Second Project: Advanced HTML and CSS



Second Project: Advanced HTML and CSS Introduction

Introduction

The first thing you'll notice about this project is that it's similar to Project 1. Although you'll be building Project 2 from scratch, you're free to reuse blocks from your previous project and adapt the HTML and CSS accordingly. Finding similarities and reusing your code will help a lot! When planning out your project, consider how the structure and styles differ. This brief will give you all the dimensions, which should simplify things.

You'll notice that this brief is less detailed than the last one. This is intentional — after all, your skills have become more advanced.

As a budding software engineer interested in web development, you might be curious about working with web designers and why specific designs look the way they do. Here's a comment from our designer:

This is the website of the fictional coffee shop in the Practicum Library. The design follows the style of the Library website; however, since the coffee shop itself is less formal, this website is more colorful and uses more graphics. The circles in the background symbolize coffee tables and cups. I suggest animating one or two of these circles. The last circle in the "About" section should pulsate, representing the heart of the coffee shop.

— Danila, Practicum designer

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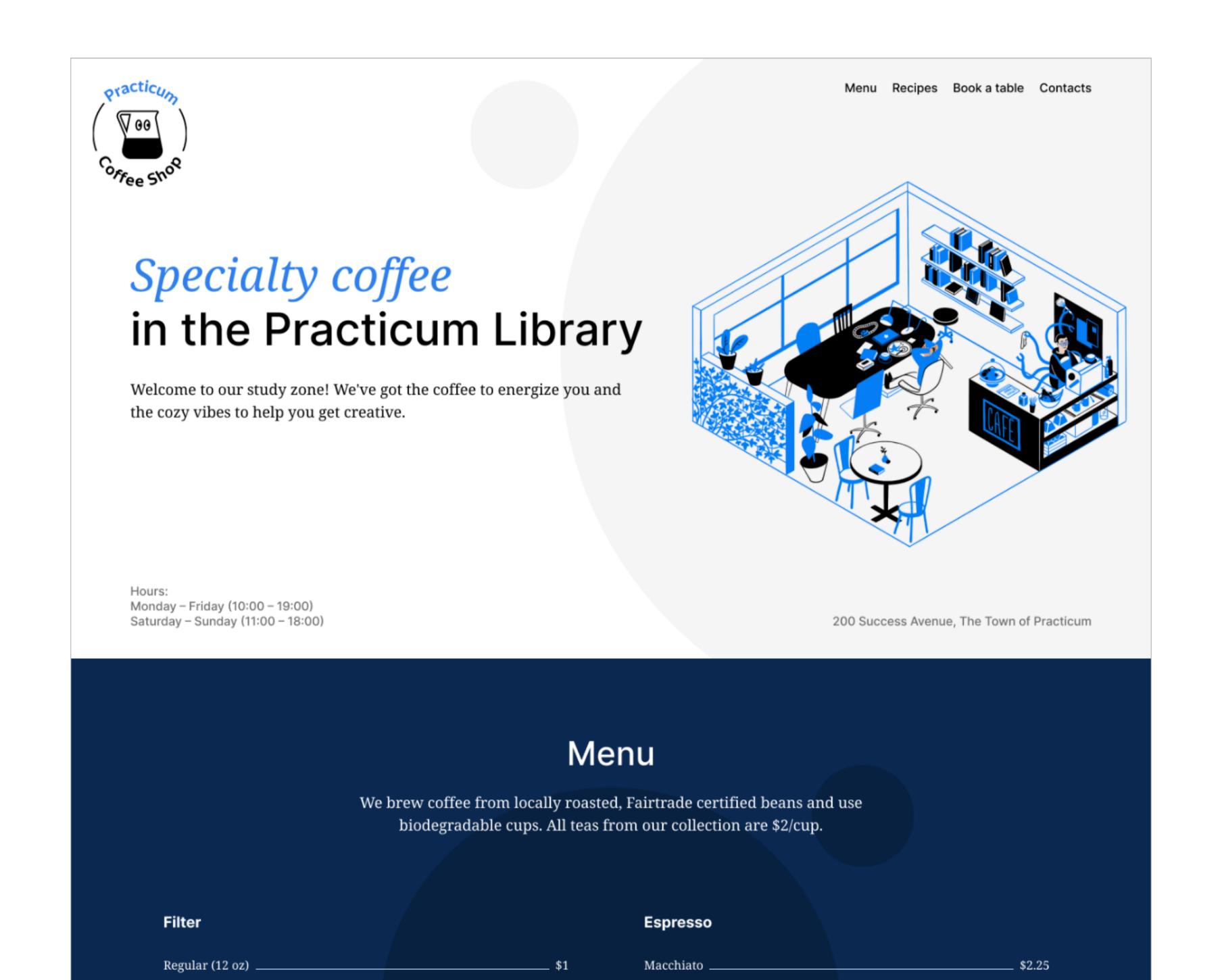
Second Project: Advanced HTML and CSS
Assignment overview

Assignment overview

Here is how your webpage should look by the end of the project.

Colors:





03

Assignment overview

Baked Goods

Large (16 oz) ______ \$1.25

XL (20 oz) ______ \$1.5

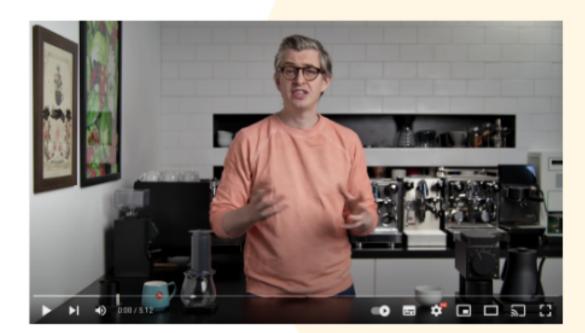
Party-size (24 oz, decaf) ______ \$1.75

Iced Coffee (16 oz) ______ \$1.25

Almond Croissant	\$2	
Banana Bread	 \$1. 75	
Key Lime Pie	\$3	
Blue Velvet Cake	\$3.75	
Web Cookie	\$2	
Eroch Bug'notto	¢0.25	

Recipes

Check out some recipes we've collected for your home-brewing convenience:





