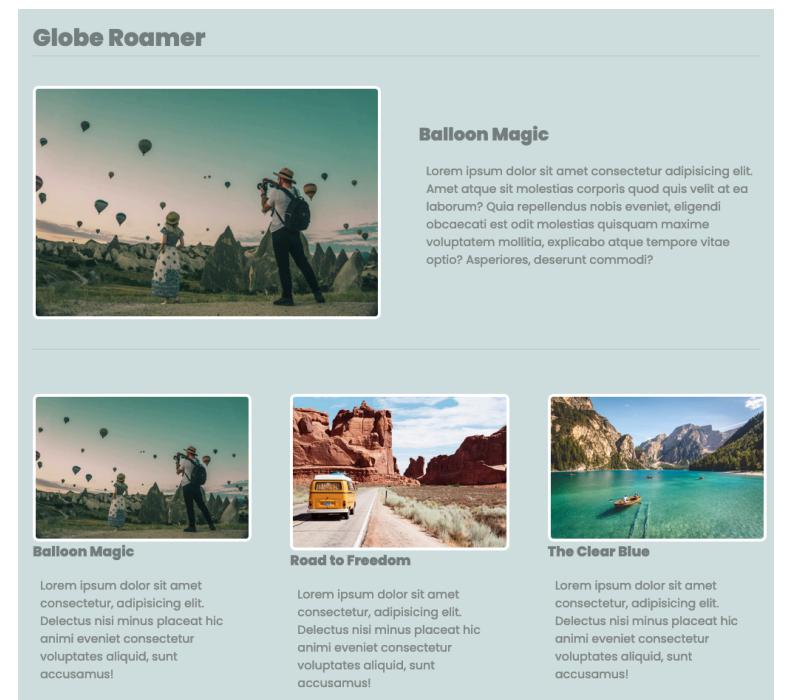
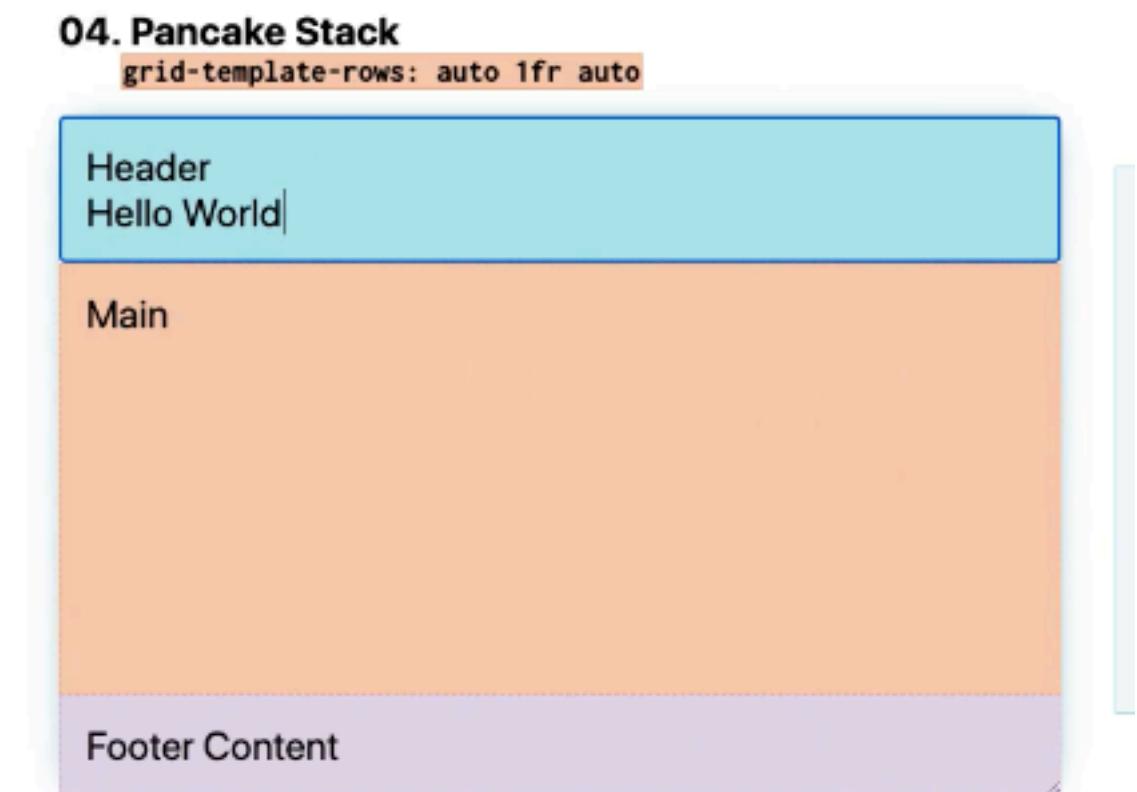


