



Google Developer Student Clubs

Portfolio in 2 Hours

Stand out from the crowd

A GDSC Workshop

```
filterByOrg = filterByOrg ? study.lead_organization === filterByOrg : true
filterStatus = filterByStatus ? study.status === filterByStatus : true
filterMatchStatus = filterMatchStatus ? study.status === filterMatchStatus : true

function filterStudies({ studies, filterByOrg = true, filterByStatus = true, filterMatchStatus = true }) {
  return studies.filter(study => {
    if (!filterByOrg & !filterByStatus & !filterMatchStatus) {
      return true
    }
    if (filterByOrg & !filterByStatus & !filterMatchStatus) {
      return study.lead_organization === filterByOrg
    }
    if (!filterByOrg & filterByStatus & !filterMatchStatus) {
      return study.status === filterByStatus
    }
    if (!filterByOrg & !filterByStatus & filterMatchStatus) {
      return study.status === filterMatchStatus
    }
    if (filterByOrg & filterByStatus & !filterMatchStatus) {
      return study.lead_organization === filterByOrg & study.status === filterByStatus
    }
    if (filterByOrg & !filterByStatus & filterMatchStatus) {
      return study.lead_organization === filterByOrg & study.status === filterMatchStatus
    }
    if (!filterByOrg & filterByStatus & filterMatchStatus) {
      return study.status === filterByStatus & study.status === filterMatchStatus
    }
    if (filterByOrg & filterByStatus & filterMatchStatus) {
      return study.lead_organization === filterByOrg & study.status === filterByStatus & study.status === filterMatchStatus
    }
  })
}
```

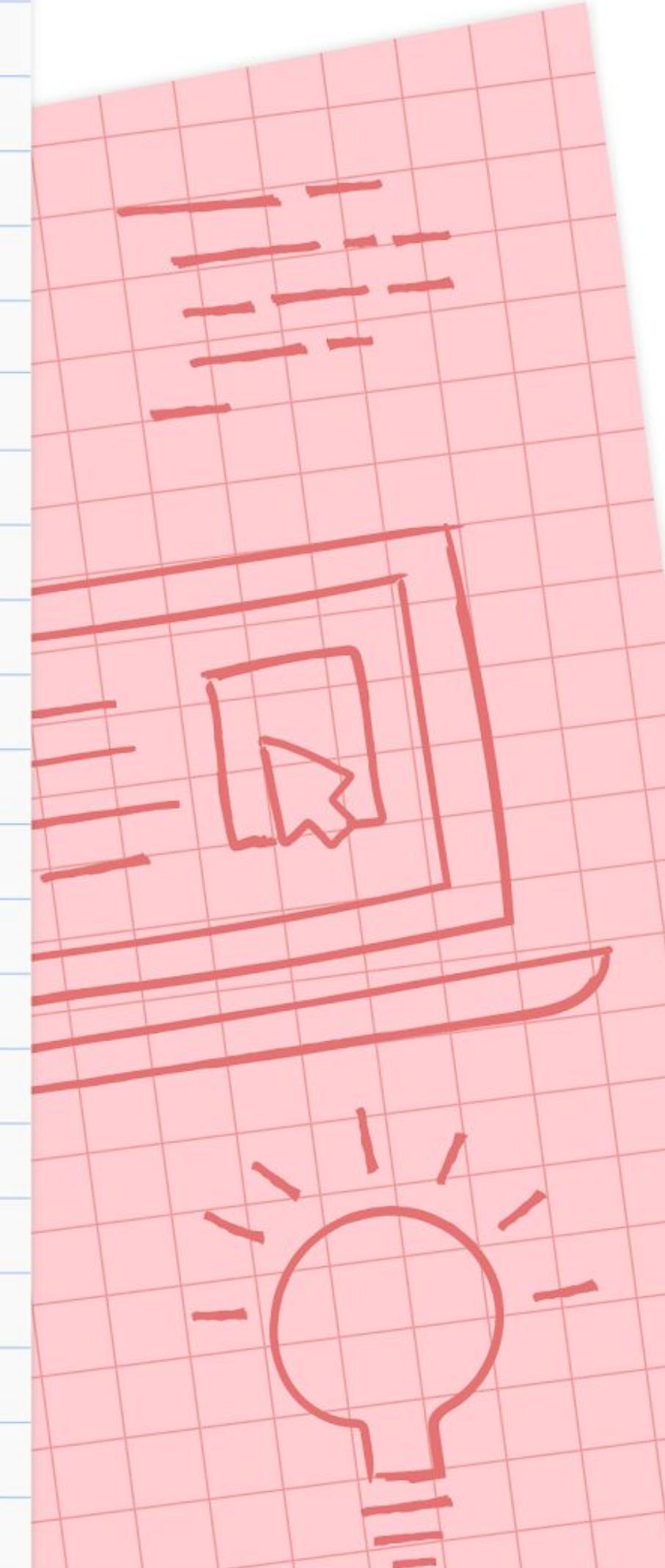


Introduction

Google Developer Student Club

GDSC is an NUS club dedicated to teaching and using Technology to make a difference in the world.

Our Aim is #TechForGood, teaching technology to everyone for the betterment of society!





#TechforGood Workshops & Fireside Chats

Second
Fireside Chat
19 Jan (7:00 PM)



Dec 2021

Digital Trends: From
Pandemic to Endemic
Fireside Chat
15 Dec (7:00 PM)

Power of Cloud
to Connect Your
Community Workshop
22 Dec (8:00 PM)

Jan 2022

Hey Google! Teach me
Computer Vision!
Workshop
18 Jan (8:00 PM)

Portfolio Website
in 2 Hours
Workshop
12 Jan (8:00 PM)

Jan 2022



Hey Google!
Tell me about Natural
Language Processing!
Workshop
26 Jan (8:00 PM)

#TechforGood

Introduction

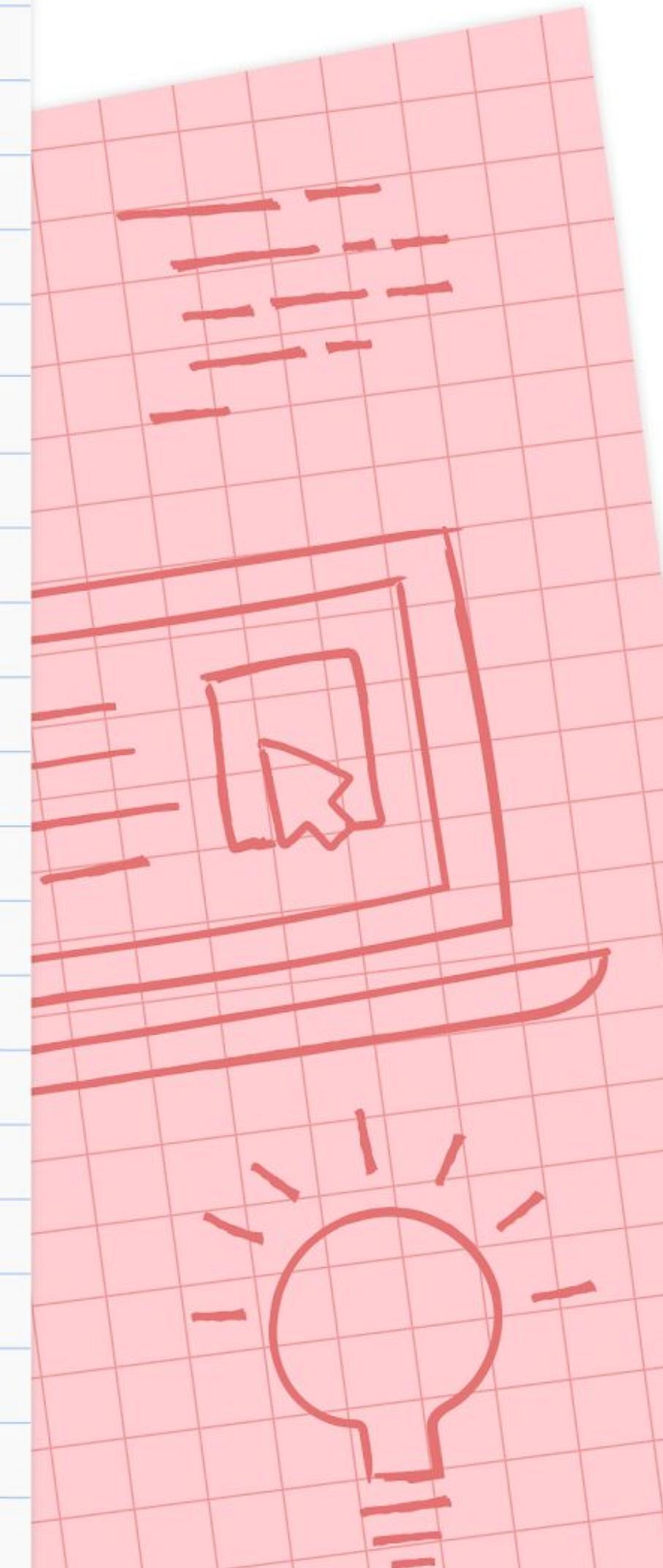
Meet us!



Joseph



Glendon



Why a Personal Portfolio Website?

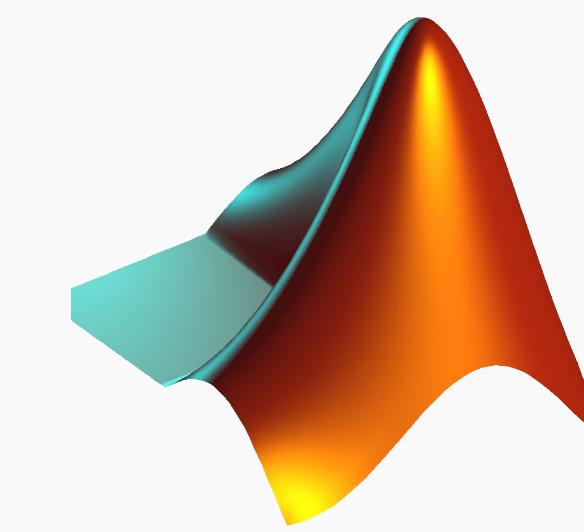
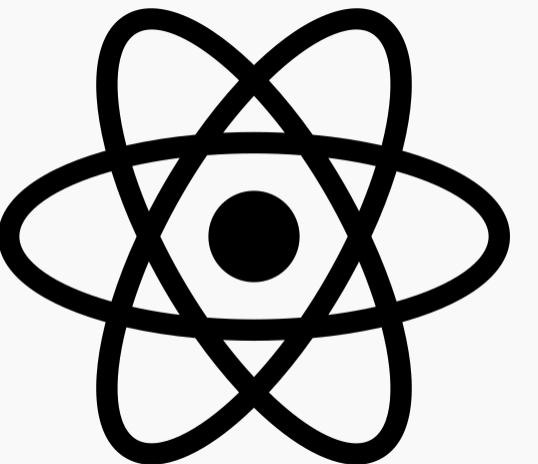
Provide professional information about yourself

- Give more information about yourself to recruiters
 - Summarise your experience and credentials
 - Showcase your work/past projects!
 - Ways to contact you
-
- **Opportunity for you to stand out with Personal Branding!**



A Personal Portfolio Website is useful for almost all Majors!

Tweak your website to showcase your portfolio according to your degree



Ways to Build a Portfolio Website

Depends on your technical expertise

1. No Code Website Builders (eg. WordPress/Wix)

Built using blocks and themes that are beginner-friendly

Handles backend queries such as forms and tags

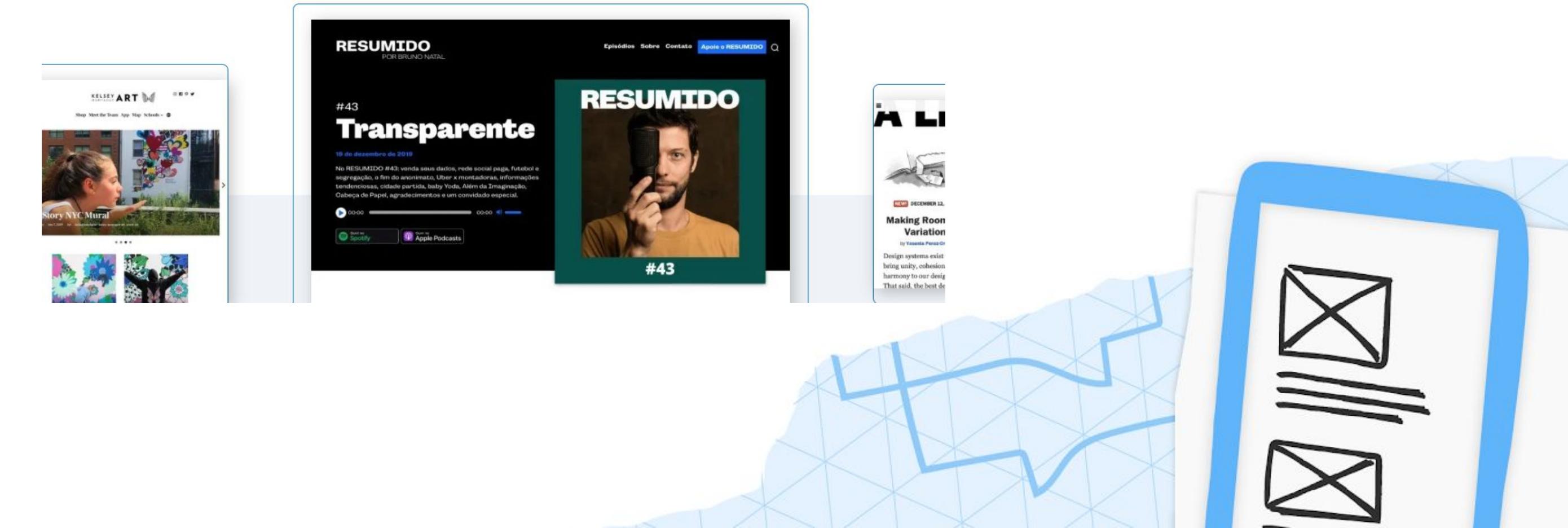
Not entirely customizable



Welcome to the world's most popular website builder,
delivered on the world's fastest
WordPress managed hosting platform.

42% of the web is built on WordPress. More bloggers, small businesses, and Fortune 500 companies use WordPress than all other options combined. Join the millions of people that call WordPress.com home.