~15 min

Aeropress recipe

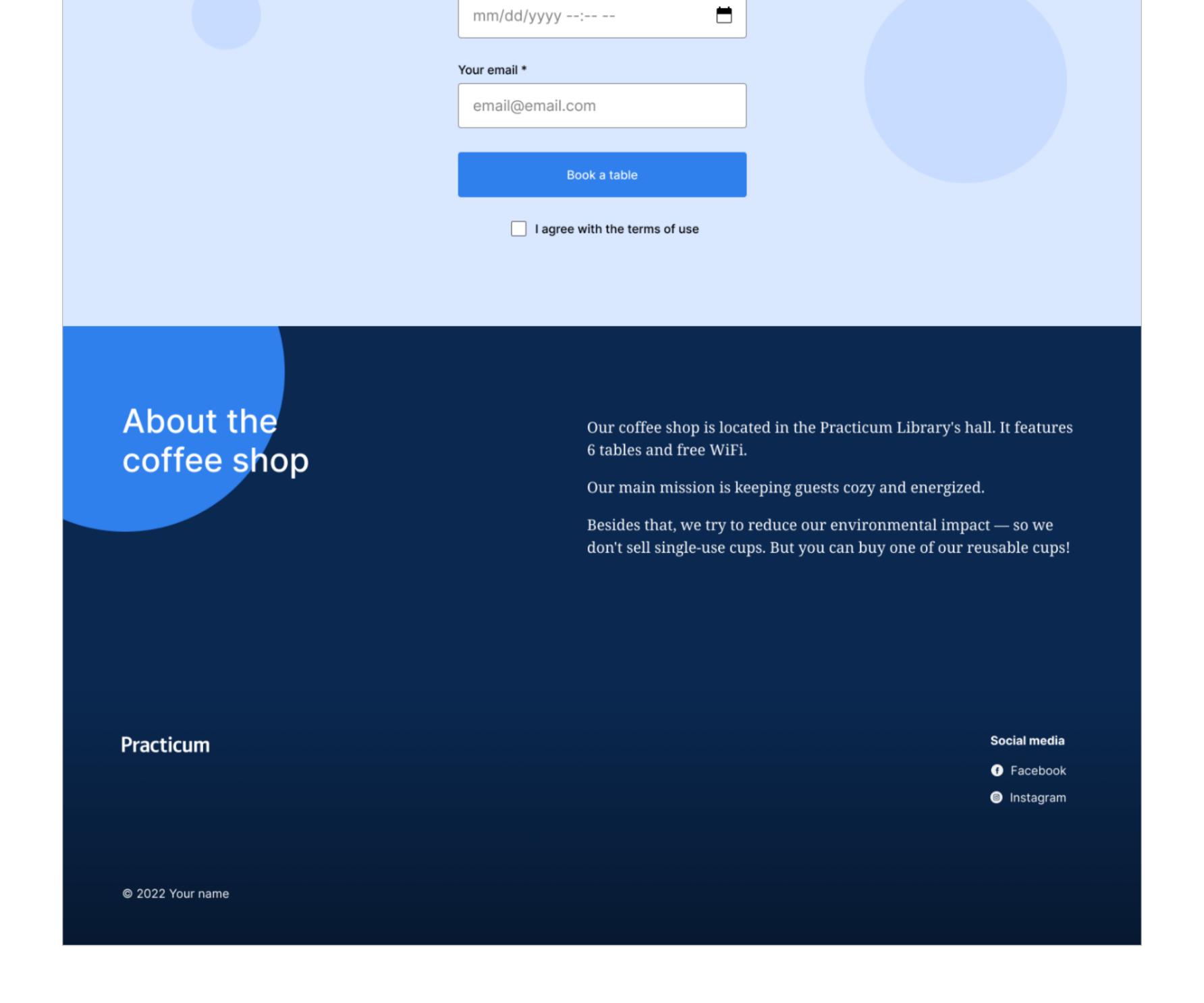
~5 min

French press recipe

Book a table

Name *	
Name Surname	
Number of guests *	
1-8	

Assignment overview

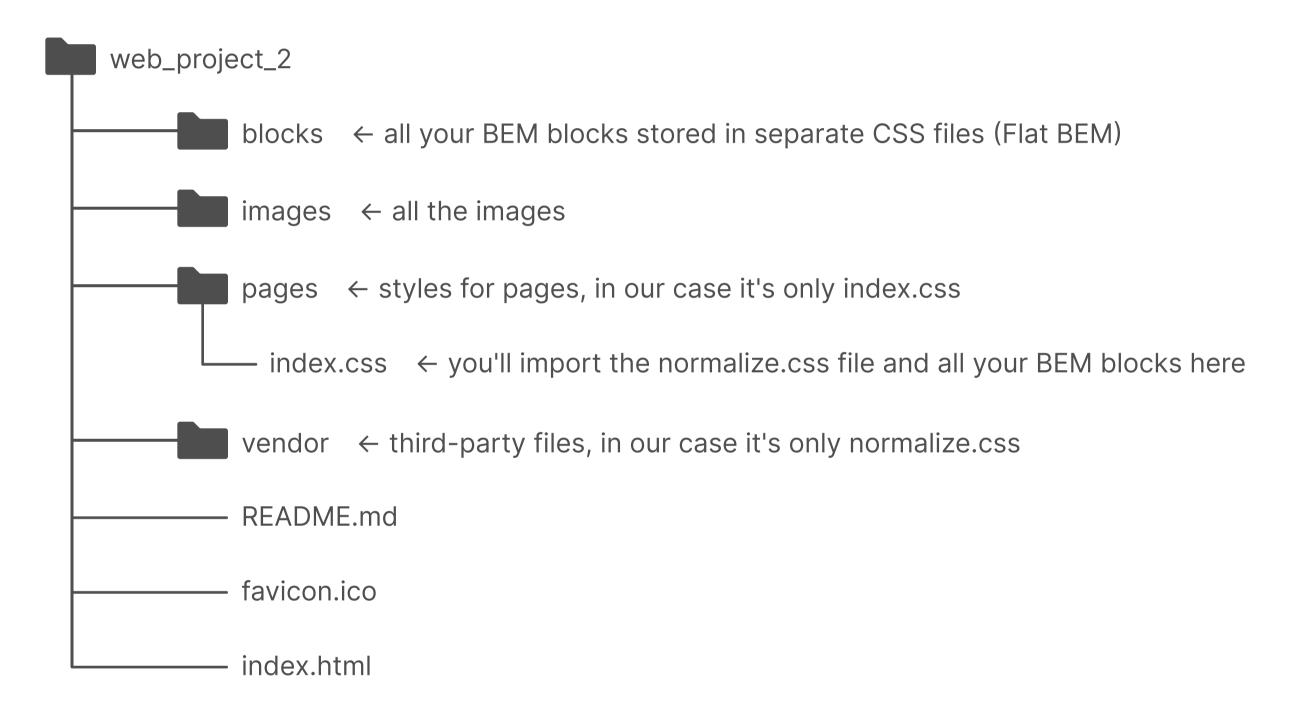


Second Project: Advanced HTML and CSS
Stage 1. Building the basic structure

Stage 1. Building the basic structure

1. Creating the file structure

First off, let's create the main folders and files for the project. The structure should look like this:



Make sure you've downloaded the necessary files from the Project 2 page. Add the files to the corresponding folders based on the structure above. Among the files we've provided, you'll find two favicons prepared by our designer. Choose the one you like, rename it to **favicon.ico**, and delete the other one. According to common practice, we'll place the favicon file in the root folder.

2. Creating the HTML page structure

Open index.html. Outline the basic document structure: the <!DOCTYPE> declaration and the <html> tags with <head> and <body> tags nested inside. Specify the webpage title: you can simply use "Practicum Coffee Shop" or try to be creative. Next, set the page language as English.



Pro tip:

We can use **Emmet** abbreviations to quickly produce some common HTML and CSS code.

Take the ! command, for example. Entering ! in the code editor will add boilerplate HTML code, complete with meta tags. Boilerplate is code that is usually the same across pages/projects, so it's useful to be able to quickly add it. We can then add code to our page using Emmet abbreviations, usually just by hitting the Tab key. To make sure it works, your cursor needs to be active and placed right after the abbreviation.

3. Don't lose your <head>

- 1. To kick things off, let's provide some useful info for the browser and search engines that we learned about in Sprint 1 (see Advanced HTML and CSS Capabilities). Use meta tags to set the following:
- The character encoding to UTF-8.
- The viewport is defined so that 1) the width of the page matches the user's device-width, and 2) initial-scale is equal to 1.
- For SEO (Search engine optimization): description (1-2 sentences), author with your name, and keywords.
- 2. Now, go ahead and connect index.css using the link> element.
- 3. Finally, connect the favicon using 1ink>.

Second Project: Advanced HTML and CSS

Stage 1. Building the basic structure

4. Importing normalize.css

In the previous project, we connected the normalize.css file using the tag. However, there's also another way. You just learned how to connect the CSS styles of BEM blocks using the @import at-rule, so now let's apply this knowledge to normalize.css as well. Import this file to index.css. Note that all other CSS files must be imported after normalize.css.

5. Fonts

1. For this project, you'll use Google Fonts.

In your next project, we'll ask you to figure out the fonts by yourself. This time, however, we'll give you a list. Using the instructions right below the list, you'll need to connect two fonts with the following styles:

Inter

- Regular 400
- Medium 500
- Bold 700

Noto Serif

• Regular 400

For each font, go to <u>fonts.google.com</u> and search for the font family. Scroll down and select the specific style(s) you want. You'll see a list of the selected styles to the right, and the site will generate the code automatically, you just need to add it in your <head>. Make sure to connect it via link>.