### Multicolumn for desktop

Hard part is the mobile transition  
in CSS only

Collapse to 2 then single  
Column      2 breakpoints

### Pancake stack



Multicolumn 3 cols to 1 col for mobile

## Design Patterns for simple layout



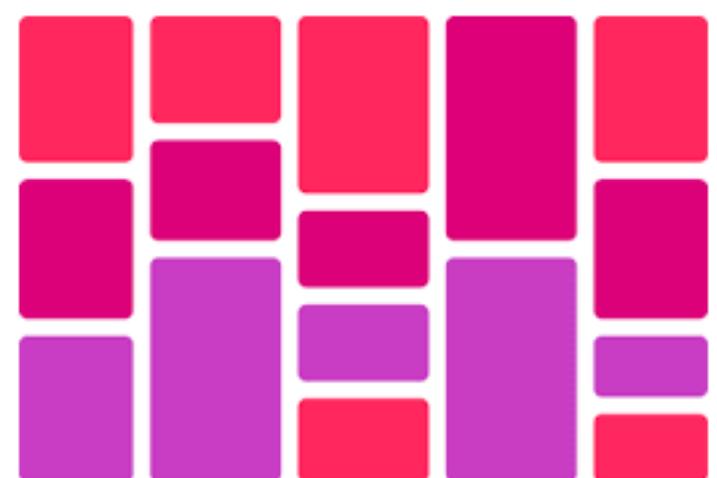
## Holy Grail Layout

**Header, footer add to multicolumn for holy grail**

**Defn does not include navbar or sidebar**

**Collapse to pancake stack in mobile**

For this classic holy grail layout, there is a header, footer, i.e.