[Start your website](#)



Ways to Build a Portfolio Website

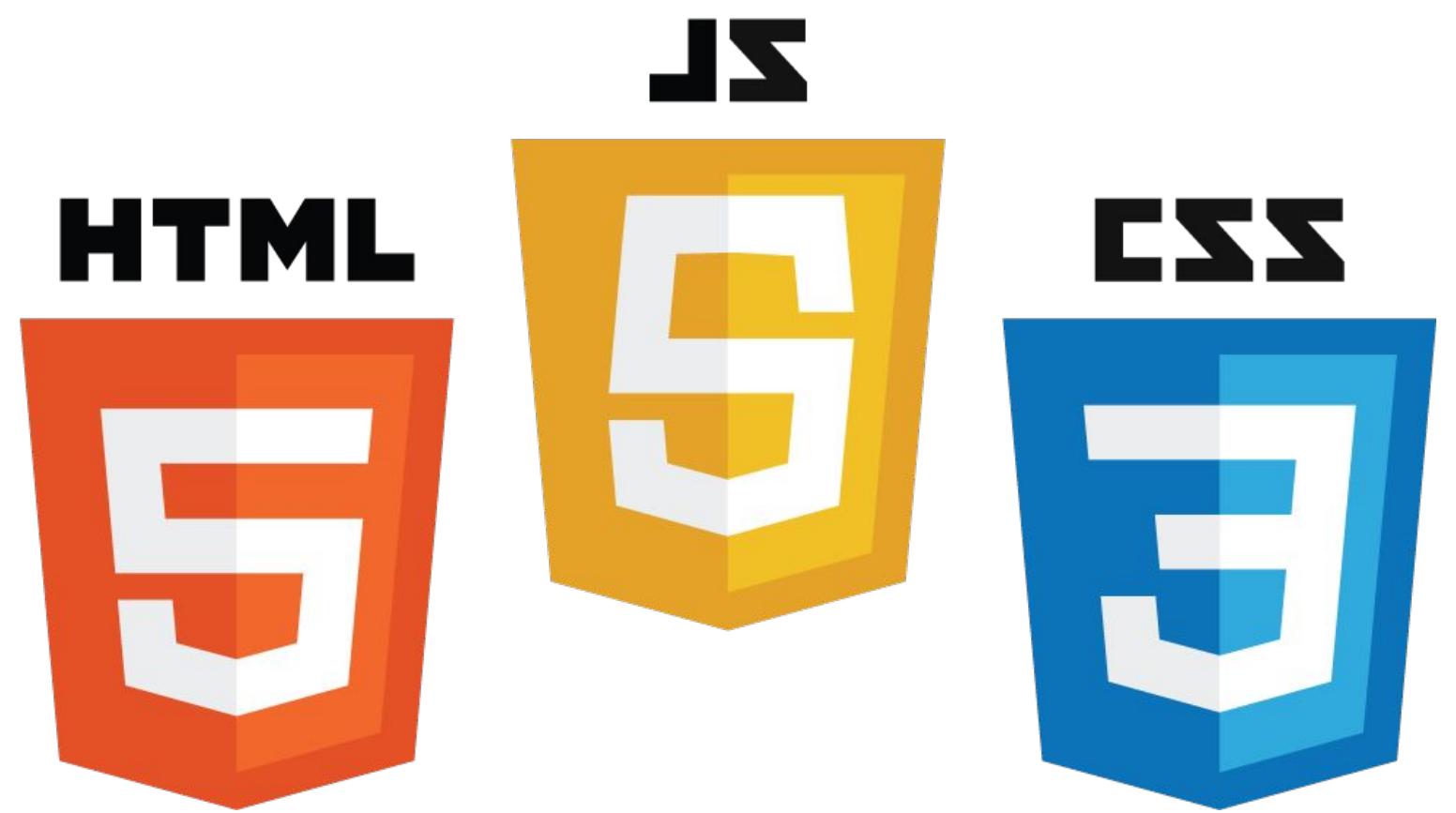
Depends on your technical expertise

2. Static Website

Website with fixed content to display

Built using only HTML, CSS and JS - only interactions are hyperlinks

Easy to code and build but cannot handle backend queries (eg. mailing option, templates of data)



Ways to Build a Portfolio Website

Depends on your technical expertise

3. Dynamic Website

Website that can display different content to users

Provides User Interaction with information on the website

Can easily update and modify content dynamically (Useful for form websites or blogs)

Much harder and complicated to code



This Workshop

Building a Static Website

- Friendly for beginners to coding/non-coders
- Robust enough for creativity and personal branding
- Personal Portfolio does not require much modifying of content short-term
- Easily expanded upon this 2-hour workshop



HTML/CSS Recap

Quick Crash Course

```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.category === filterByCategory;
    }
    if (filterByOrg) {
      return study.org === filterByOrg;
    }
    return true;
  });
}
```

Quick Descriptions

HTML (Hypertext Mark-up Language) - Used to provide the structure for the website page layout
Eg. Headings, Lists, Images

CSS (Cascading Style Sheet) - Used to design the presentation of the website elements
Eg. Color, Size, Font



HTML Page Structure

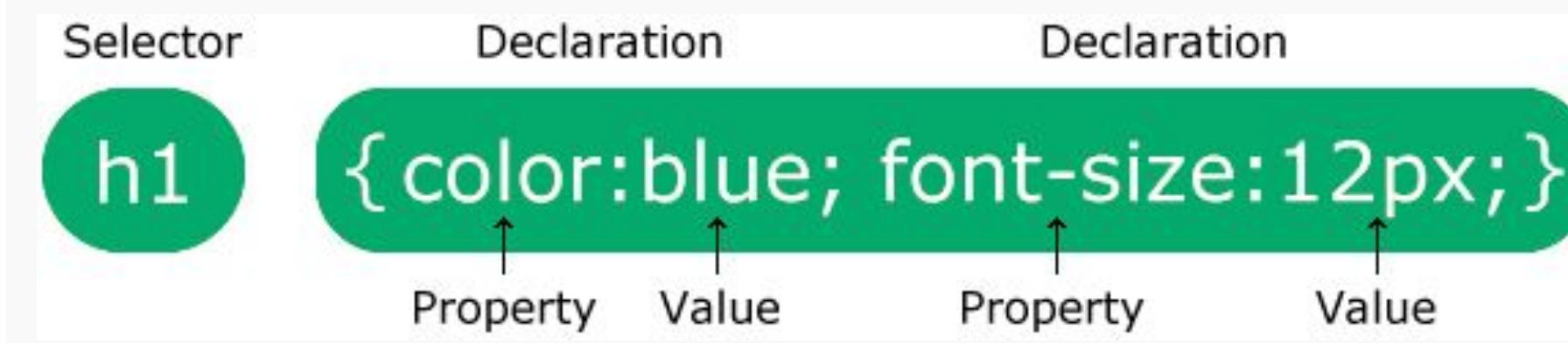
Below is a visualization of an HTML page structure:

```
<html>  
  <head>  
    <title>Page title</title>  
  </head>  
  
  <body>  
    <h1>This is a heading</h1>  
  
    <p>This is a paragraph.</p>  
  
    <p>This is another paragraph.</p>  
  </body>  
</html>
```

Image taken from W3Schools



```
body {  
    background-color: lightblue;  
}  
  
h1 {  
    color: white;  
    text-align: center;  
}  
  
p {  
    font-family: verdana;  
    font-size: 20px;  
}
```



Images taken from W3Schools



HTML:

```
<h1>HI I'M JACOB TAN!</h1>
```

HI I'M JACOB TAN!

CSS:

```
h1 {  
  color: #227582;  
  font-weight: 700;  
}
```

HI I'M JACOB TAN!



Bootstrap 5

The CSS Framework we will be using

- Simple CSS Framework we can use to build our website
- In-built Grid System that allows for easy planning
- Compatibility with Different browsers and screen sizes in mind
- Components that we can easily use to build and customise our website

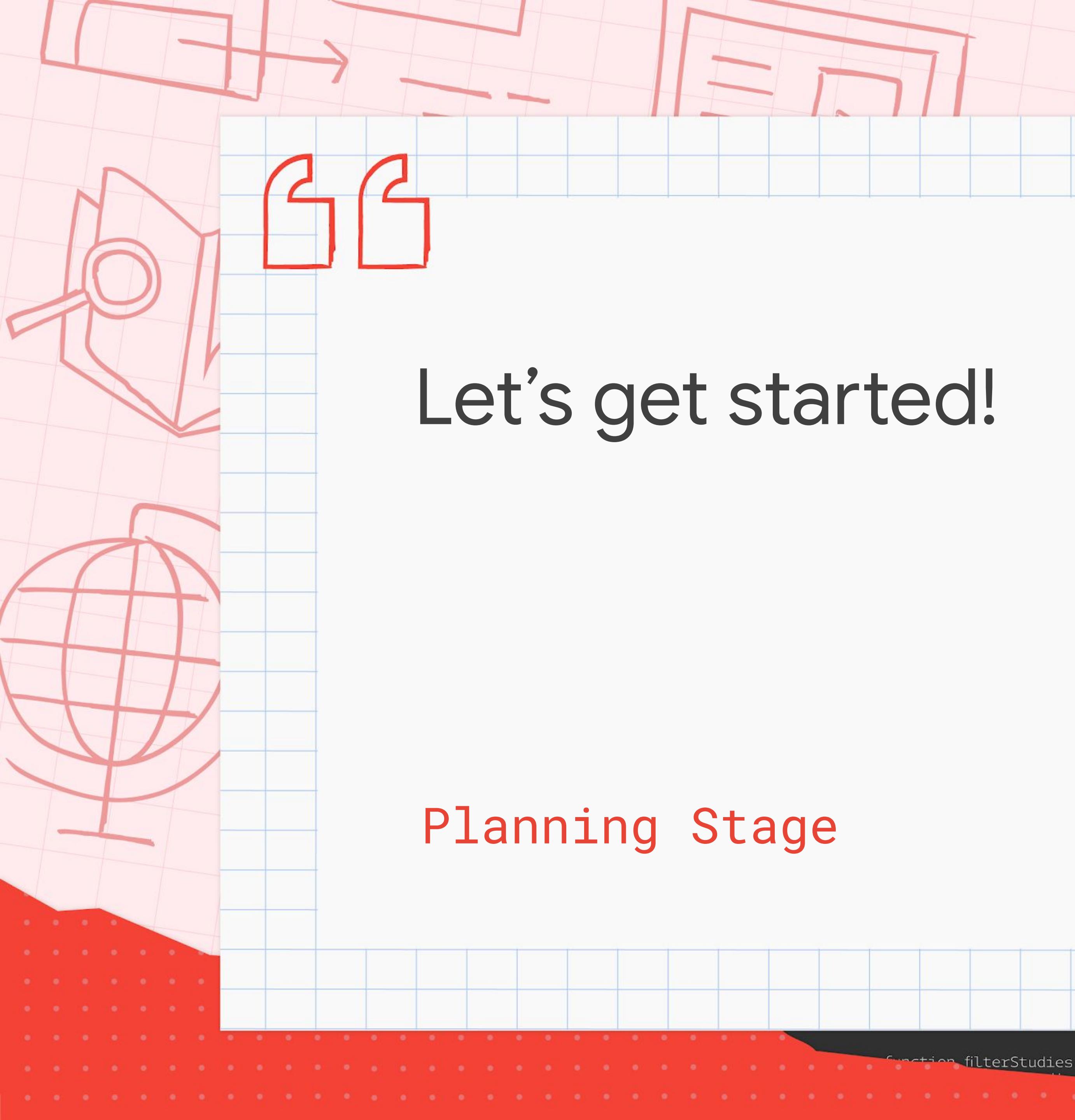


Bootstrap's Grid System

12-Column system used for building websites

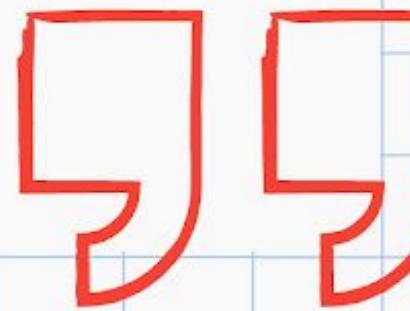
The image shows a website layout demonstrating Bootstrap's 12-column grid system. The layout is structured as follows:

- Header:** A top navigation bar with four items: "About", "Experience", "Projects", and "Contact".
- Hero Section:** A large green rectangular area containing the text "HI I'M JACOB TAN!" in white, bold, sans-serif font.
- Text Content:** Below the hero section, there are three lines of text:
 - I am currently a Year 2 Computer Science student at NUS.
 - Nothing excites me more than making projects to help people!
 - Scroll down to learn more about me!
- Profile Picture:** A circular portrait of a young man with glasses, wearing a suit and holding an orange mug.
- Sidebar:** A vertical sidebar on the far right featuring a green icon bar with various symbols like a gear, a person, and a chart.



Let's get started!

Planning Stage

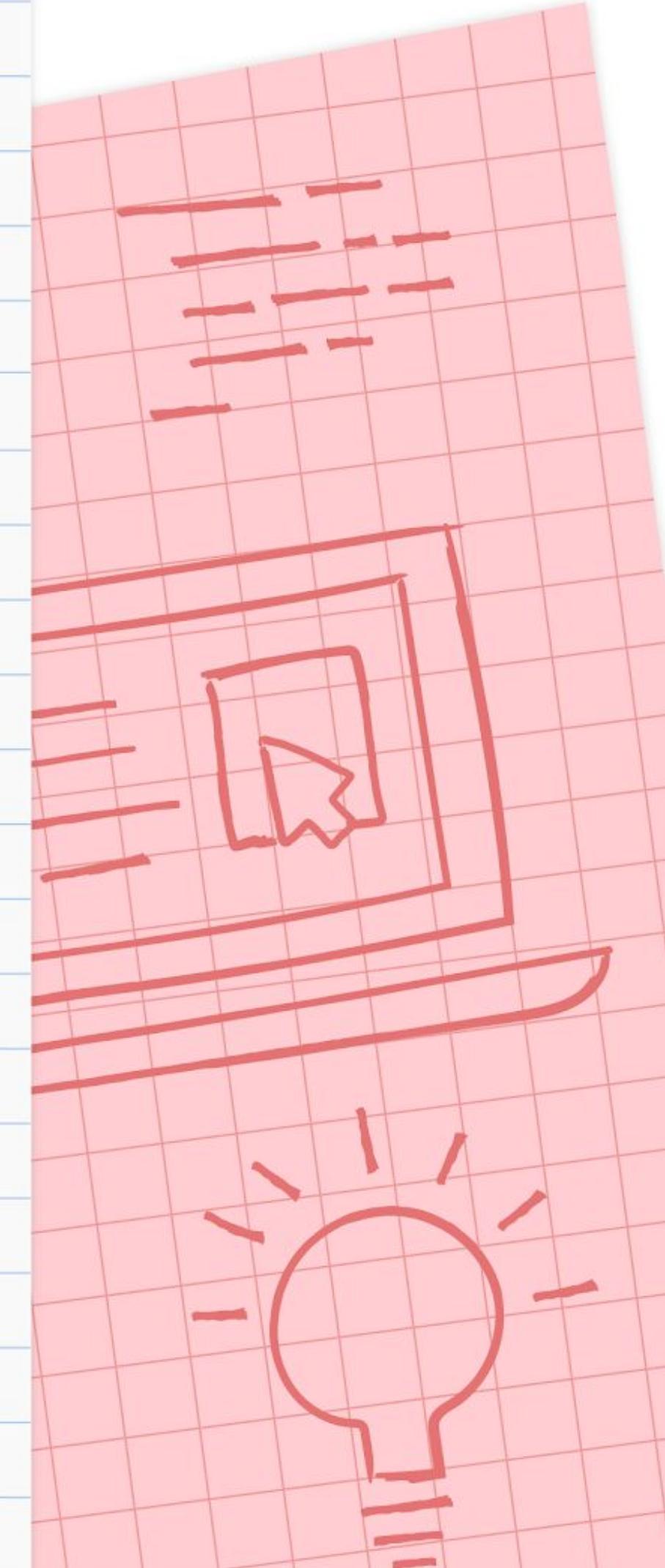


```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.orgs.some(org => org === filterByOrg);
    }
    return true;
  });
}
```