- 2. When you assign font styles to webpage elements, make sure to specify fallback fonts:
 - For Inter, use Arial as a fallback and use the generic sans-serif family in case the user doesn't have either of the other fonts.
 - For Noto Serif, use Times New Roman as a fallback and use the generic serif family in case the user doesn't have either of the other fonts.

6. Outlining the main blocks of the webpage

- 1. Just like you did in the first project, we'll start by creating a wrapper for the entire page. Create a <div> element with the page class, then style it so that:
 - The block has a minimum width of 1100px and a maximum width of 1600px.
 - The block is centered for screens over 1600px wide.

Next, let's specify the font settings for the page block:

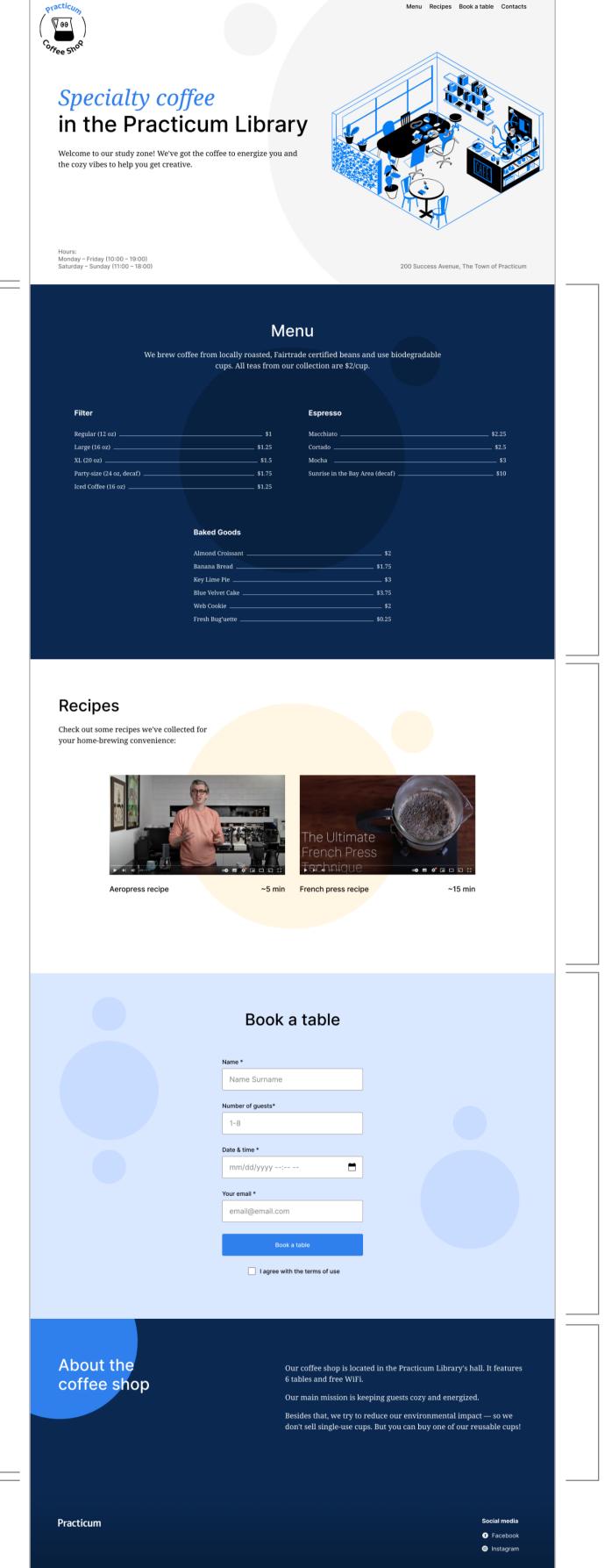
- Set the font family to "Inter" (remember the fallback fonts).
- Set the font size to 16px.
- Set the line height to 20px.
- 2. Now, take a look at Pic. 2. Notice how the header, main, and footer sections form the upper-level structure of the webpage. Create these semantic elements according to Pic. 2 inside the page block. Assign classes to them according to Pic. 2.



And with that, we're done with all the prep work. Now, you'll finish your webpage section by section. This is the regular process for marking up a webpage, though there is no strict rule.

Site header: header block

Main page content



Section: menu block

Section: recipes block

Section:

reservation block

Section: about block

Site footer:

footer block

Pic. 2

© 2022 Your name

Second Project: Advanced HTML and CSS Stage 2. Step by step implementation

Stage 2. Step-by-step implementation

Take the page content from the texts.md file that was provided in the archive. When you don't need it anymore, delete it from your repository — it's not needed for the finished project.

You'll work through each of the sections on the page, one by one.



Pro tip:

Many engineers prefer to create the entire HTML structure first and then define styles for the entire page. The alternative is finishing both the HTML and the CSS for each section as you work through them. Find out which way works best for you and don't be afraid to experiment!

For each individual section, we'll adhere to the following structure: Required elements and class names → sizes and spacings → typography.

The "About the coffee shop" section will also include instructions on animation.

All the elements and class names shown in the brief are required, but you are free to create additional elements, such as wrappers, if you think you need them. Just ensure that you adhere to the BEM naming principles.

Note that you can only use absolute positioning in a few cases, all of which are specified in the brief.

Second Project: Advanced HTML and CSS
Stage 2. Step by step implementation / Header

1. Header



! Pro tip:

How can you break lines of text into multiple lines and control the exact placement of those breaks? You could use
br> but this may cause accessibility issues due to the way
br> is handled by screen readers.

One trick is to wrap the desired lines in elements with display: block; applied. Another option could be to use a non-breaking space: a special space character that can't be broken by a new line. Simply insert in your HTML between the words that should stick together.

Required elements and class names

Background: Set the background color to #FFFFFF. For the background image, provide the URL to the background-header.svg file. The background doesn't repeat and its position is centered. Set the size value to cover.

1. block: logo. Find the corresponding image in the images folder. You can use absolute positioning for this element.

2-5. block: nav, element: link. The instructions for writing class names will follow this format throughout the brief. In this case, it means that your class name should be written as follows: nav__link.

Create a hover state for links so that they smoothly transition to #2F80ED. You can specify any values you'd like for transition properties, such as duration or timing function.

Remember to use the nav semantic element. You can build the navigation bar in a similar way to what you did in Project 1.

6. block: header, element: title. Since this is the title of our page, use an <h1> heading. Also, keep the text on separate lines, as shown in the design. It may be a small detail, but small details can have a big impact on the look of the site.

7. block: header, element: span-accent. This is for the blue text in italics that says "Specialty coffee". This text should be wrapped in a set of tags. The element is an inline tag often used to apply separate styles to part of a paragraph in order to make it stand out.

8. block: header, element: description.

9. block: header, element: image. You can use absolute positioning for this element.

10-13. block: header, element: paragraph. Think about how you can group the three paragraphs as shown in the design. Hint: your knowledge of flexbox and a few divs can help.