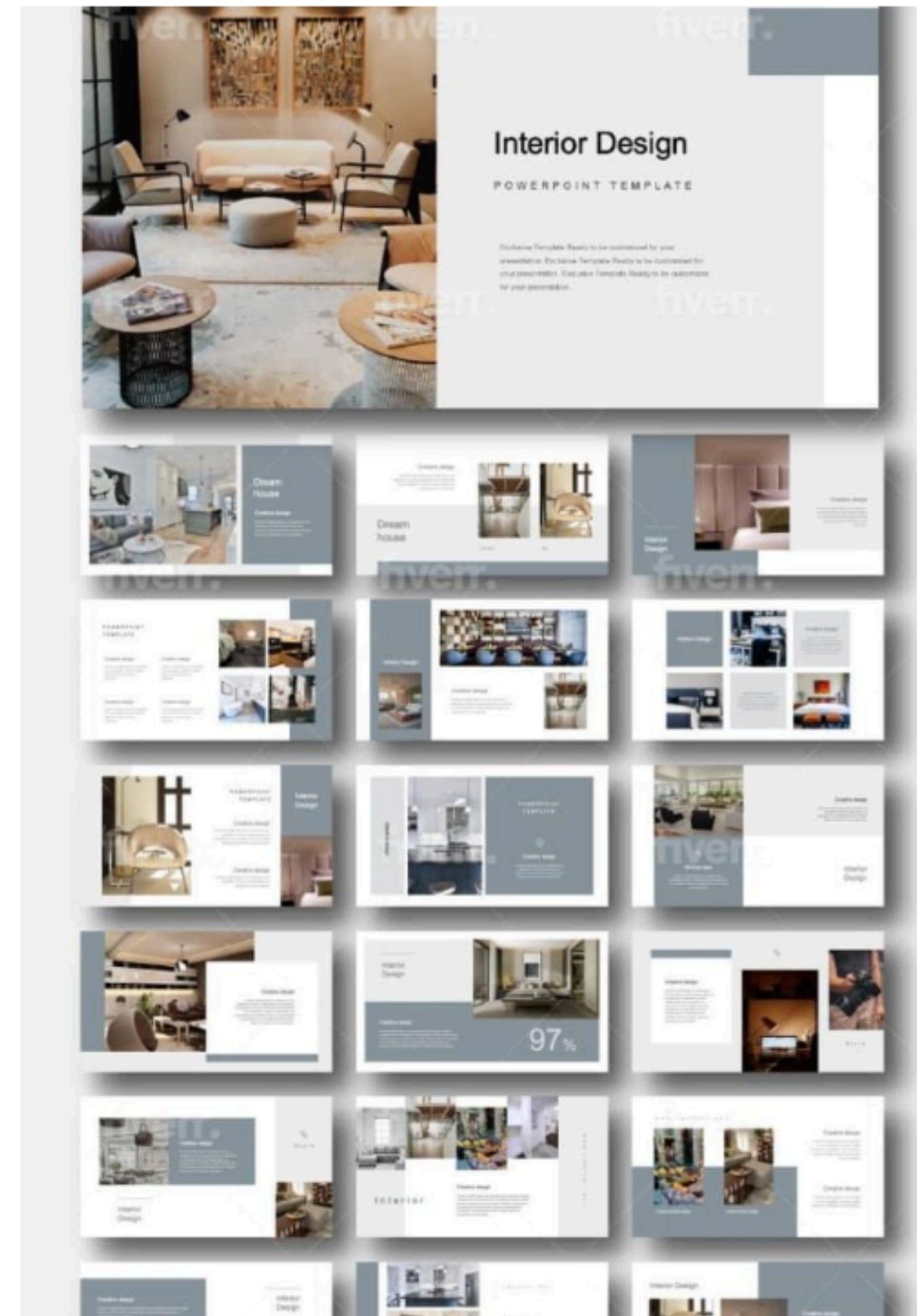
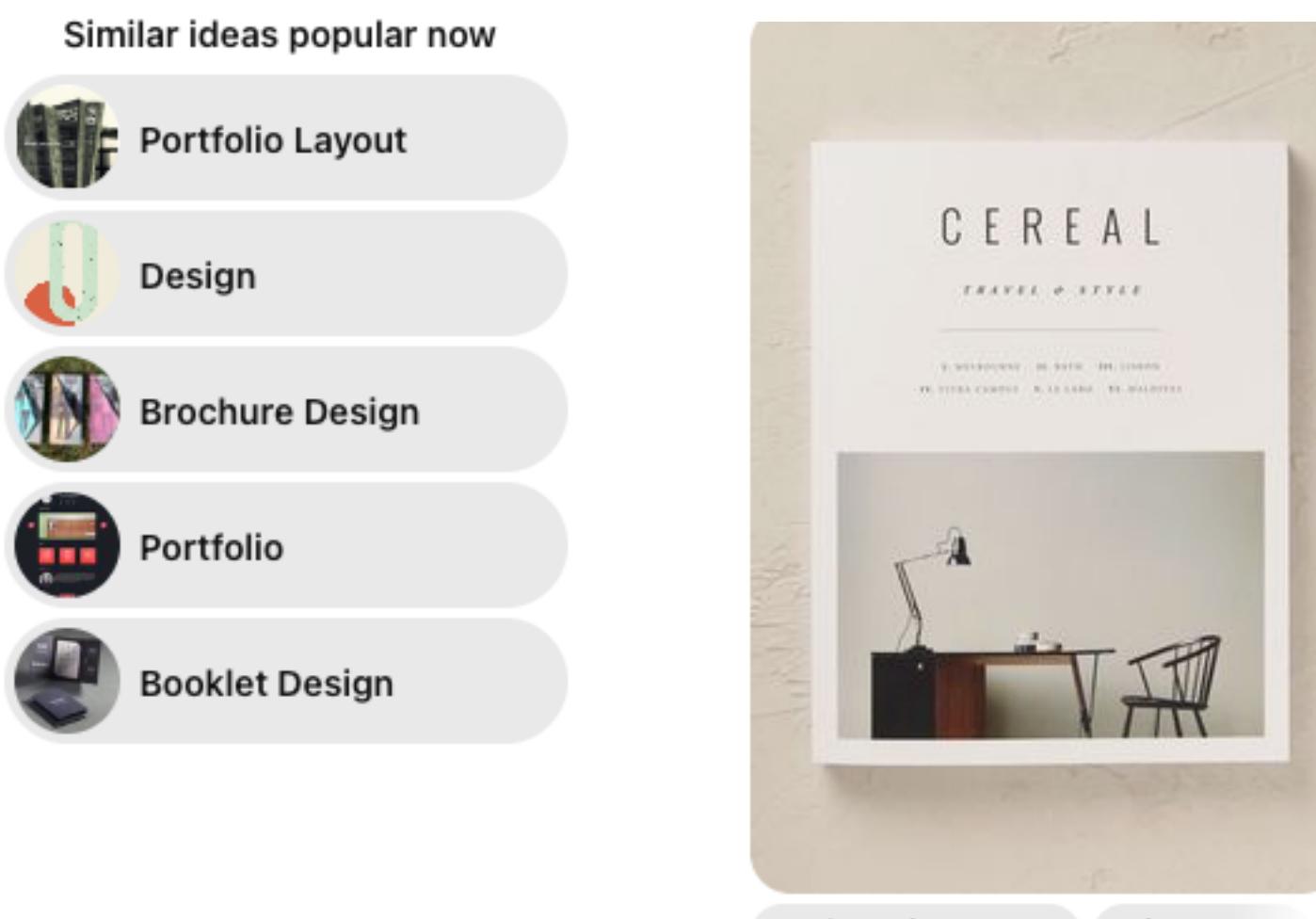