Branding & Customisation

How to Stand out

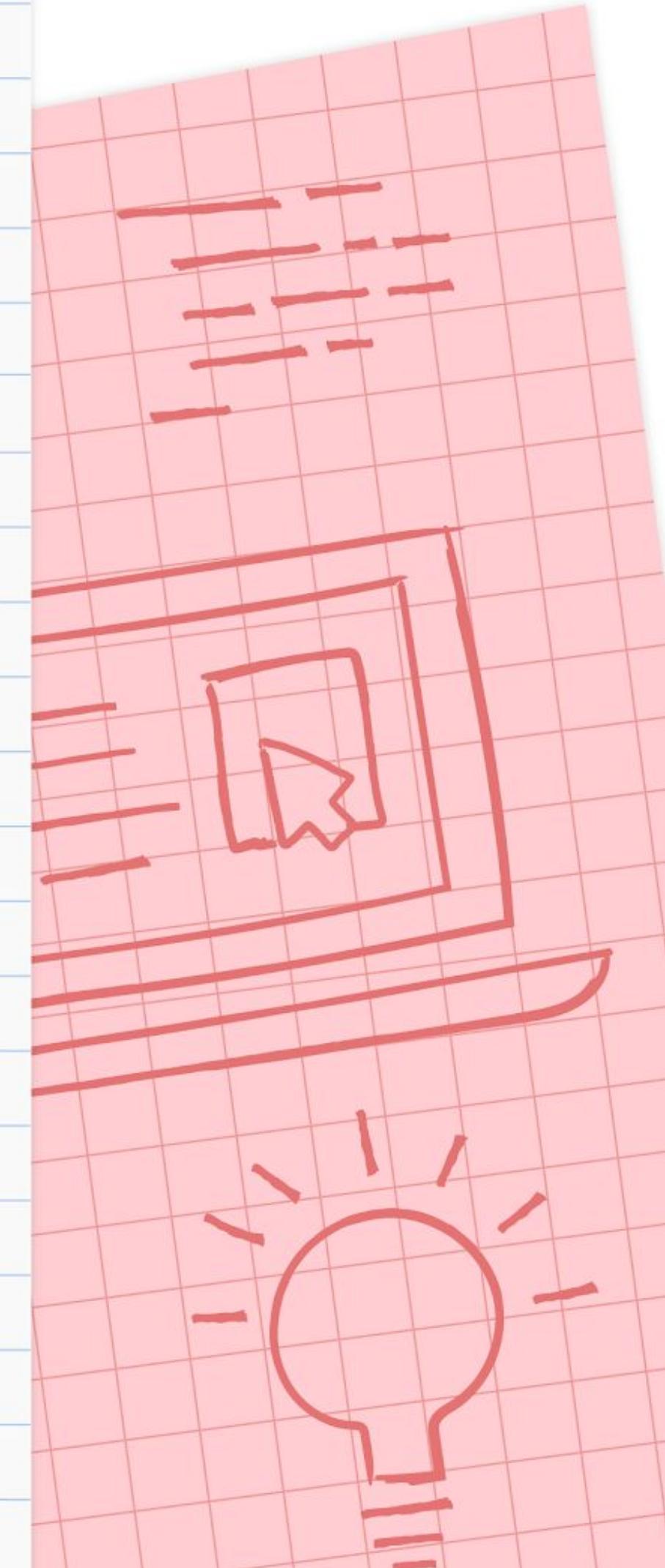
- Typography (Google Fonts)
- Colour Scheme (Coolors)
- Layout/Mockup (Design on your own/Find templates online)



Fonts

Pick your own free fonts from [Google Fonts](#)

Source Sans Pro



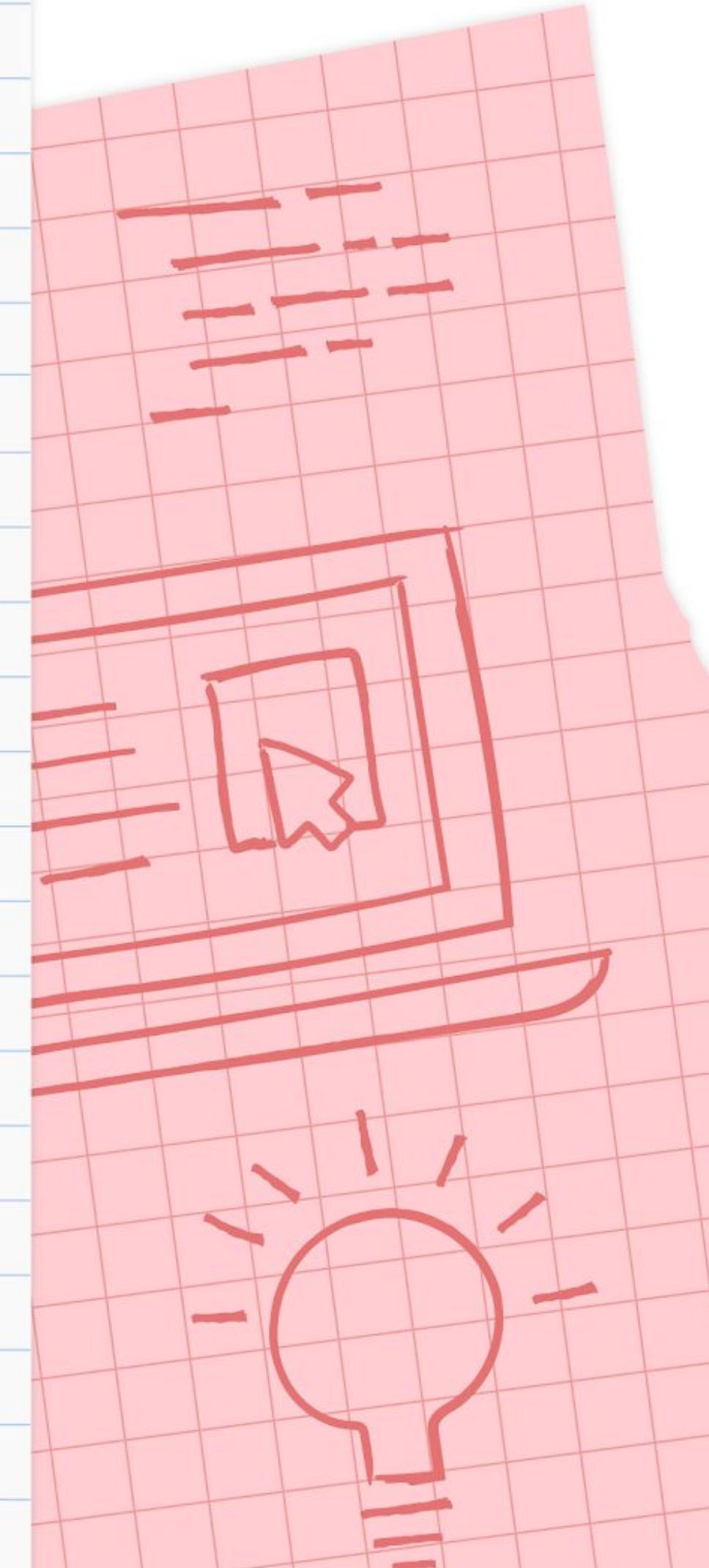
Colour Scheme

Personalised themes for your website

We'll be using a 2-colour scheme

**Strong Header colour (#227582) +
Light Background colour (#fffff7)**

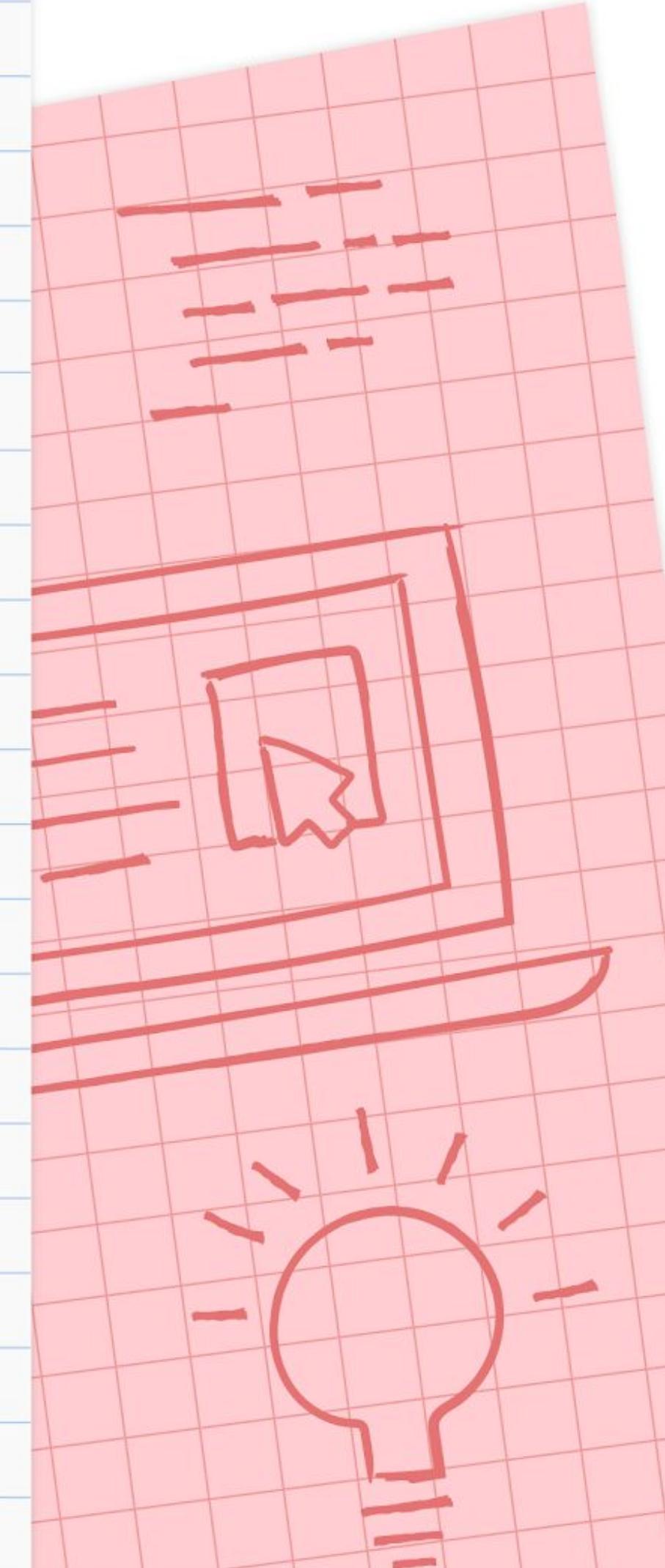
Generated with [Coolors](#)



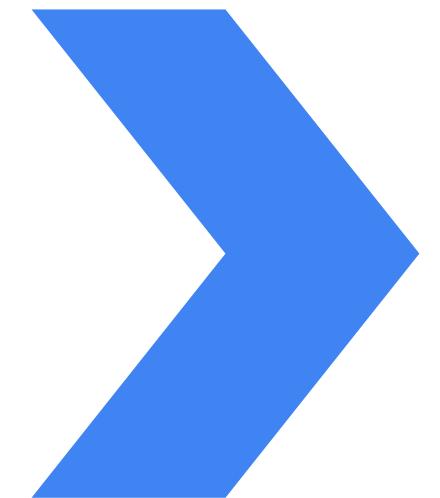
Our Demo Website

A rough Layout of what we will be doing

- Navigation Bar
- Intro Section
- About
- Experiences
- Projects
- Contact us



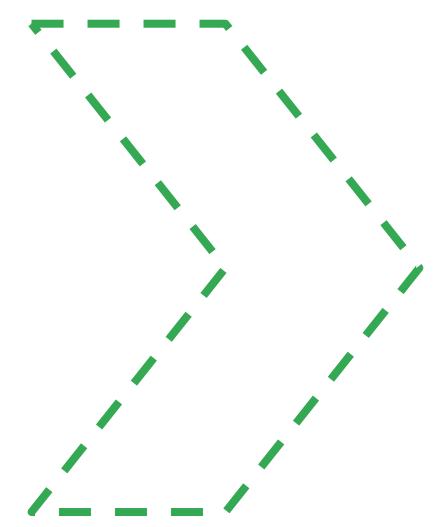
Resources for you!



1) [Github Repository \(Code of our sample website\)](#)



2) [Sample Website \(for reference\)](#)



3) [Dropbox \(Images used\)](#)



Live Coding!

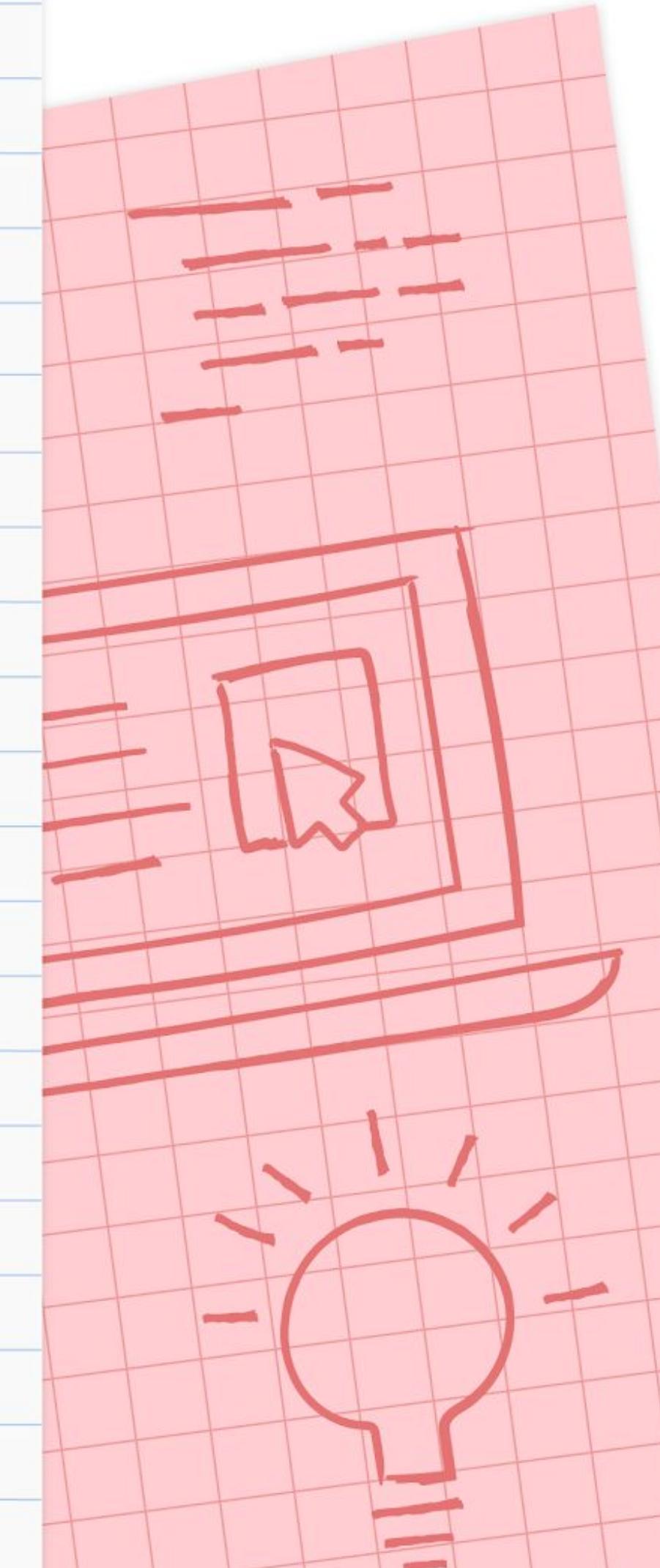
You can follow along as we code~!

```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization === filterByOrg);
    }
    return true;
  });
}
```

Disclaimer!