Sizes and spacings

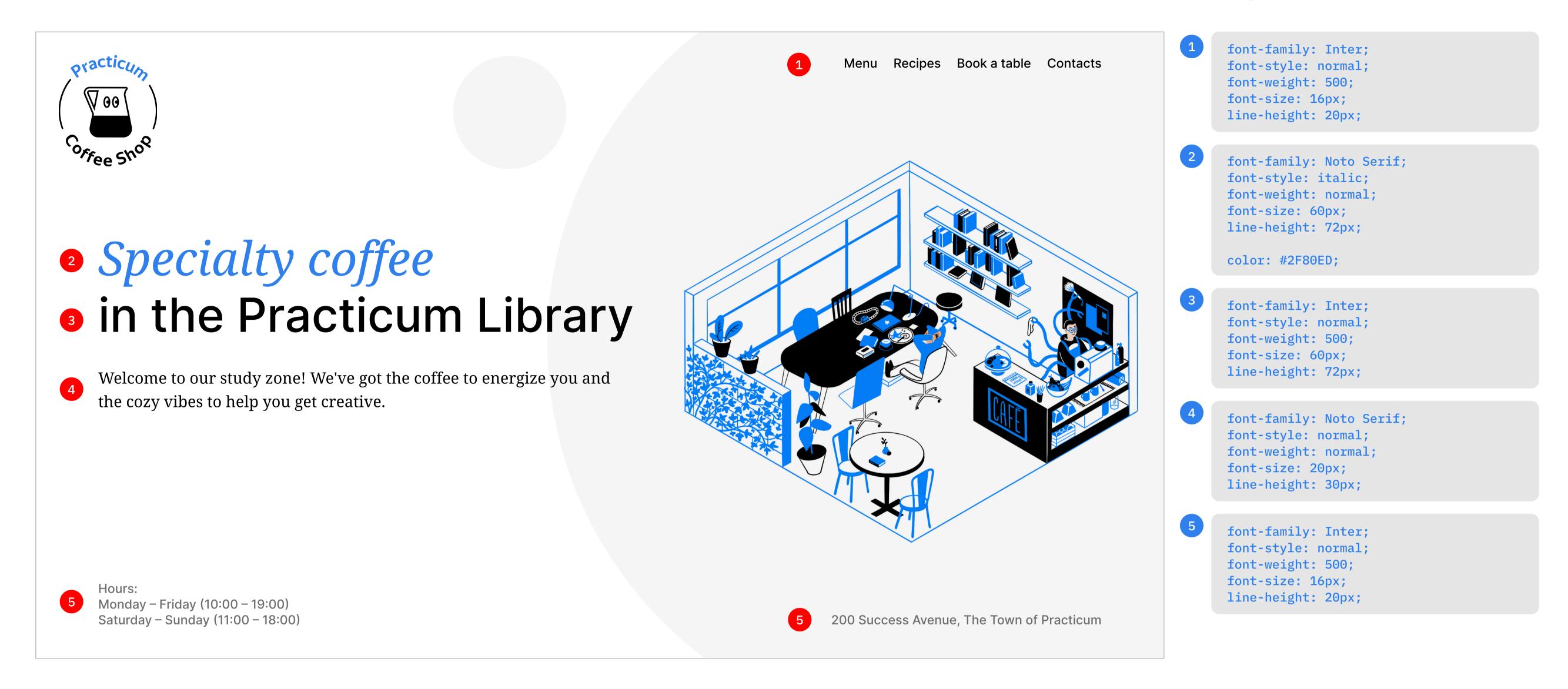
Minimum block height: 720px, maximum block height: 800px.

Set the regular screen height to 100vh (100% of the viewport) so that it fits screen sizes between 720px and 800px by default.

Add all the sizes according to the picture above.

Second Project: Advanced HTML and CSS

Stage 2. Step by step implementation / Header



Typography



During the next sprint, you'll start working with a design software called Figma. Figma automatically generates some CSS styles, a few of which you can safely copy to your CSS files. You can also copy font styles, albeit carefully. We'll practice doing this during the Typography portion of the brief.

The numbered code snippets correspond to their respective numbered text elements. We don't need to duplicate the styles to multiple CSS selectors — take a moment to consider the reason why.

First, remember the styles we assigned to the page block? They are inherited by all of its child elements, meaning we don't need to assign the same styles again. Second, you don't need to write values that are the same as the defaults, e.g. font-style: normal; and font-weight: normal; (which is equivalent to font-weight: 400;).

With all this in mind, write the necessary styles for the necessary text elements in CSS.



Copying styles from Figma may seem tedious, but it's still an essential part of creating a webpage and it will ensure that the page looks great for your users. Moreover, having touched on these routine tasks, it'll be easier for you to understand why engineers came up with the automation tools that we'll learn about later in the program.

Second Project: Advanced HTML and CSS
Stage 2. Step by step implementation / Menu

2. Section: Menu



Pro tip:

The list divider is one of the trickiest parts of this design. Notice that it's shown as a separate element. A flex item property would be helpful here. Specifically, one that controls how much of the remaining space of the main container the item should take. Review the lesson on Flex Item Properties: Changing the Size of Individual Elements (Sprint 1).

Required elements and class names

Background: Set the background color to #0a2750. For the background image, provide the URL to background-menu.svg. The background doesn't repeat and its position is centered. Set the size value to cover.

- 1. block: menu, element: title.
- 2. block: menu, element: subtitle.

- 3. block: menu, element: cards. Notice how the third card is centered. It may look difficult at first, but this is where flexbox shows its true potential.
- 4. block: card.
- 5. block: card, element: title.
- 6. block: card, element: list-item.
- 7. block: card, element: list-divider.

Second Project: Advanced HTML and CSS
Stage 2. Step by step implementation / Menu



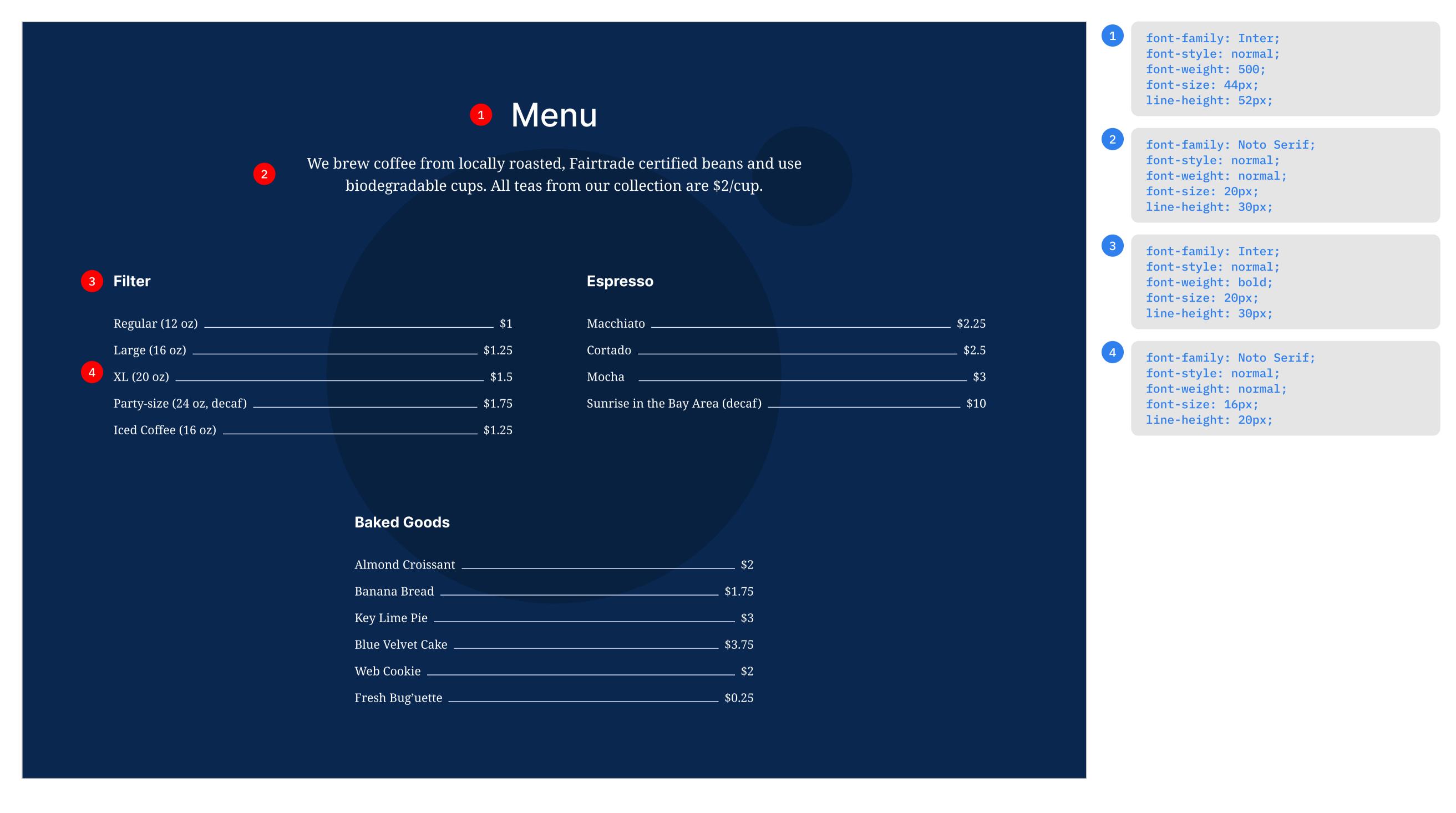
Sizes and spacings

Add all the sizes according to the picture above.