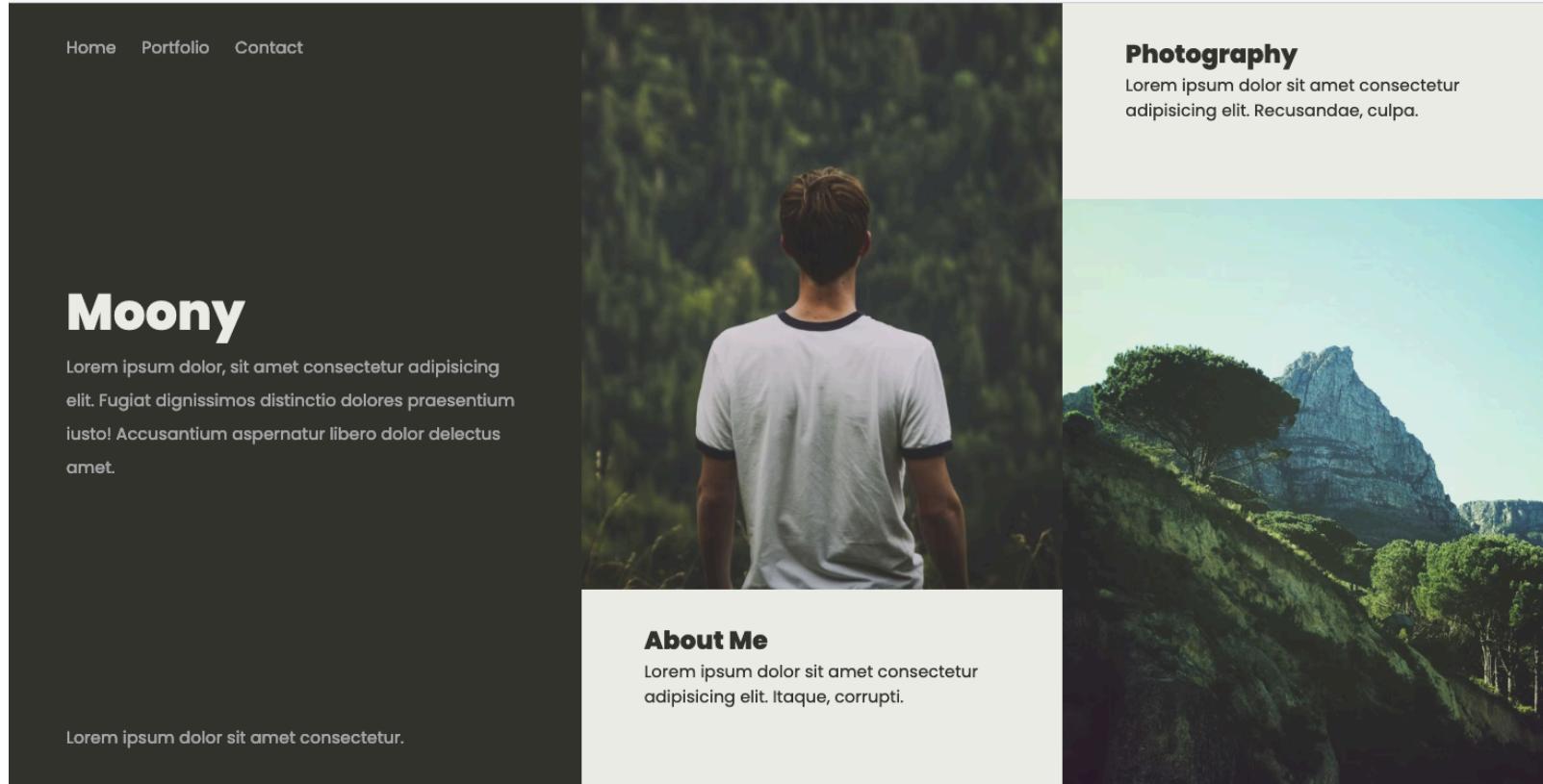
## Masonry Layout