We are not making an entire website from Scratch in this workshop!

- Ultimately, everybody's portfolio website is unique
- We are not showing you how to build OUR website
- This workshop will introduce you to the tools at your disposal as well as the thought process behind designing your own website!
- We will teach some properties of HTML and CSS and also how to apply these to style your website





Have Questions later?

Feel free to ask them in the Zoom Chat later!

We'll dedicate time to answer some questions in between each section!

```
const filterByOrg = study => study leadOrganization === filterByOrg
const filterStatus = filterByStatus ? study.status === filterByStatus : true
const filterMatchStatus = matchStatus ? study.status === matchStatus : true

function filterStudies({ studies, filterByOrg, filterByStatus, matchStatus }) {
  return studies.filter(study => filterByOrg(study) & filterStatus(study) & filterMatchStatus(study))
}
```



Section 0: Setting Up

[Visual Studio Code](#)

[Bootstrap Documentation](#)

[Google Fonts](#)

[Colour Scheme \(Coolors\)](#)

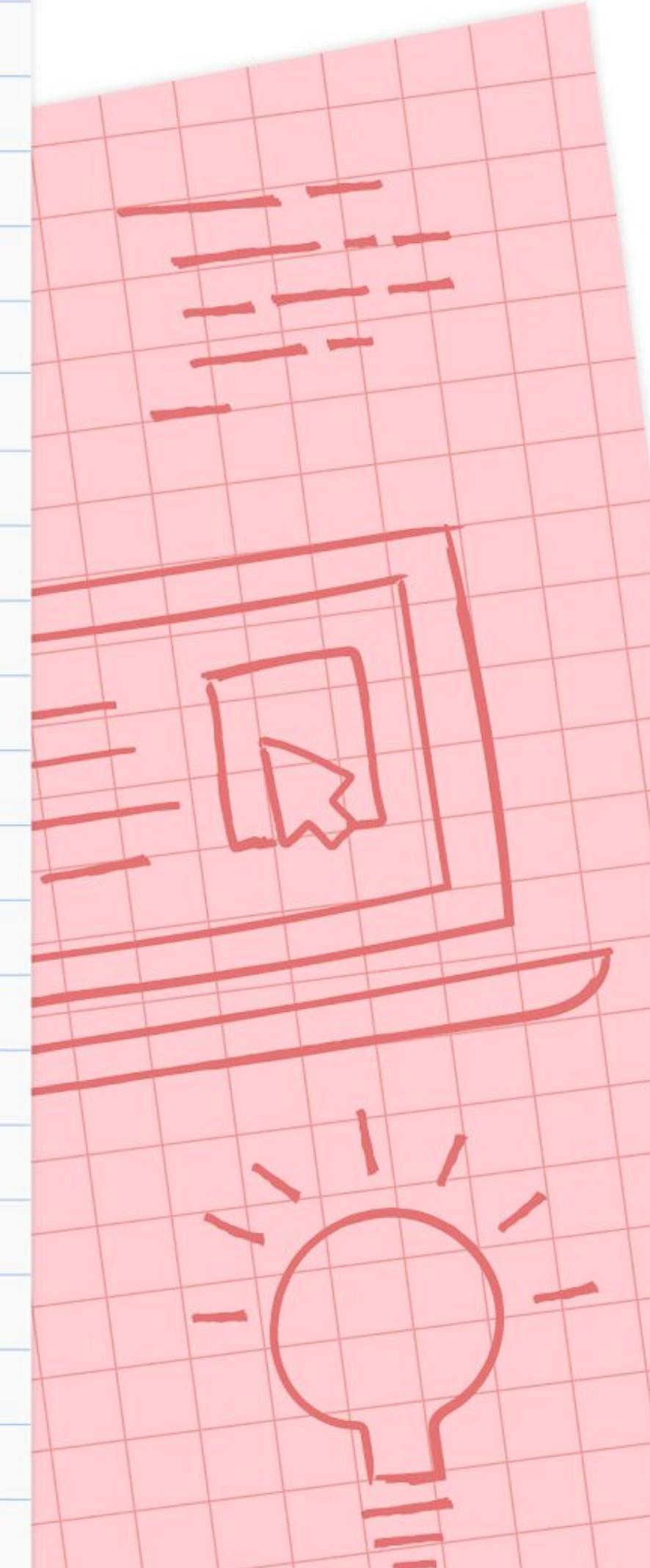
```
filterByOrg = filterByOrg ? study leadOrganization === filterByOrg : true  
filterStatus = filterByStatus ? study status === filterByStatus : true  
filterMatchStatus = filterMatchStatus ? study matchStatus === filterMatchStatus : true  
  
function filterStudies({ studies, filterByOrg, filterByStatus, filterMatchStatus }) {  
  return studies.filter(study =>  
    filterByOrg  
    &amp; filterStatus  
    &amp; filterMatchStatus  
  );  
}
```

Visual Studio Code



Text-editor

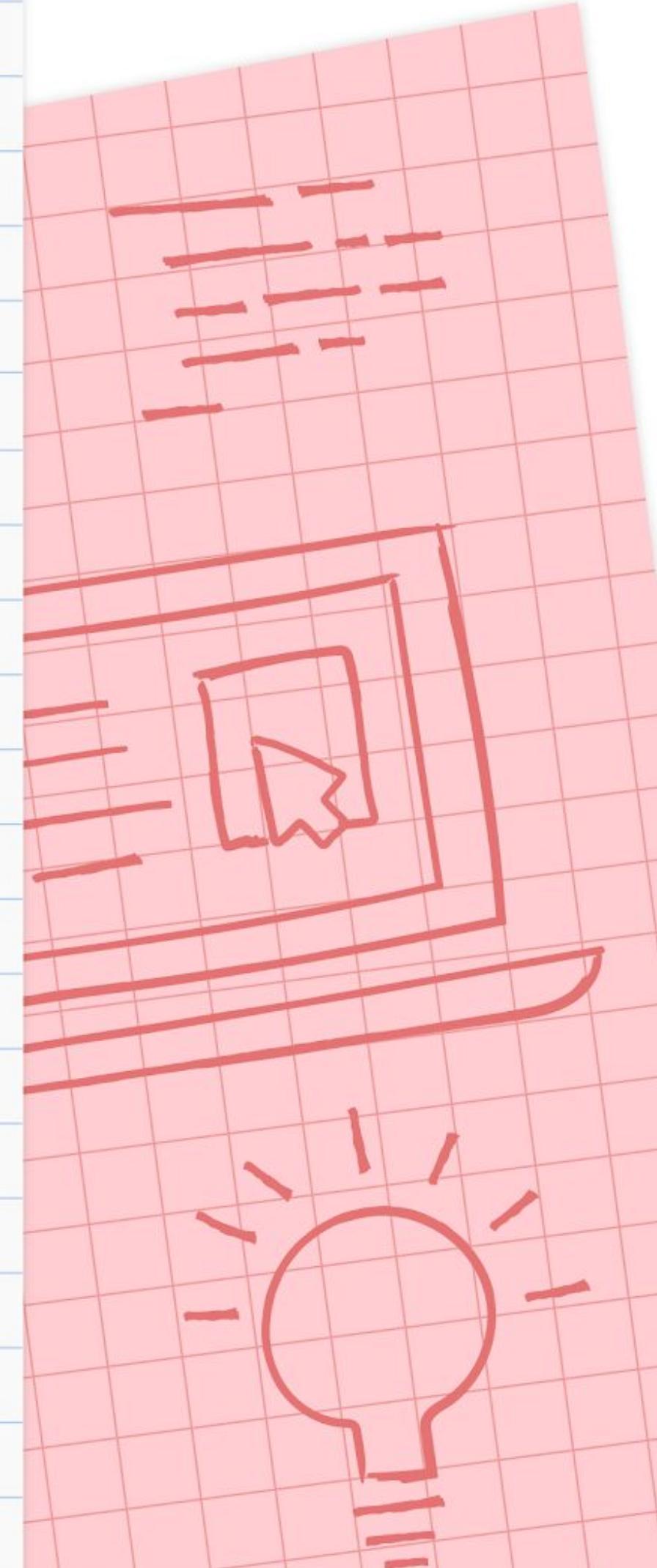
- Can be used for any programming language
- Available on all platforms
- Powerful extensions
- **Live Server Extension:** Used to see how our webpage looks like as we edit our code



Index.html

Where our main content will be written in

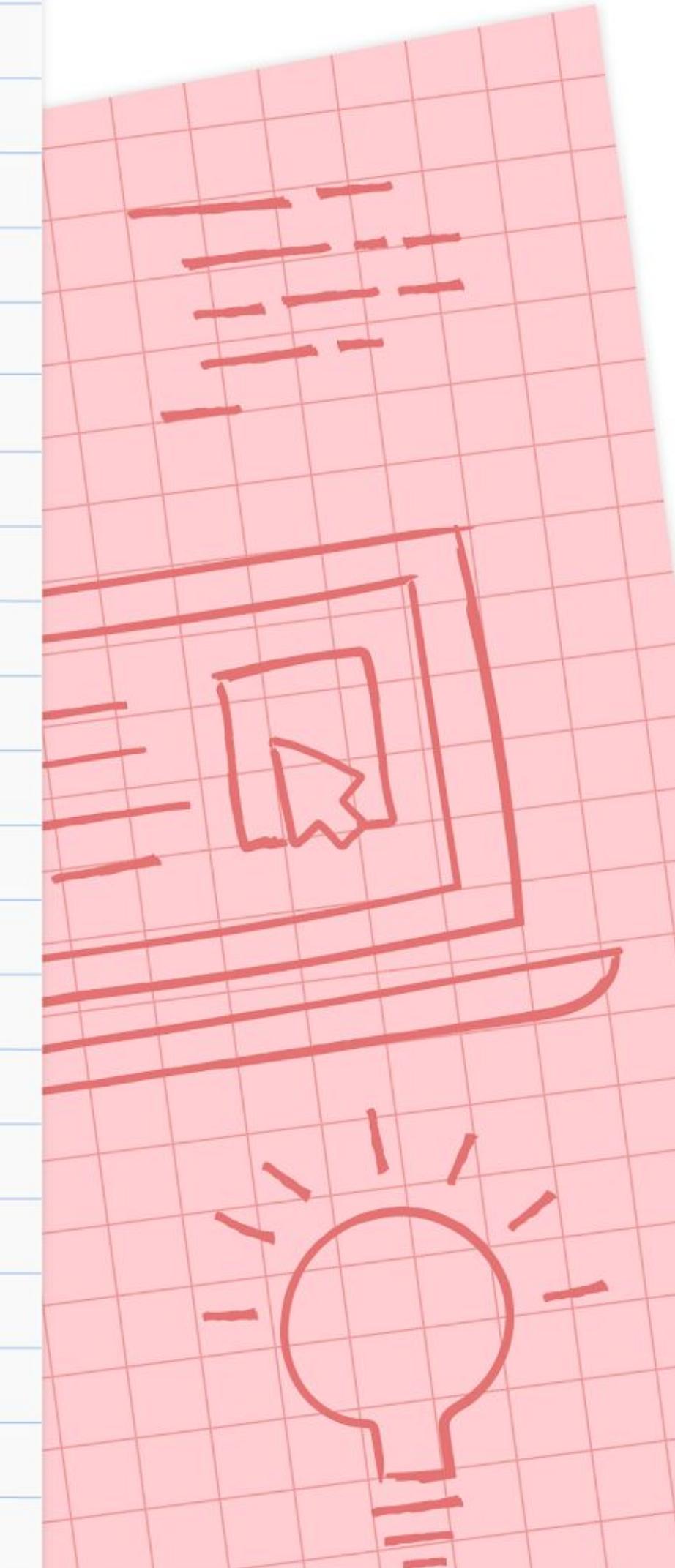
- Used to “describe” the website layout and content
- Boilerplate template from Bootstrap
- <head>: Technical Information about the file (title of the website, style of the website etc)
- <body>: Main content of the website



Style.css

Where we can further style the elements

- Bootstrap already has a default CSS format for each object (eg. Font size, font etc)
- **If we want to edit the appearance, we can edit it in a style.css file and link it to our html file**
- For this workshop, we will be customising some elements of the website on our own for demonstration
- You can further customise your website elements on your own/choose to stick with Bootstrap!



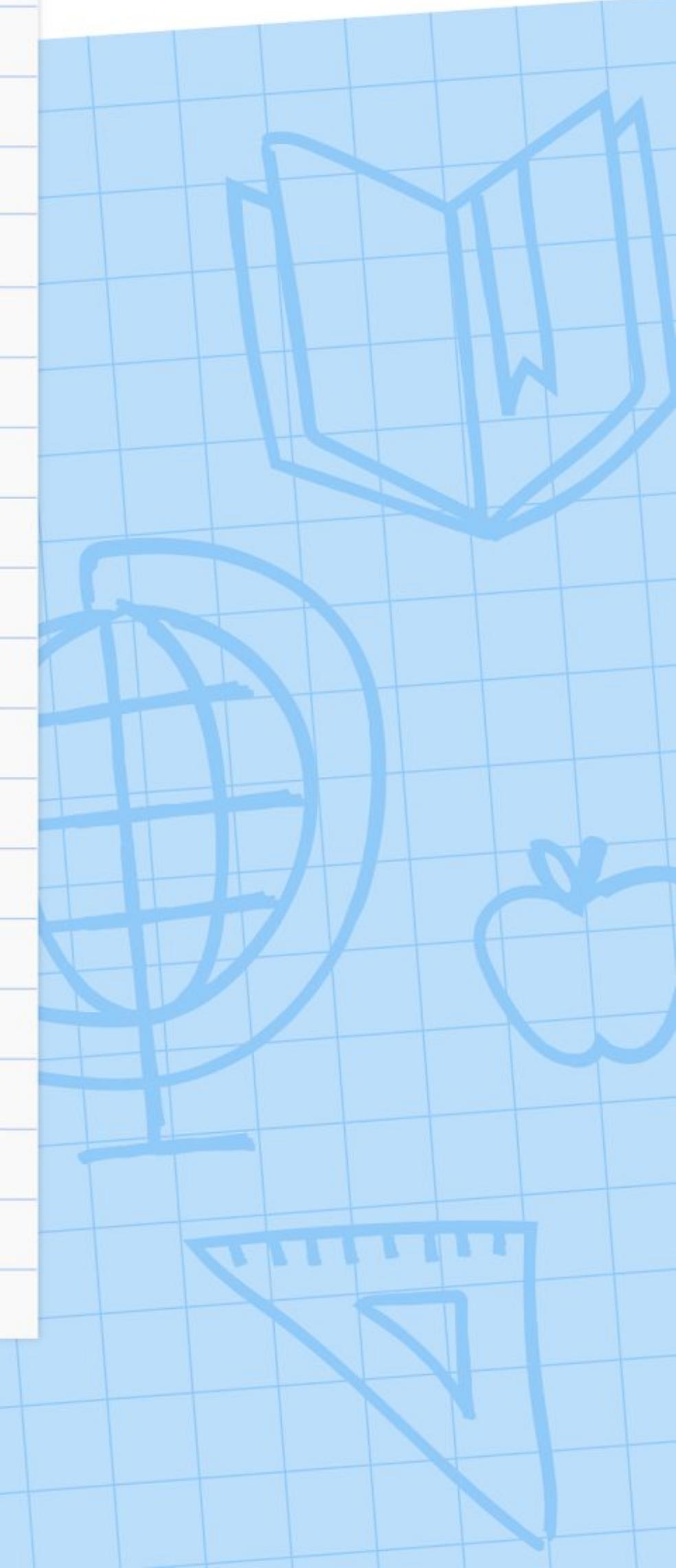


Section 1: Navbar

Organise your contents into sections

```
filterByOrg = filterByOrg ? study.teal_organization === filterByOrg : true
filterStatus = filterByStatus ? study.status === filterByStatus : true
filterPatchStatus) {
  return study;
}

function filterStudies({ studies, filterByOrg =
  filterByOrg ? studies.filter(study => study.teal_organization === filterByOrg) : studies,
  filterByStatus =
  filterByStatus ? studies.filter(study => study.status === filterByStatus) : studies,
  filterPatchStatus =
  filterPatchStatus ? studies.filter(study => study.patchStatus === filterPatchStatus) : studies
}) {
  return studies;
}
```