All blocks should be centered inside the section.

Second Project: Advanced HTML and CSS

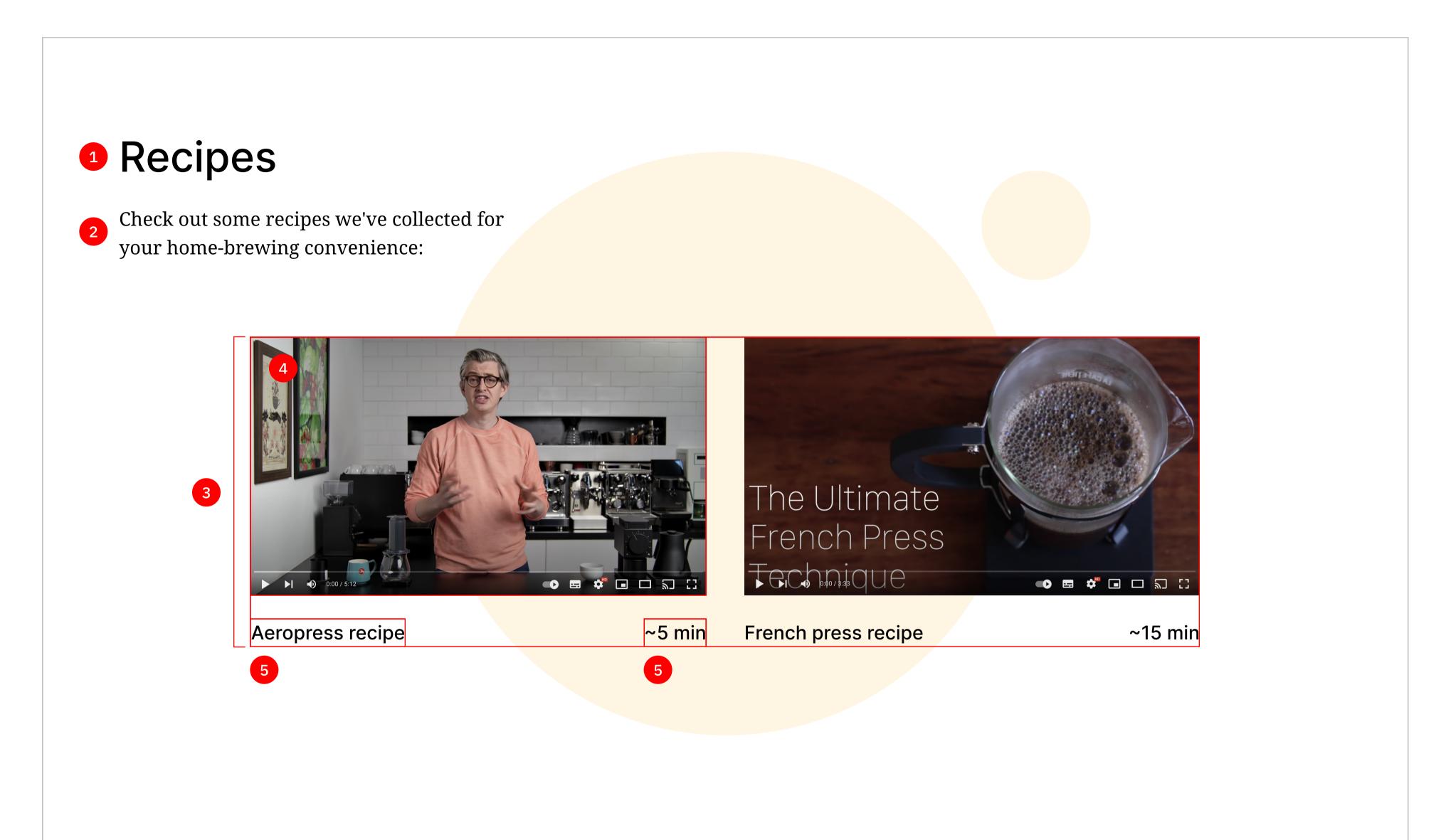
Stage 2. Step by step implementation / Menu



Typography

The numbered code snippets correspond to their respective numbered text elements.

3. Section: Recipes



Required elements and class names

Background: Set the background color to #FFFFFF. For the background image, provide the URL to background-recipes.svg. The background doesn't repeat and its position is centered. Set the size value to cover.

Use the <iframe> tag to add videos. You can use these links or choose your own (make sure to change the description and time accordingly):

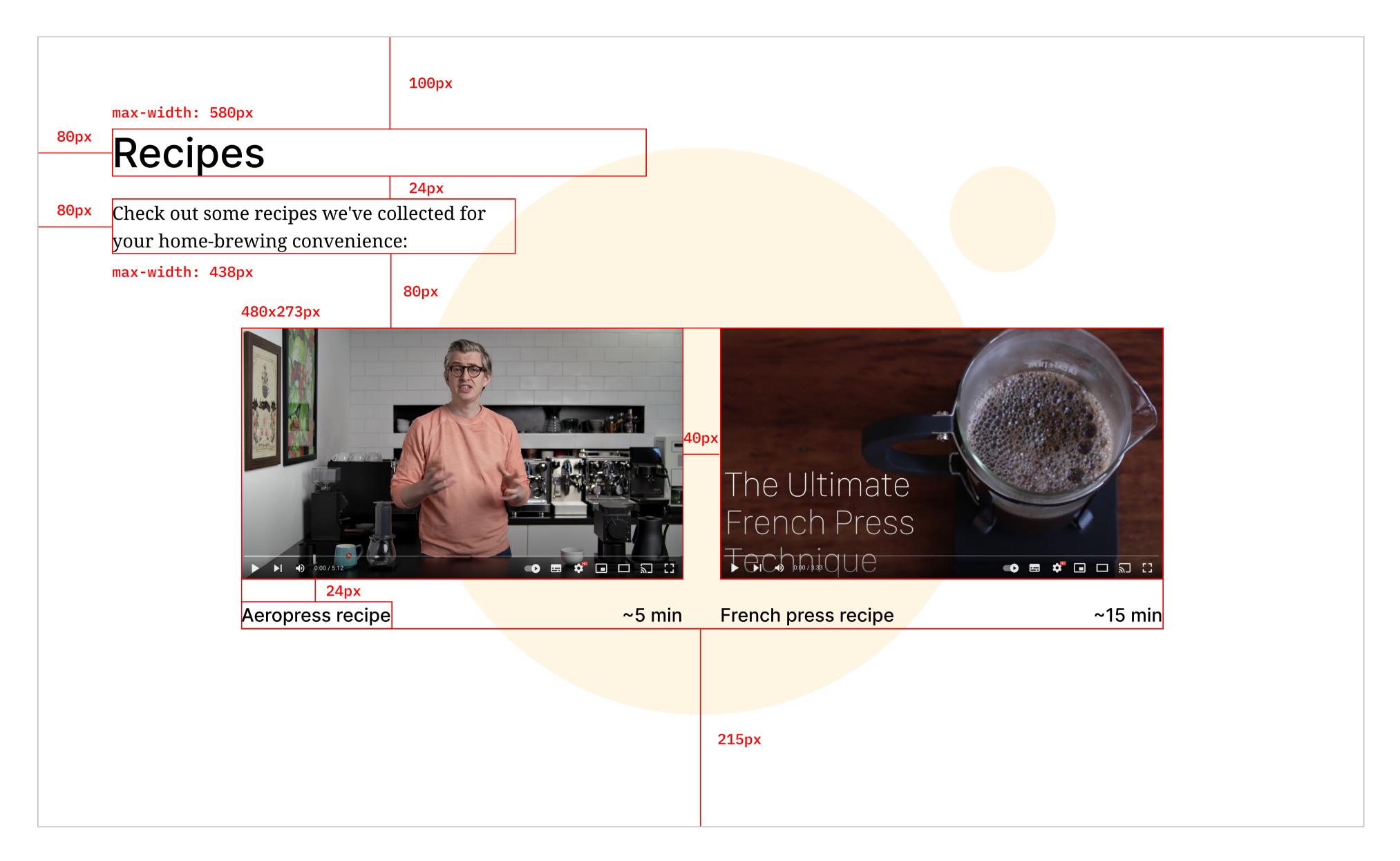
https://www.youtube.com/watch?v=j6VIT_jUVPc

https://www.youtube.com/watch?v=st571DYYTR8

- 1. block: recipes, element: title.
- 2. block: recipes, element: subtitle.
- 3. block: recipes, element: videos.
- 4. block: recipes, element: iframe.
- 5. block: recipes, element: video-caption.