**Hard because all columns uneven**

**Looks like brick wall**

# Design Patterns for layout

Portfolio much more complex. Not a single layout style



## Design Patterns for layout

**12 grid system standard**

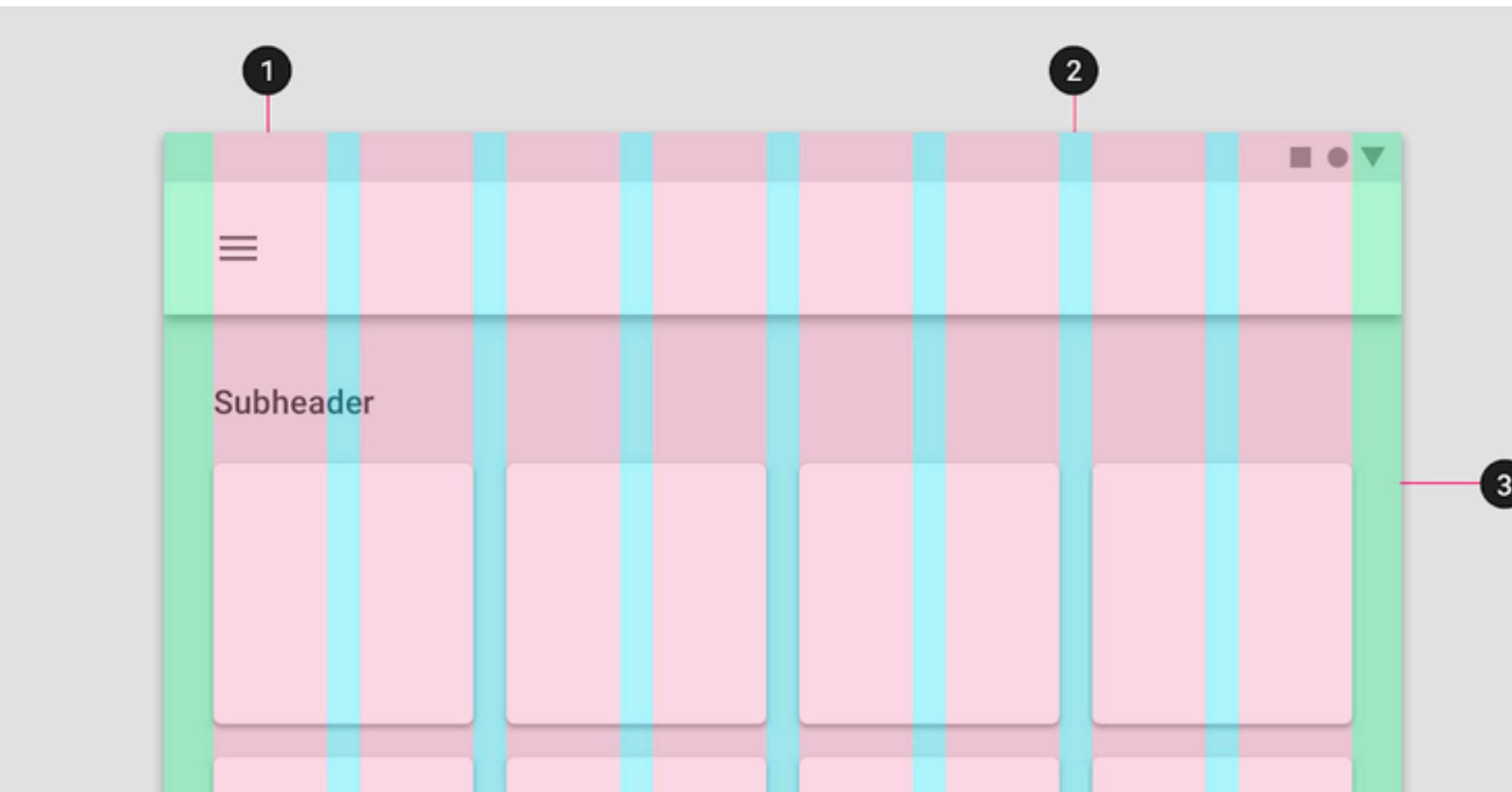
**These systems are responsive by grid 12->8->4**