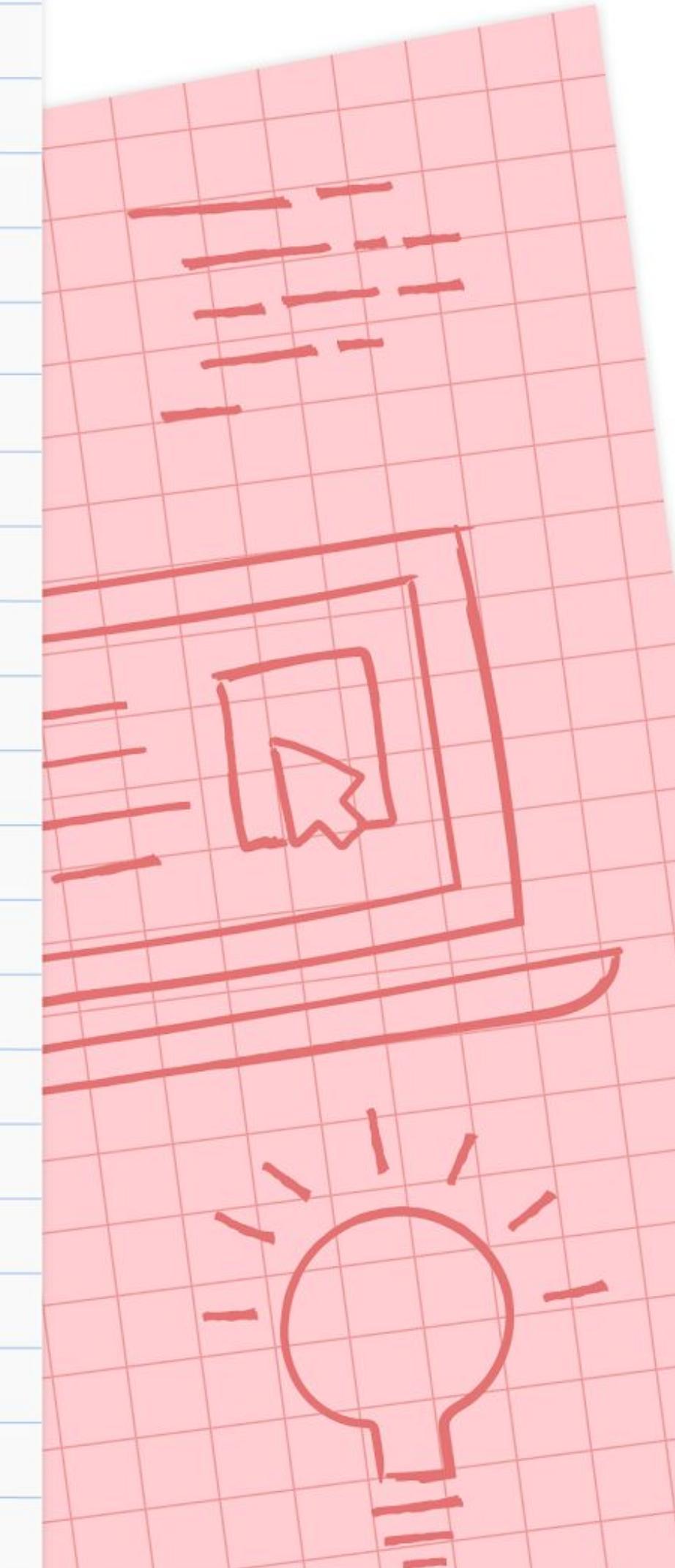


Jacob.**About Experience Projects Contact**

Navigation Bars

- Split your website into sections
- Each section is accessible immediately by clicking the text on the navigation bar
- Details your contents into organised sections for employers
- Choice of sections is up to you!

We will be using Bootstrap's Navbar component for simplicity!





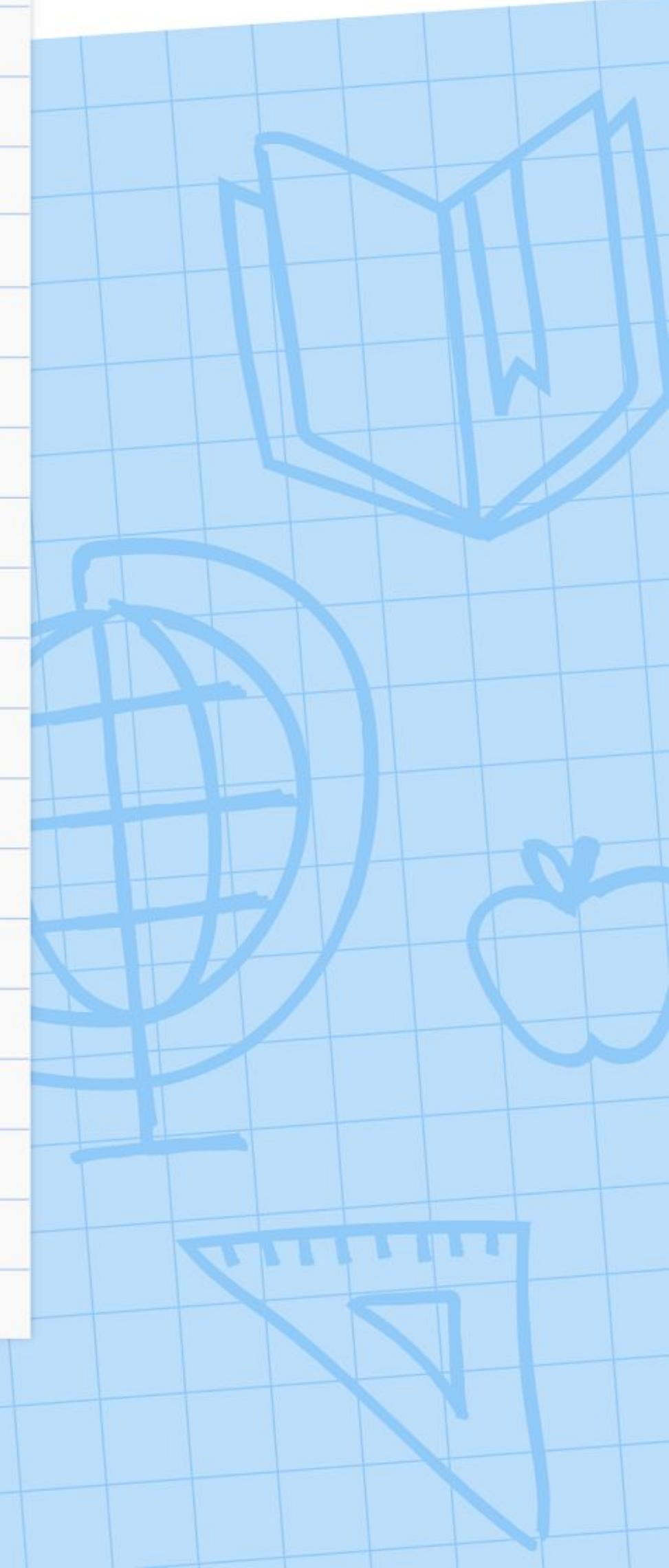
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Section 2: Cover Section

Introduce yourself and your portfolio

```
filterByOrg = filterByOrg ? study.team_organization === filterByOrg : true
filterStatus = filterByStatus ? study.status === filterByStatus : true
const matchStatus = filterStatus ? study.status === filterStatus : true

function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  const filteredStudies = studies.filter(study => {
    if (!filterByOrg & !filterByStatus) return true
    if (filterByOrg & !filterByStatus) return study.team_organization === filterByOrg
    if (!filterByOrg & filterByStatus) return study.status === filterByStatus
    if (filterByOrg & filterByStatus) return study.team_organization === filterByOrg & study.status === filterByStatus
  })
  return filteredStudies
}
```



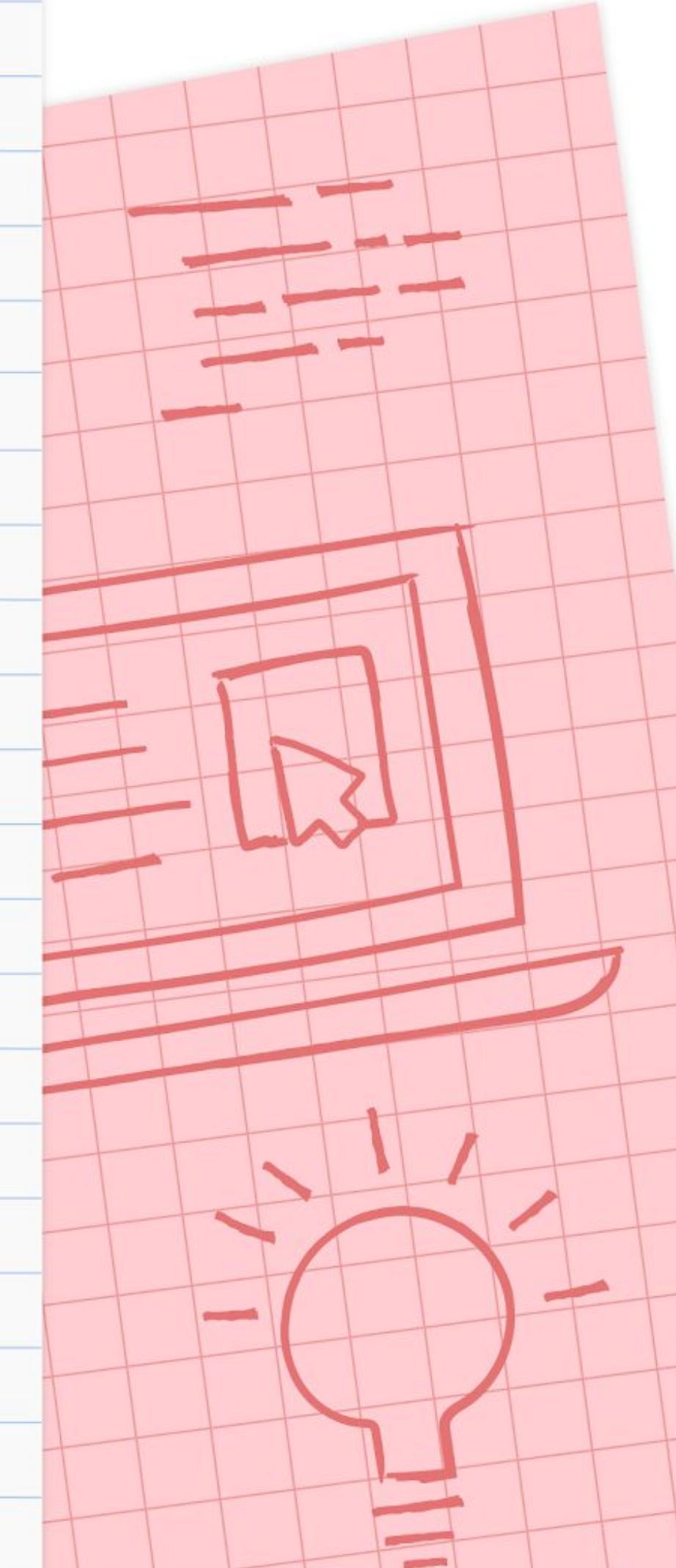
HTML Text Tags

Heading: `<h1>` to `<h6>` tags

- Style of text commonly used for headers on a website
- 6 different tags to choose from to denote size and hierarchy

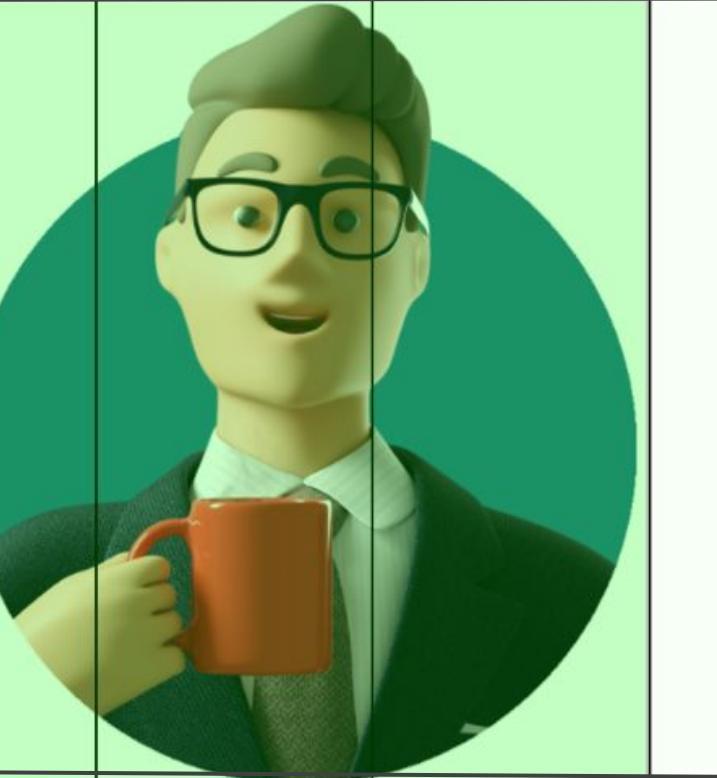
Paragraph: `<p>` tag

- Used for long paragraphs of texts (usually the body of a paragraph)



BootStrap's Grid System

Rows + 12 Columns

	Jacob.											About	Experience	Projects	Contact	
		<h2>HI I'M JACOB TAN!</h2> <p>I am currently a Year 2 Computer Science student at NUS. Nothing excites me more than making projects to help people! Scroll down to learn more about me!</p>														