Second Project: Advanced HTML and CSS

Stage 2. Step by step implementation / Recipes



Sizes and spacings

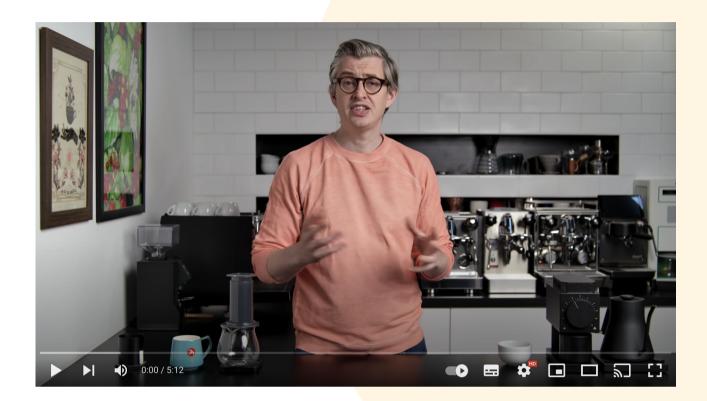
Add all the sizes according to the picture above.

The videos element should be centered inside the section.

Second Project: Advanced HTML and CSS

Stage 2. Step by step implementation / Recipes

- Recipes
- Check out some recipes we've collected for your home-brewing convenience:





3 Aeropress recipe

~5 min

French press recipe

~15 min

font-family: Inter; font-style: normal; font-weight: 500; font-size: 44px; line-height: 52px;

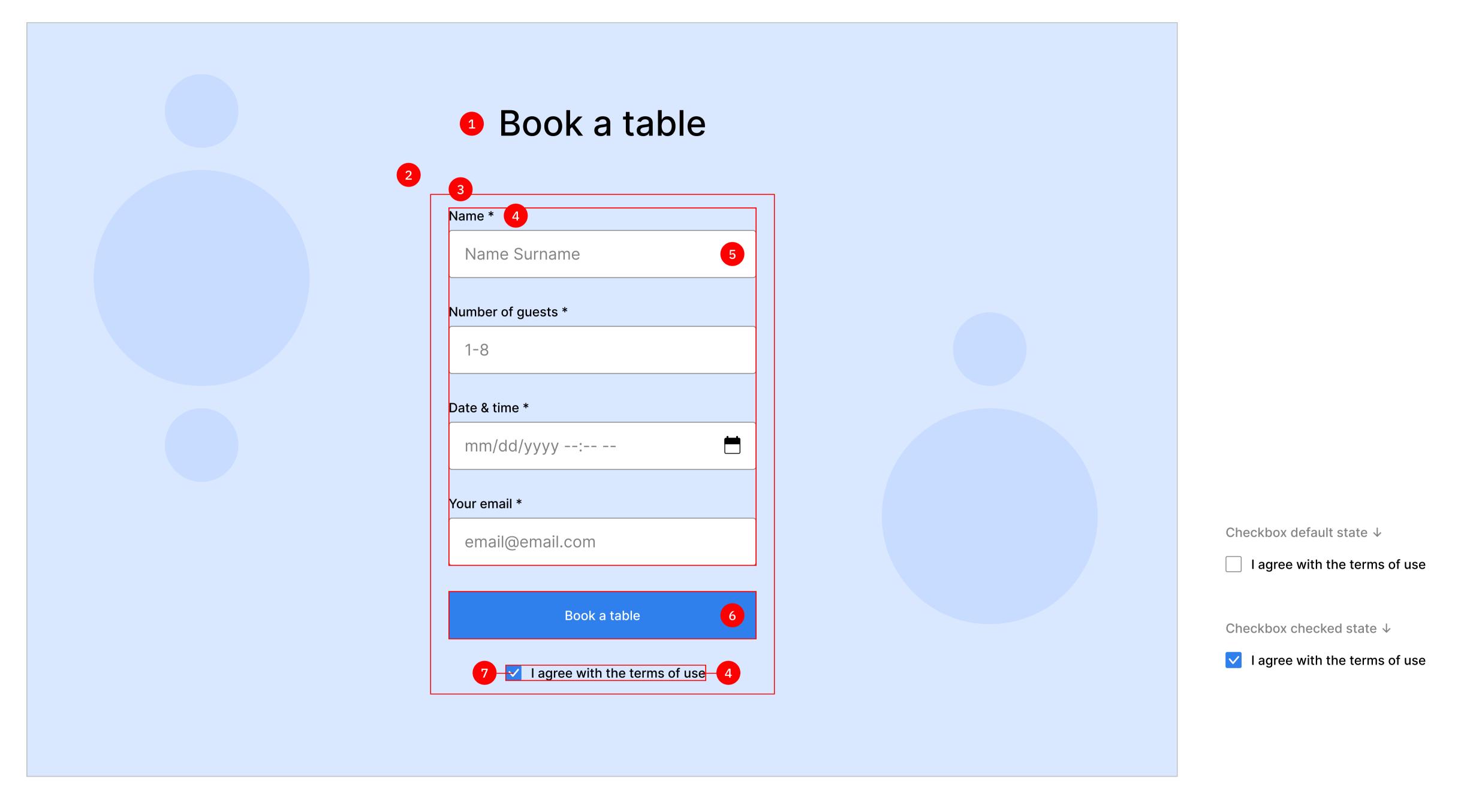
font-family: Noto Serif;
font-style: normal;
font-weight: normal;
font-size: 20px;
line-height: 30px;

```
font-family: Inter;
font-style: normal;
font-weight: 500;
font-size: 20px;
line-height: 30px;
```

Typography

The numbered code snippets correspond to their respective numbered text elements.