**Desktop->tablet->mobile**

<https://m2.material.io/design/layout/responsive-layout-grid.html#columns-gutters-and-margins>

### Columns, gutters, and margins

The responsive layout grid is made up of three elements: columns, gutters, and margins.



1. Columns
2. Gutters
3. Margins

**12 : gutter 24px margin:adjust**

**8 : gutter 24px margin:adjust**

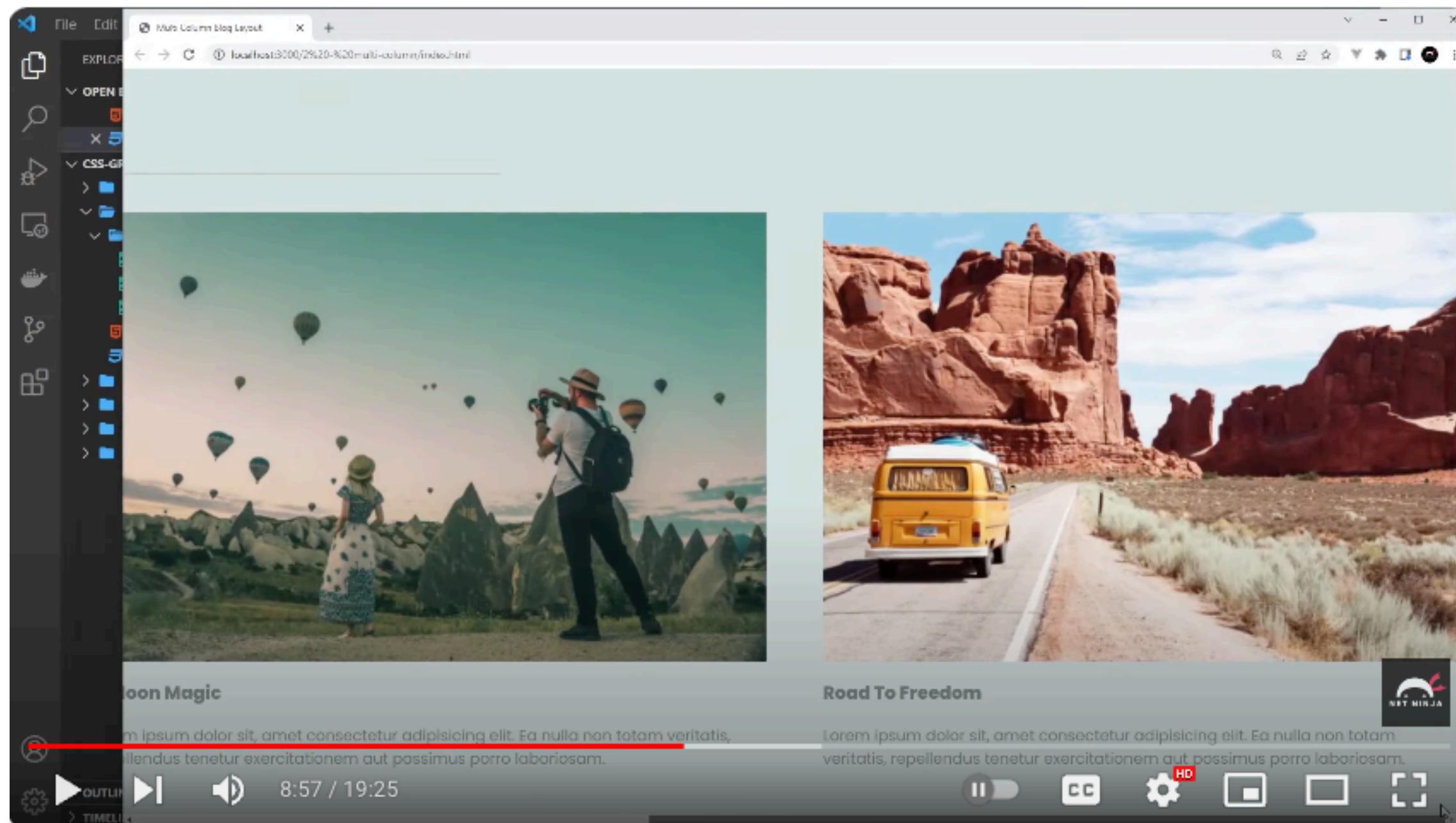