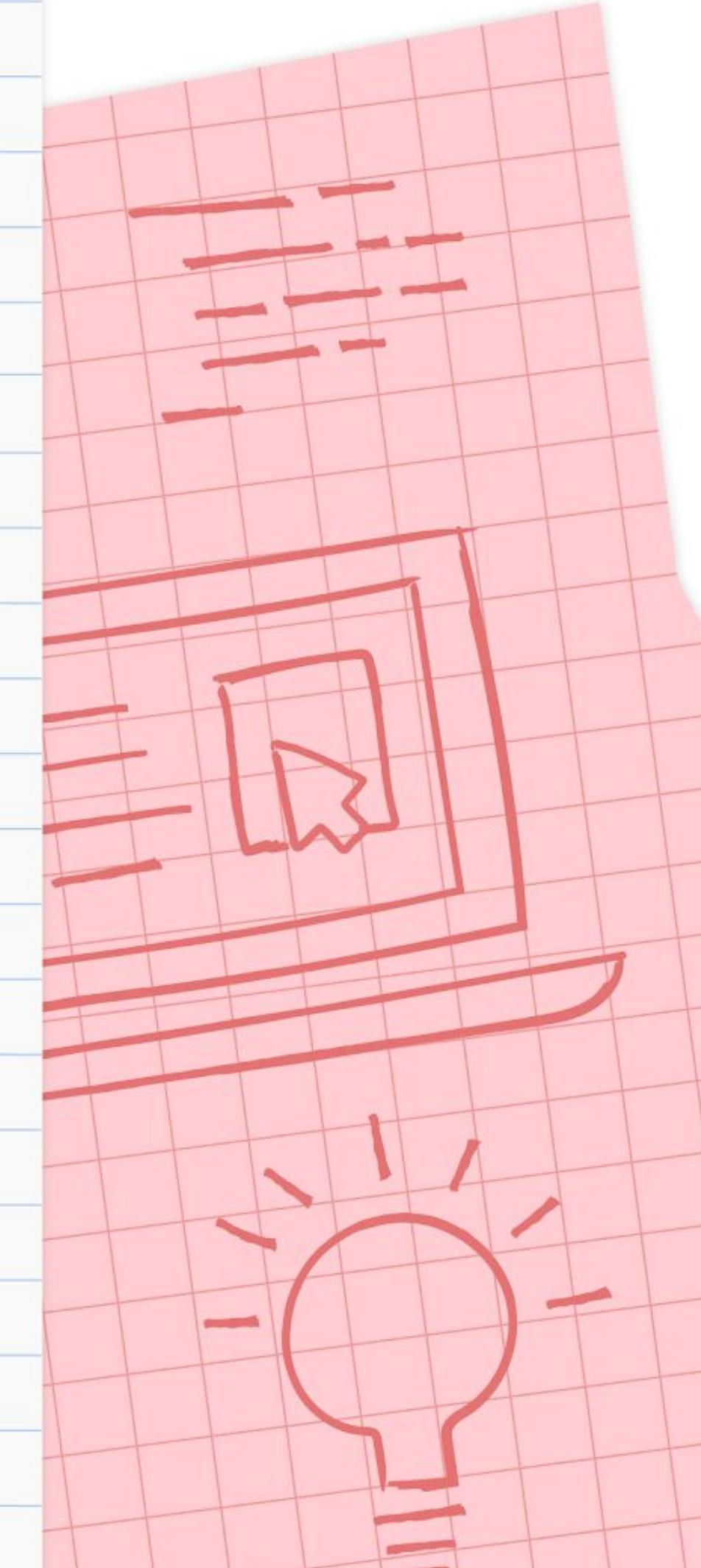
Container & Container-fluid

Used to contain the elements according to Bootstrap's Grid System

This is a primary alert—check it out!

This is a secondary alert—check it out!

- Container-fluid ensures that the width of the container remains 100% regardless of screen size
- Containers will add paddings for larger screen size
- Both have their use cases, depending on what you are trying to achieve!

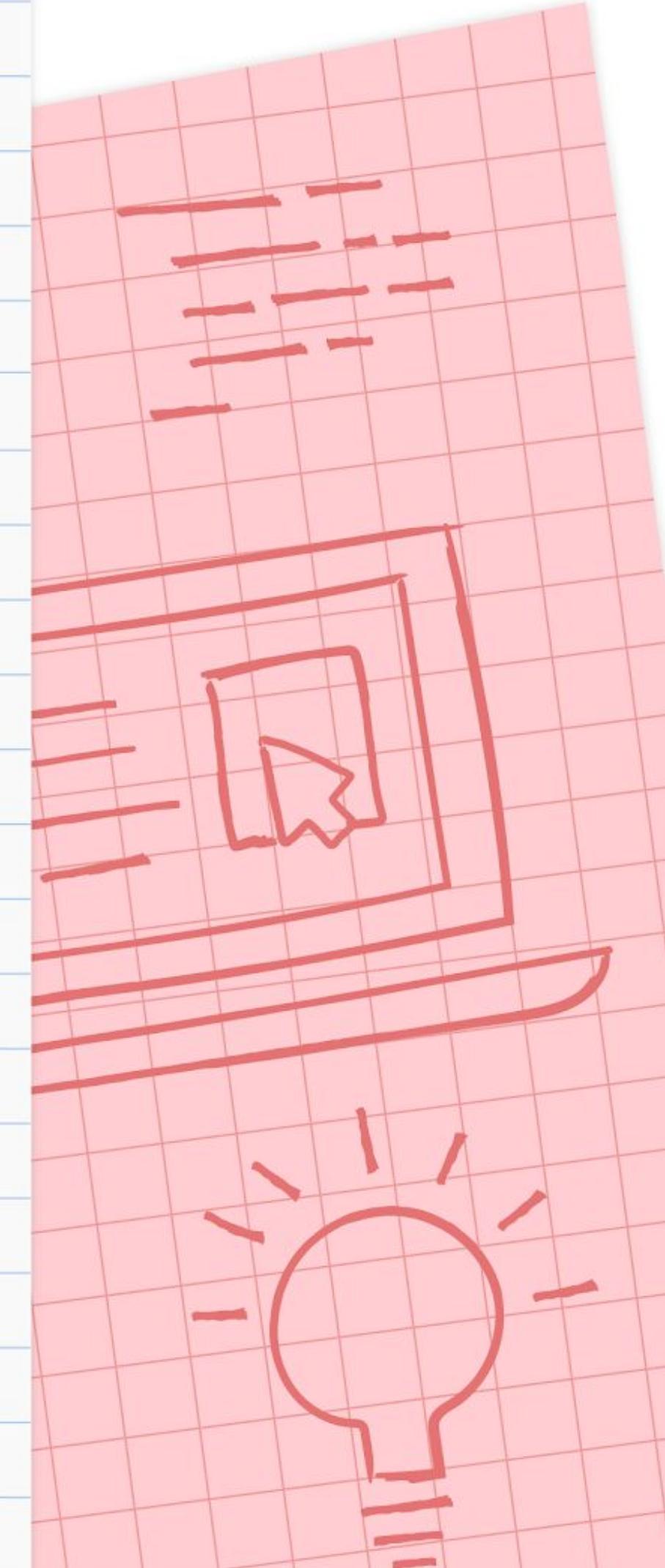


Margin & Padding

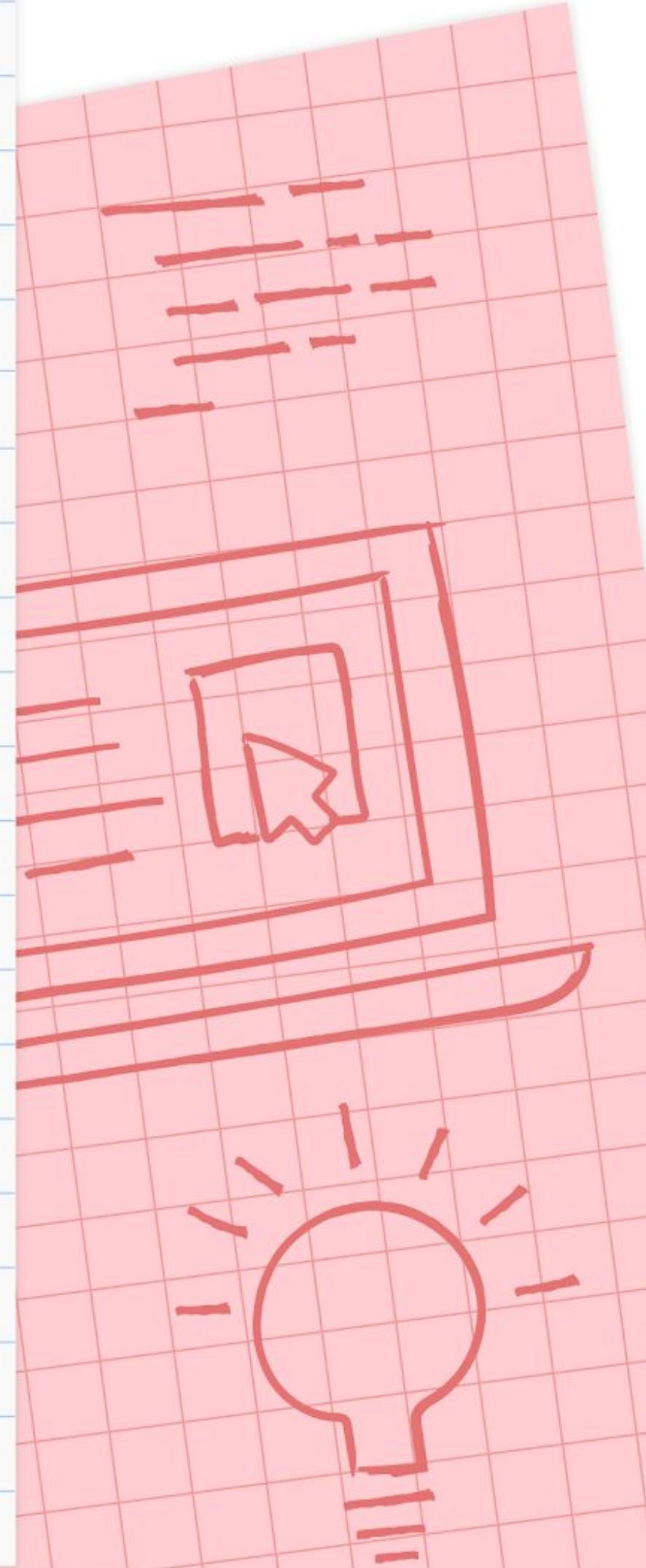
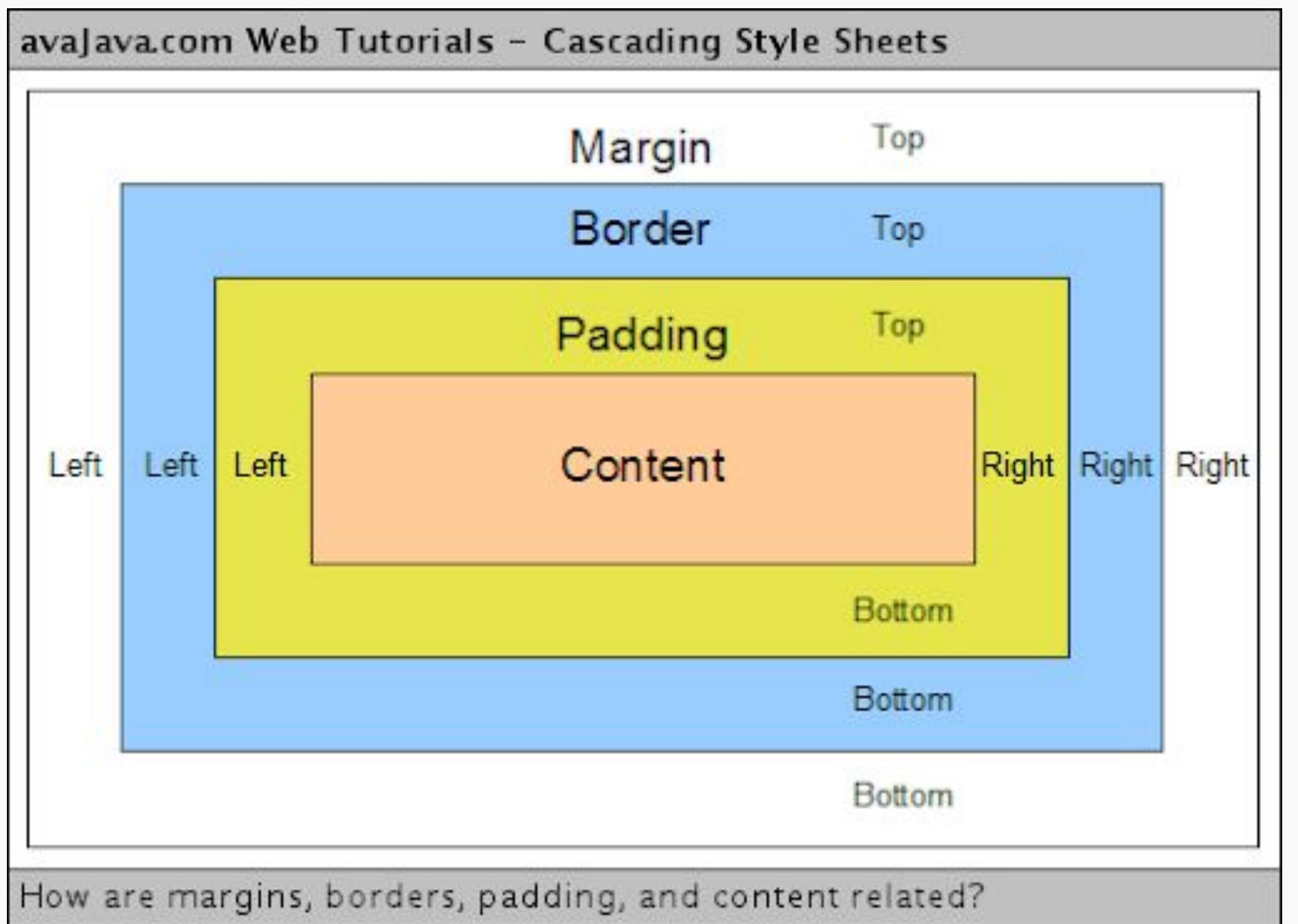
Each element occupies a set space