4. Section: Reservation



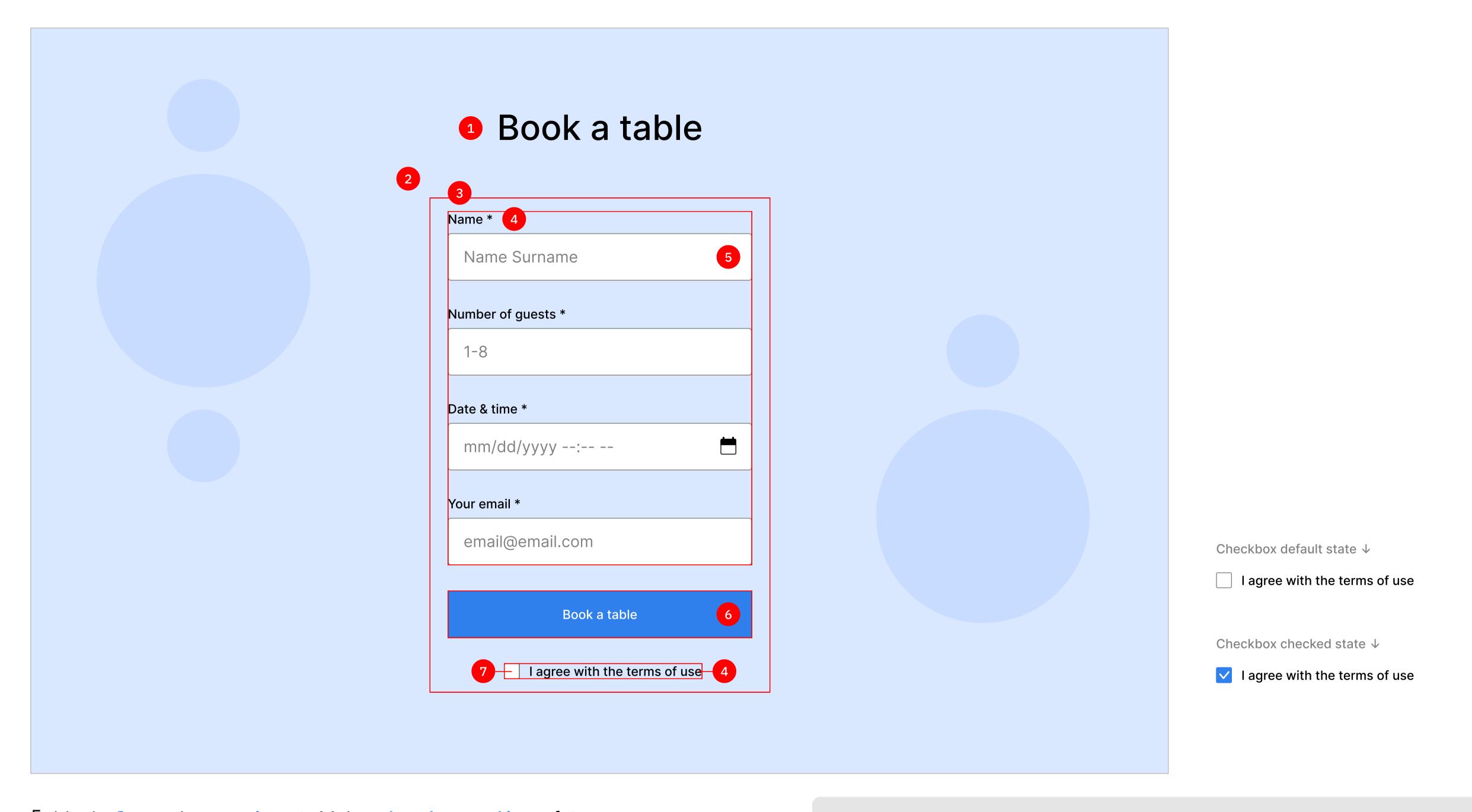
Required elements and class names

Background: Set the background color to #D9E7FF. For the background image, provide the URL to background-reservation.svg. The background doesn't repeat and its position is centered. Set the size value to cover.

Use the appropriate type of input: text, number, datetime-local, email, checkbox. Specify placeholder texts as shown in the design. All fields, including the checkbox, should be required.

- 2. block: reservation, element: form. Also, mix it with the form block. For reservation__form, define the width and margins. Remember, we can only specify these properties for child elements according to BEM. The form block and its elements will contain all the styles that apply to the form, thus making it reusable.
- 3. block: form, element: fieldset.
- 4. block: form, element: label.

1. block: reservation, element: title.



- 5. block: form, element: input. Make a border-radius of 4px.
- 6. block: **form**, element: **button**. Use the appropriate HTML tag for the button. Make a **border-radius** of **4px**. Create a hover state, so that the opacity changes from 100% to 70%. Add smooth transition for the **opacity** property.
- 7. block: **form**, element: **checkbox**. Make a **border-radius** of **2px**. Ensure that the text is on the same level as the checkbox.

You can keep the standard checked styles for it. However, in this case, remember to remove the check.svg from the images folder.

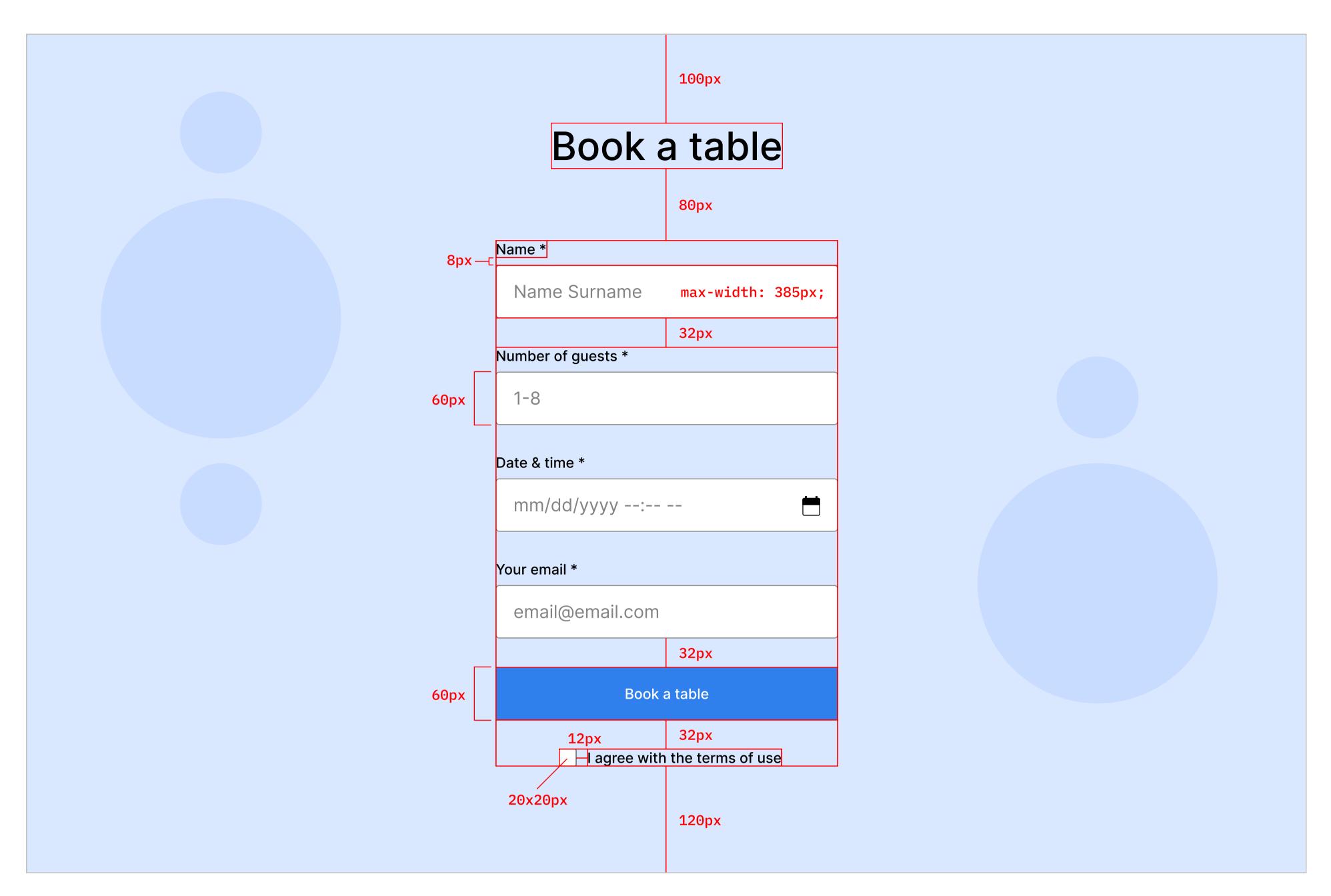
If you want to challenge yourself, you can also style it as follows: set the background color to #2F80ED, and a background image of check.svg.

Pro tip:

Notice that you can't easily control CSS styles for the datetime-local input because each browser defines its UI. That's why it's common practice to leave the standard styles. Accordingly, you should keep the standard styles for this project as well.