**4: gutter 16px margin:16px**

## Making Multicolumn Responsive

## Debugging patterns important

Couldn't replicate the image  
Overflow problem with max-width:1200px  
Requires setting img=100% of parent Container.

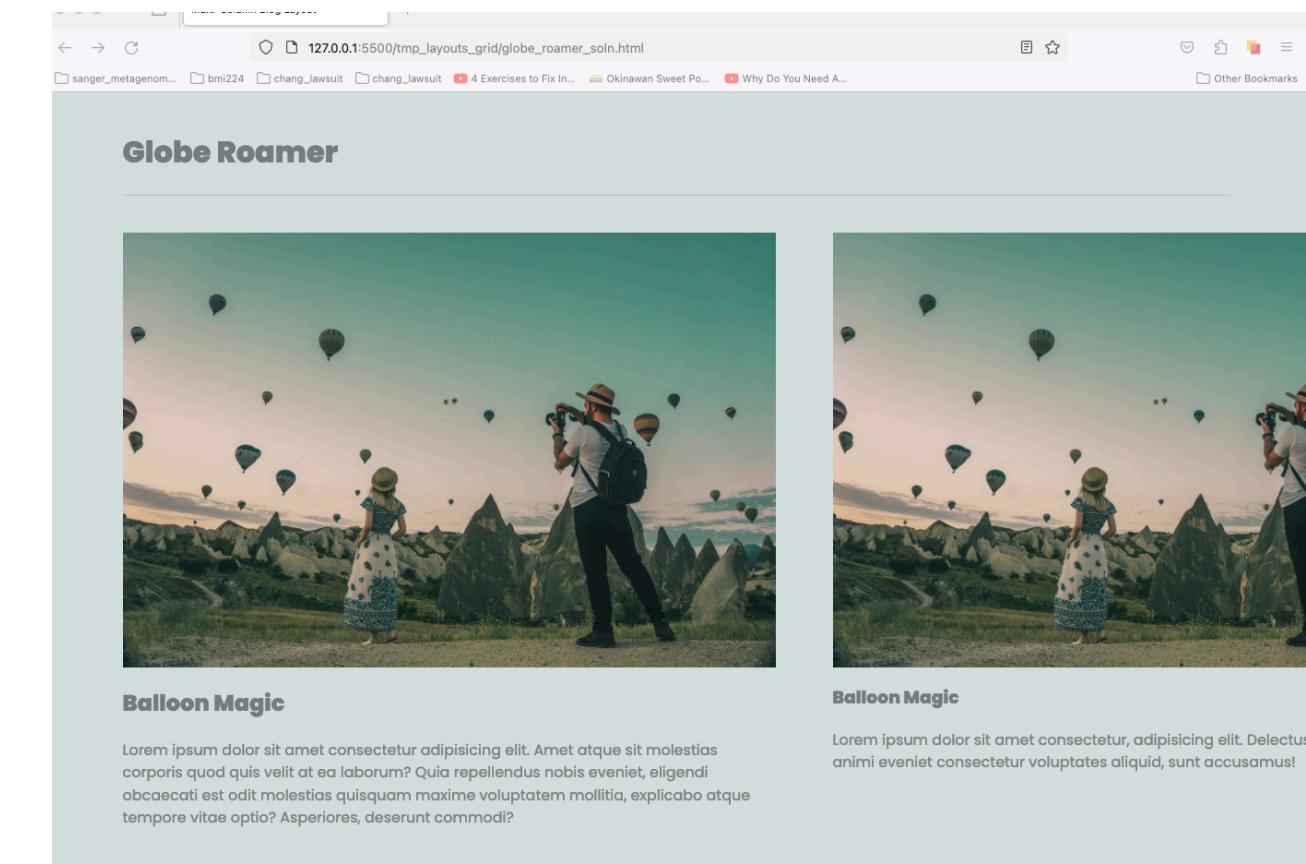
<https://www.youtube.com/watch?v=5cIMvD2ZDo0>