Margin: Empty space outside the object

Padding: Empty space within the object



Margin & Padding

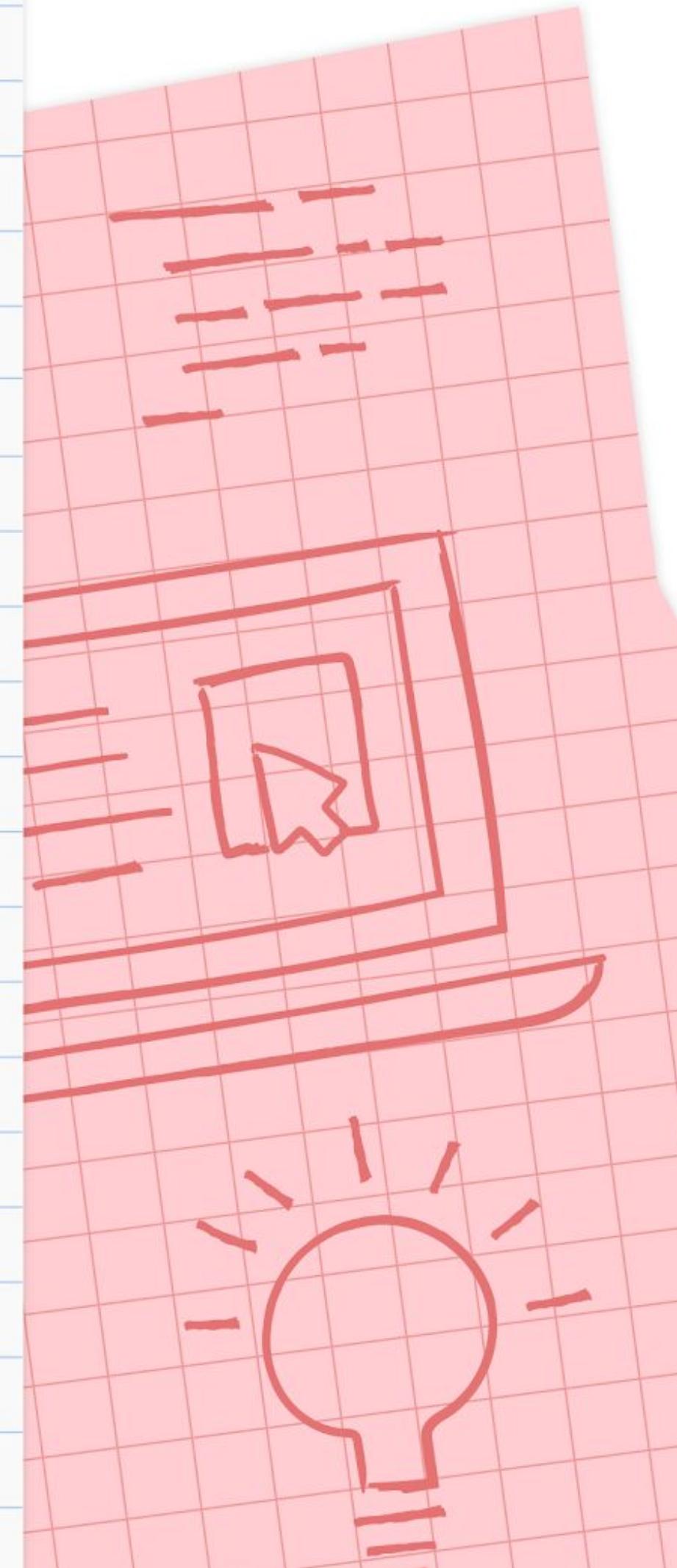


Alignment of Content

Justify and Align

Justify-content: Align the items vertically

Align-content: Align the items horizontally



Alignment of Content

Hi I'm Jacob Tan!

Hi I'm Jacob Tan!

Hi I'm Jacob Tan!

justify-content-start

justify-content-center

justify-content-end



Alignment of Content

Hi I'm Jacob Tan!

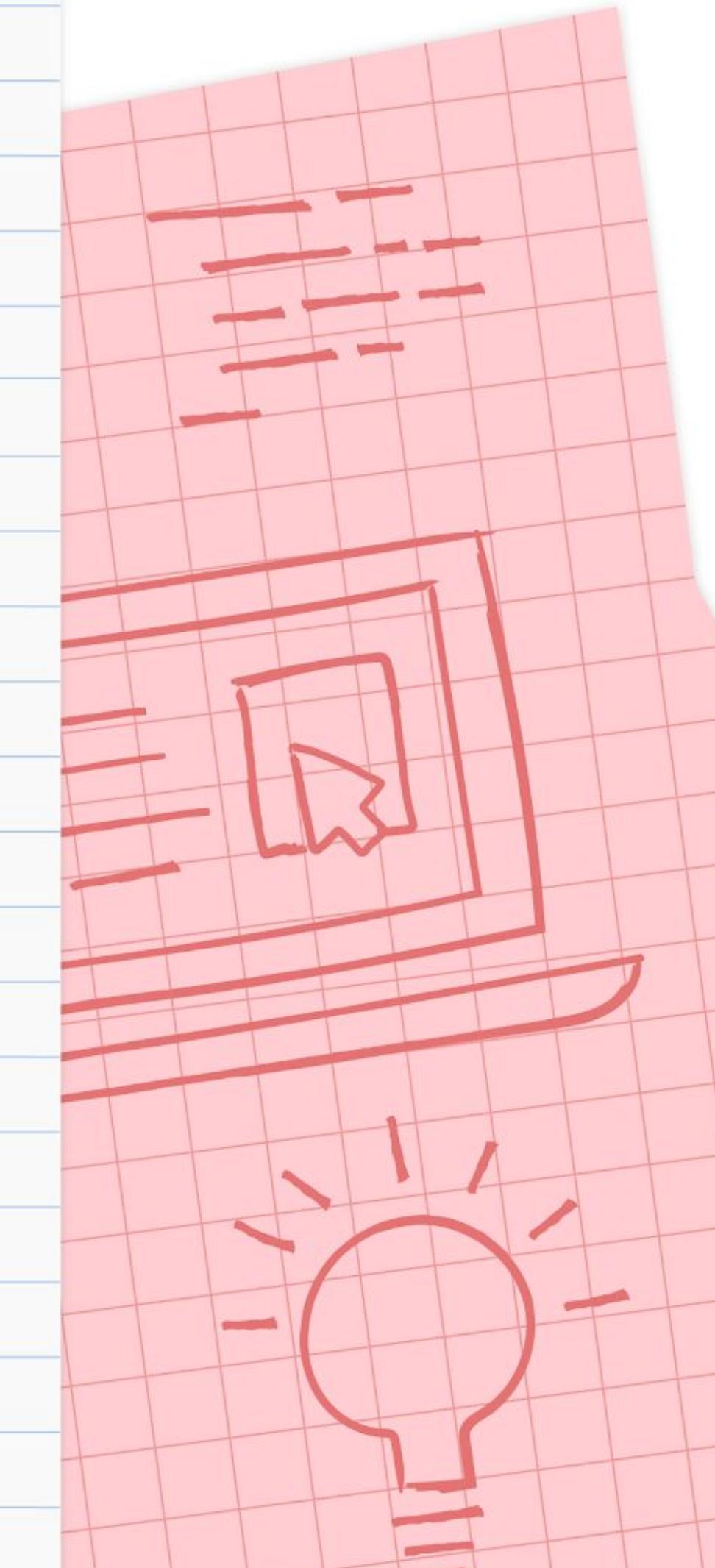
align-content-start

Hi I'm Jacob Tan!

align-content-center

Hi I'm Jacob Tan!

align-content-end





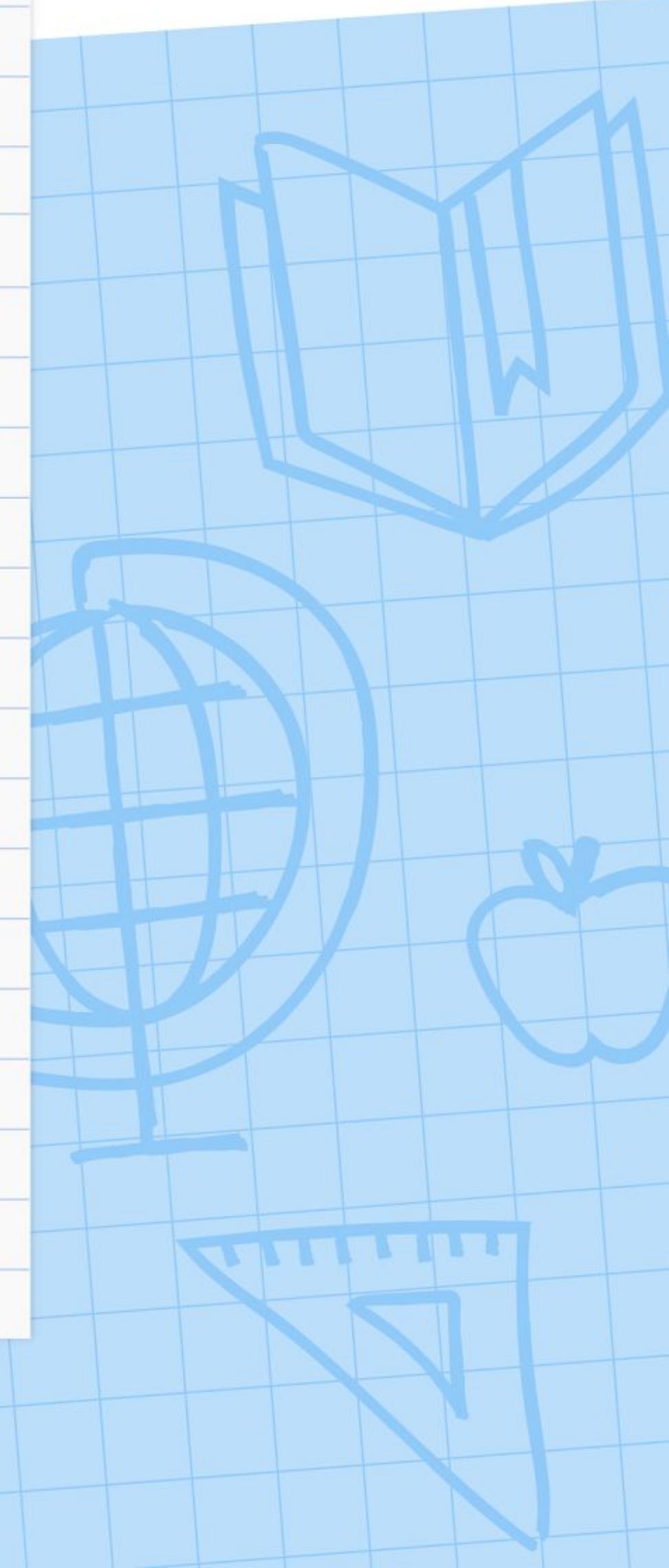
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Section 3: Projects

Showcase screenshots/photos
of your past projects!

```
const filterByOrg = study => study.lead_organization === filterByOrg;
const filterStatus = filterByStatus ? study.status === filterByStatus : true;
const filterPatchStatus = filterPatchStatus ? study.patch_status === filterPatchStatus : true;

function filterStudies({ studies, filterByOrg = null, filterByStatus = null, filterPatchStatus = null }) {
  const filteredStudies = studies.filter(study => {
    if (filterByOrg) {
      return filterByOrg(study);
    }
    if (filterStatus) {
      return filterStatus(study);
    }
    if (filterPatchStatus) {
      return filterPatchStatus(study);
    }
    return true;
  });
  return filteredStudies;
}
```



Text Alignment in Bootstrap

Jacob

HI I'M JACOB TAN!

I am currently a Year 2 Computer Science student at NUS.

Nothing excites me more than making projects to help people!

text-start

Jacob

HI I'M JACOB TAN!

I am currently a Year 2 Computer Science student at NUS.

Nothing excites me more than making projects to help people!

text-center

Jacob

HI I'M JACOB TAN!

I am currently a Year 2 Computer Science student at NUS.

Nothing excites me more than making projects to help people!

text-end



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Icons

Adding visual aesthetics to your portfolio website

- Adding icons are a great way to add aesthetics and personality to your website
- Scalable Vector Graphics (SVGs) are always preferred when adding icons or images to your website
 - SVGs provide higher resolution when scaling to your customised size (compared to JPGs or PNGs)
- Many free online resources for SVGs
 - [Icons8](#)
 - [Bootstrap Icons](#)



Custom CSS Class

Standardizing media dimensions across your website

- Custom classes can also be created in your style.css file
 - Ease for standardizing icons and images in your website

```
.icon {  
    height: 50px;  
    width: auto;  
    margin-right: 2em;  
}
```

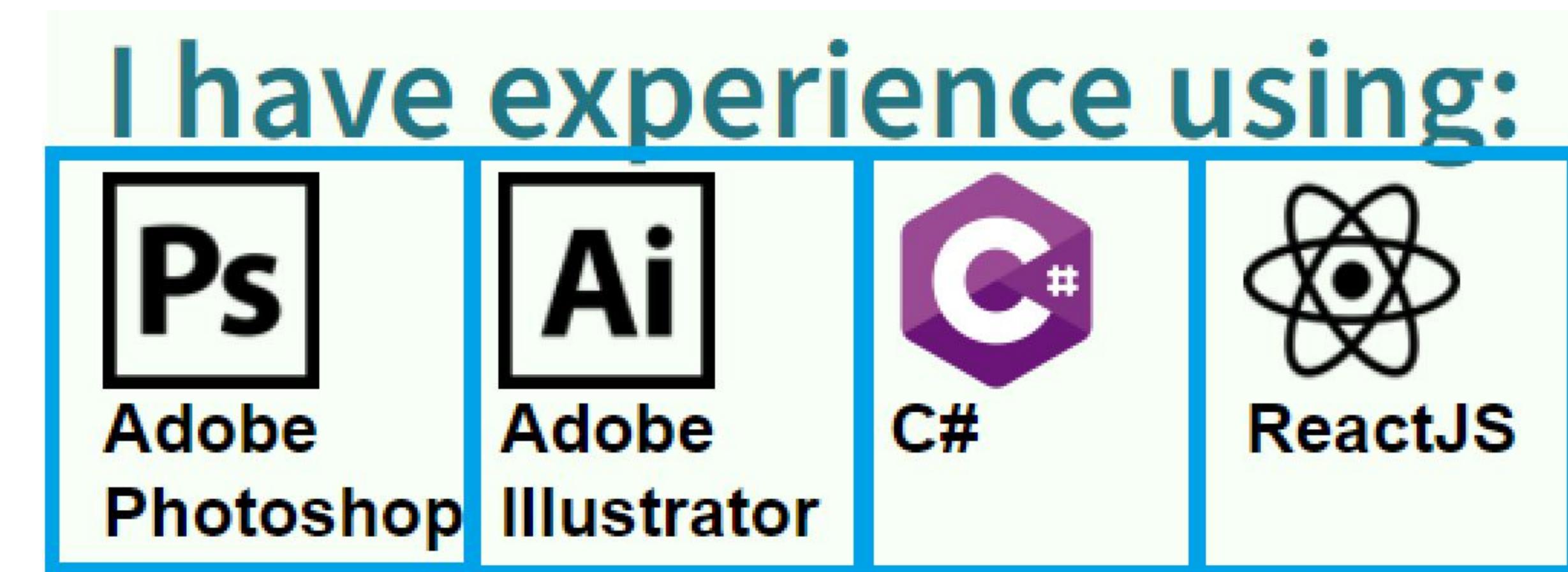
Maintains width of icons

1 vw represents 1% of device's viewport width

```
.project-image {  
    max-height: 20vw;  
    max-width: 30vw;  
}
```

Horizontal Lists

Great for showcasing tech stacks!