Build Layouts with CSS Grid #2 - Multi-Column Layout

Comment out reset.css

```
/*
img, picture, video, canvas, svg {
  display: block;
  max-width: 100%;
}
```



## Making Holy Grail Responsive

<https://www.youtube.com/watch?v=5cIMvD2ZDo0>

Tricky span 3 not span 5. There are 3 columns not 5.  
Still seems to work at span 5. No runtime error messages

```
grid-container {  
  display: grid;  
  grid-template-columns: 1fr 3fr 1fr;  
  column-gap: 30px;  
  
  header {
```

Add href to li.  
.article span 2 not needed  
Aside and main automatically span 2 after  
Making nav span 3.

The Fog Wall

Categories

- Film & Cinema
- Books & Reading
- Games & Consoles
- Food & Drink
- World News
- Outdoor Living

The Best 5

- Published on: May 15th 2022
- In the category:

```
nav {  
  grid-column: span 3;  
  border-right: 0;  
  border-bottom: 1px solid #ddd;  
}  
nav li {  
  display: inline-block;  
  margin-right: 10px;  
}  
article {  
  grid-column: span 2;  
}  
aside {  
  padding: 16px;  
}
```

# Making Holy Grail Responsive

The screenshot shows a blog post titled "The Best 5 Open World Adventure Games" on a website with a dark background. The title is at the top, followed by a list of categories on the left and publication details on the right. Below the title is a large image of a game scene with a character looking at a city in the fog.

**The Fog Wall**

Categories

- Film & Cinema
- Books & Reading
- Games & Consoles
- Food & Drink
- World News
- Outdoor Living

Published on:  
May 15th 2022

In the category:  
Games &  
Consoles

Written by:  
Mario

Change the li to include href.  
Adding text-decoration:underline  
Not good idea

## The Fog Wall

### Categories

[Film & Cinema](#)   [Books & Reading](#)   [Games & Consoles](#)   [Food & Drink](#)   [World News](#)   [Outdoor Living](#)

# Making Holy Grail Responsive

The Fog Wall

Categories

[Film & Cinema](#) [Books & Reading](#) [Games & Consoles](#) [Food & Drink](#) [World News](#) [Outdoor Living](#)

**The Best 5 Open World Adventure Games**

- Published on:  
May 15th 2022
- In the category:  
Games & Consoles
- Written by:  
Mario



2 col

The Fog Wall

Categories

[Film & Cinema](#) [Books & Reading](#) [Games & Consoles](#) [Food & Drink](#)

[World News](#) [Outdoor Living](#)

**The Best 5 Open World Adventure Games**



1 col

Convert from grid 3 cols to grid 1 cols.  
Not span 3->span 1  
Stays at span 3. convert side borders to  
Top borders