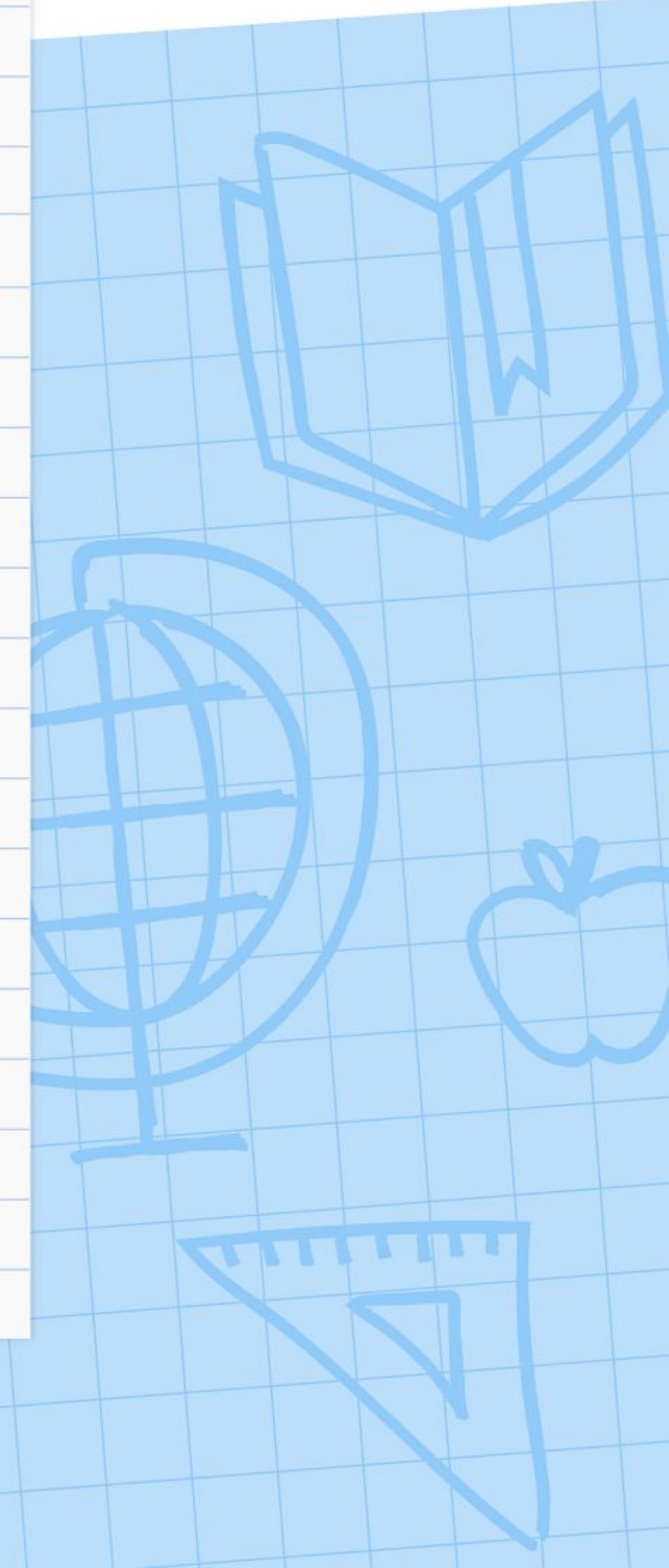
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Section 4: Contact Me

Add hyperlinks for others to contact you on your socials!

```
filterByOrg = filterByOrg ? study.teau_organization === filterByOrg : true
filterStatus = filterByStatus ? study.status === filterByStatus : true
filterPatchStatus) {
    return study;
}

function filterStudies({ studies, filterByOrg =
    filterByOrg ? studies.filter(study => study.teau_organization === filterByOrg) : studies,
    filterByStatus =
    filterByStatus ? studies.filter(study => study.status === filterByStatus) : studies,
    filterPatchStatus) {
    return study;
}
```



Breakpoints

A mobile-first approach to websites

- Breakpoints allows you to customize how your website looks on different devices (with different screen size)
- Bootstrap adopts a mobile-first approach towards breakpoints
 - For example, “p-md-4” means a padding of size 4 will only apply for devices with 768px and larger
- For multiple breakpoints, the larger breakpoint will apply
 - For example, having both “p-md-2” and “p-lg-4” in the same class, a padding of size 4 will be applied for devices with 992px and larger.

Next step:

Deployment of website!



netlify



Web Hosting

- Uploading HTML/CSS/Image files to a server
 - Accessible by anyone on any internet-connected device
- Factors to consider:
 - Reliability
 - Price

Domain Names

Apple.com, tesla.com, samsung.com, etc...

- Domain names can cost an average of \$2-20 per year
 - Tesla.com bought by Tesla for \$11 million in 2018

Illustration taken from [here](#)



General tips

- Keep domain names short
 - Under 15 characters
- Try to avoid hyphens
 - Other users might think its a scam website
- Generally avoid double letters
 - E.g. Presssetup.com
- More tips can be found [online!](#)



Netlify Demonstration

```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.orgs.some(org => org === filterByOrg);
    }
    return true;
  });
}
```

Leveling up your portfolio website...!

Making your website stand out from the rest

Possible upgrades to make:

- Wireframing your website
- Adding interactive elements
- Search Engine Optimization (SEO)

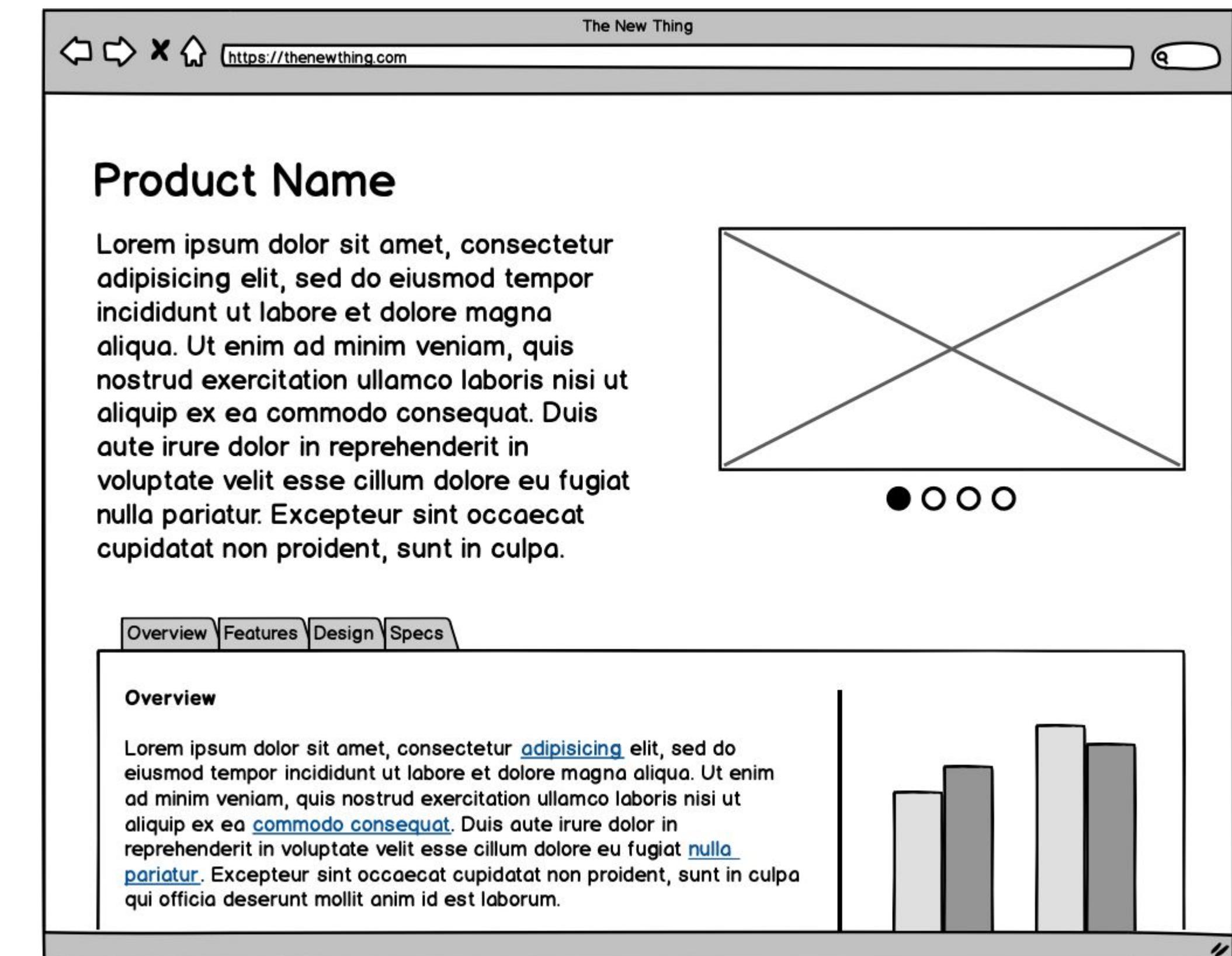


Wireframing

Planning ahead . . .

- A schematic or blueprint for your website
 - Helps to think about the structure of your website
- Tools available include:
 - [Adobe XD \(Student price available*\)](#)
 - [Figma](#)
 - etc
- Lots of information and guides available online

*At the time of creating this slide



Interactive Elements

Form a connection with your audience

- Most of the time involves coding in Javascript
- Helps to personalize your website
- Some ideas to get you started:
 - [Contact form](#)
 - [Hover effects](#)
 - [Search bar](#)



Search Engine Optimization (SEO)

Increase your website traffic

- Google (and other search engines) uses highly complex algorithms to rank search results to end-users
- A [study](#) shows that 90.63% of content online does not get any traffic from Google
- Search engine optimization is tailoring your website's meta-data to appear higher/more frequently on search engines
- Official documentation on SEO by Google can be found [here](#)

Search Engine Optimization (SEO)

Increase your website traffic

- SEO as a business is highly profitable
- SEO can be broken down into 2 sub-categories:
 - On-site/on-page SEO
 - Off-site/off-page SEO

How much does SEO cost Singapore?

Depending on the knowledge and experience of the SEO agency/expert, the cost of SEO can be anywhere between \$500 to \$4500 a month. The average cost of SEO in Singapore is **\$500-\$1000 per month.** 12 Jan 2021

<https://blog.sagipl.com/seo-in-singapore>

How Much Does it Cost for SEO Services in Singapore by ... - SAG IPL

Search Engine Optimization (SEO)

On-site SEO

- Meta titles and descriptions
 - Include keywords in your titles and descriptions, in concise sentences
 - **Avoid Keyword Stuffing**

Repeating the same words or phrases so often that it sounds unnatural, for example:

We sell custom cigar humidors. Our custom cigar humidors are handmade. If you're thinking of buying a custom cigar humidor, please contact our custom cigar humidor specialists at custom.cigar.humidors@example.com.

<https://www.semrush.com> :

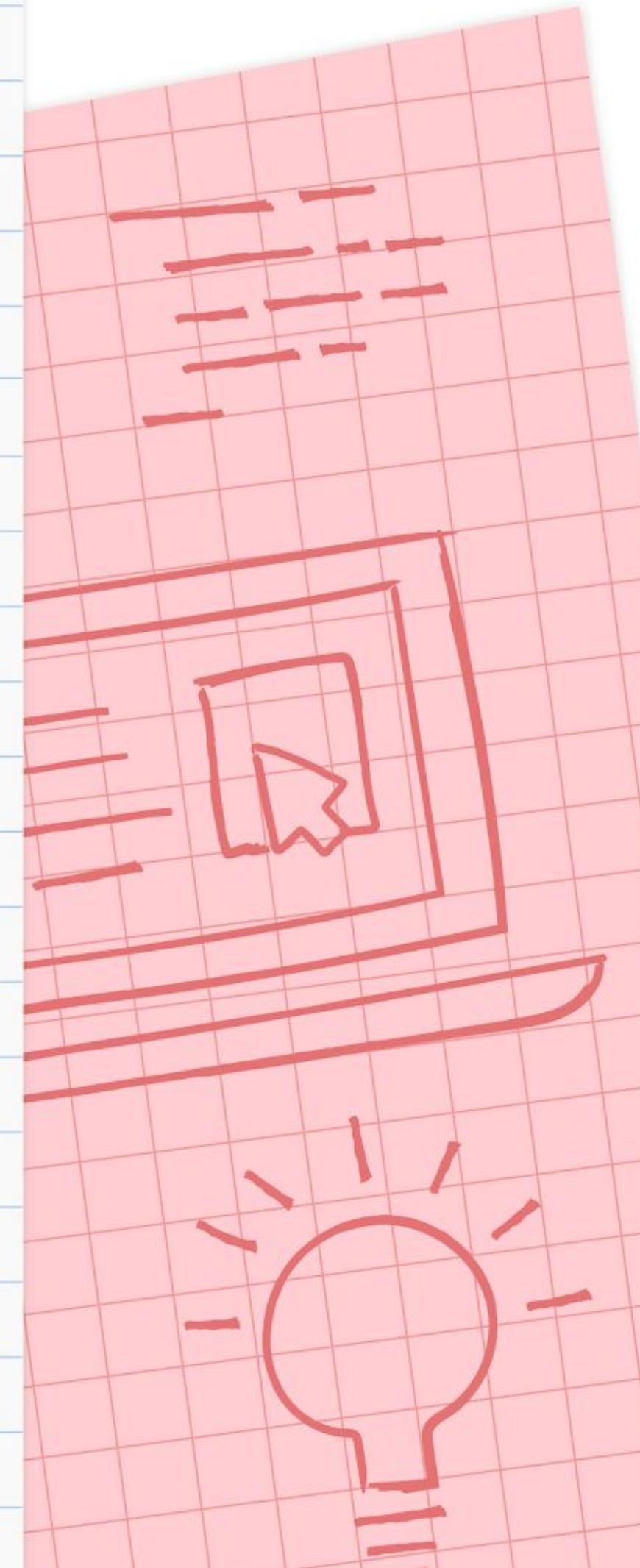
Semrush - Online Marketing Can Be Easy Title

Semrush knows a lot about your market and website. It gives you access to the world's largest database of 20 billion keywords, 310 million ads and 17 billion ... Description



Thank you!

We would love to have your feedback!





#TechforGood Workshops & Fireside Chats

Second
Fireside Chat
19 Jan (7:00 PM)



Dec 2021

Digital Trends: From
Pandemic to Endemic
Fireside Chat
15 Dec (7:00 PM)

Power of Cloud
to Connect Your
Community Workshop
22 Dec (8:00 PM)

Jan 2022

Hey Google! Teach me
Computer Vision!
Workshop
18 Jan (8:00 PM)

Portfolio Website
in 2 Hours
Workshop
12 Jan (8:00 PM)

Jan 2022



Hey Google!
Tell me about Natural
Language Processing!
Workshop
26 Jan (8:00 PM)

#TechforGood



Google Developer Student Clubs

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```
        study.lead_organization === filterByOrg .  
        study.status = filterByStatus ? study.status === filterByStatus : true  
        matchStatus) {  
  
      function filterStudies({ studies, filterByOrg,  
        filterByStatus }) {  
        return studies.filter(study =>  
          study.lead_organization === filterByOrg .  
          study.status = filterByStatus ? study.status === filterByStatus : true  
          matchStatus) }
```



(Additional) Resources

- [Bootstrap, HTML/CSS/JavaScript Documentations, Free Icons by Bootstrap](#)
- [Netlify, Vercel, Hosting from Github](#)
- [Google Fonts](#)