In general, not everything from a design can be easily implemented, and in some situations, without using JavaScript workarounds, it's virtually impossible. In such a case, the time-cost ratio may not be reasonable for the business, and the eventual solution may not be readily scalable. Accordingly, when dealing with something like this, it's good practice to communicate with the designer and find the most appropriate solution together.

Second Project: Advanced HTML and CSS
Stage 2. Step by step implementation / Reservation



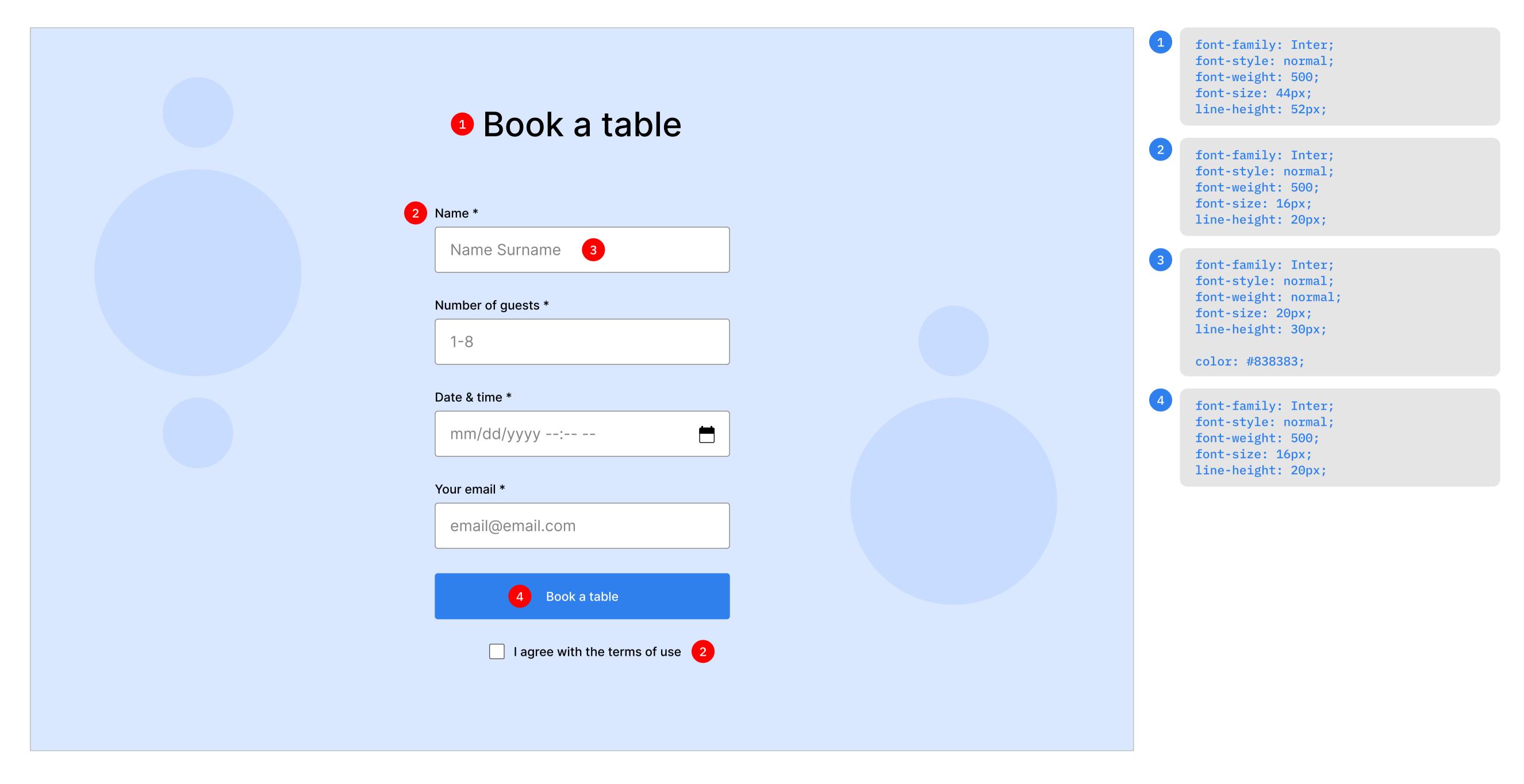
Sizes and spacings

Add all the sizes according to the picture above.

The blocks should be centered inside the section.

Second Project: Advanced HTML and CSS

Stage 2. Step by step implementation / Reservation



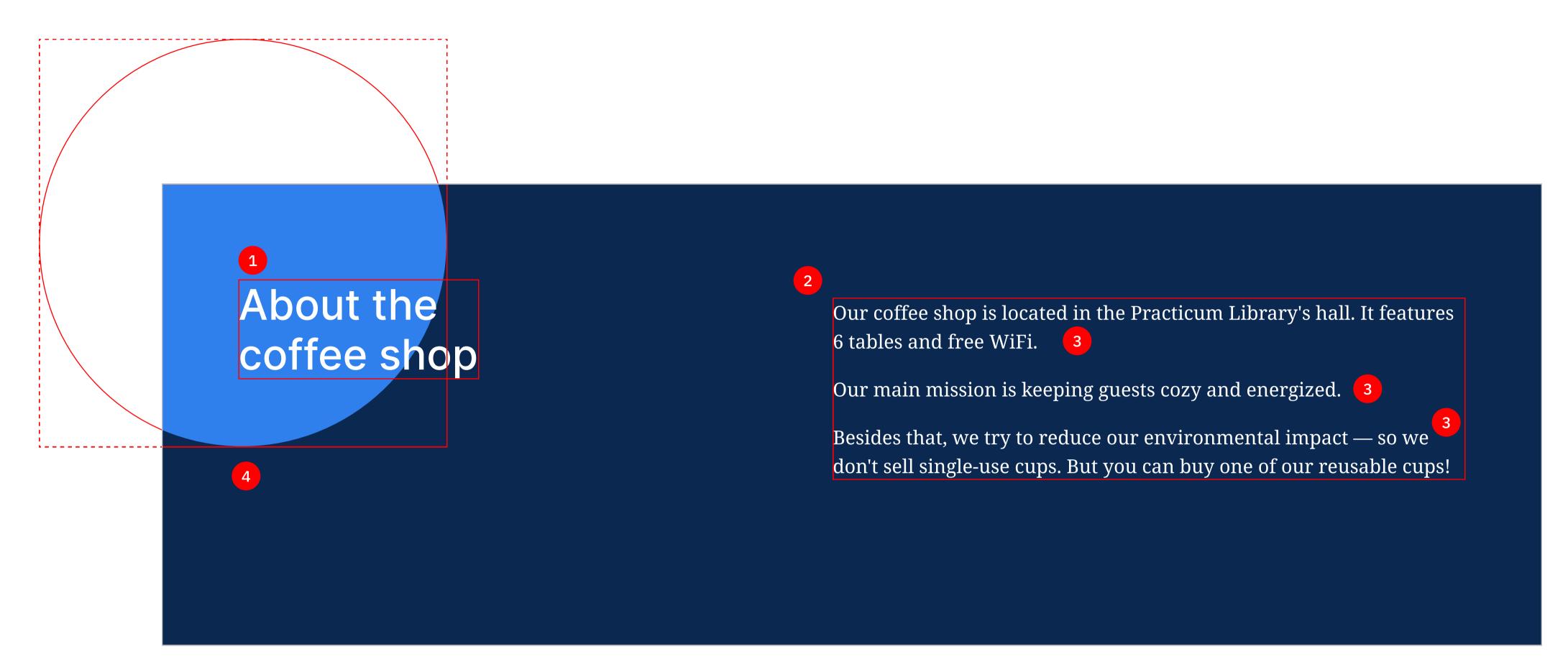
Typography

The numbered code snippets correspond to their respective numbered text elements. Notice that the color of placeholder text is different.

Second Project: Advanced HTML and CSS

Stage 2. Step by step implementation / About

5. Section: About the coffee shop



Required elements and class names

1. block: about, element: title.

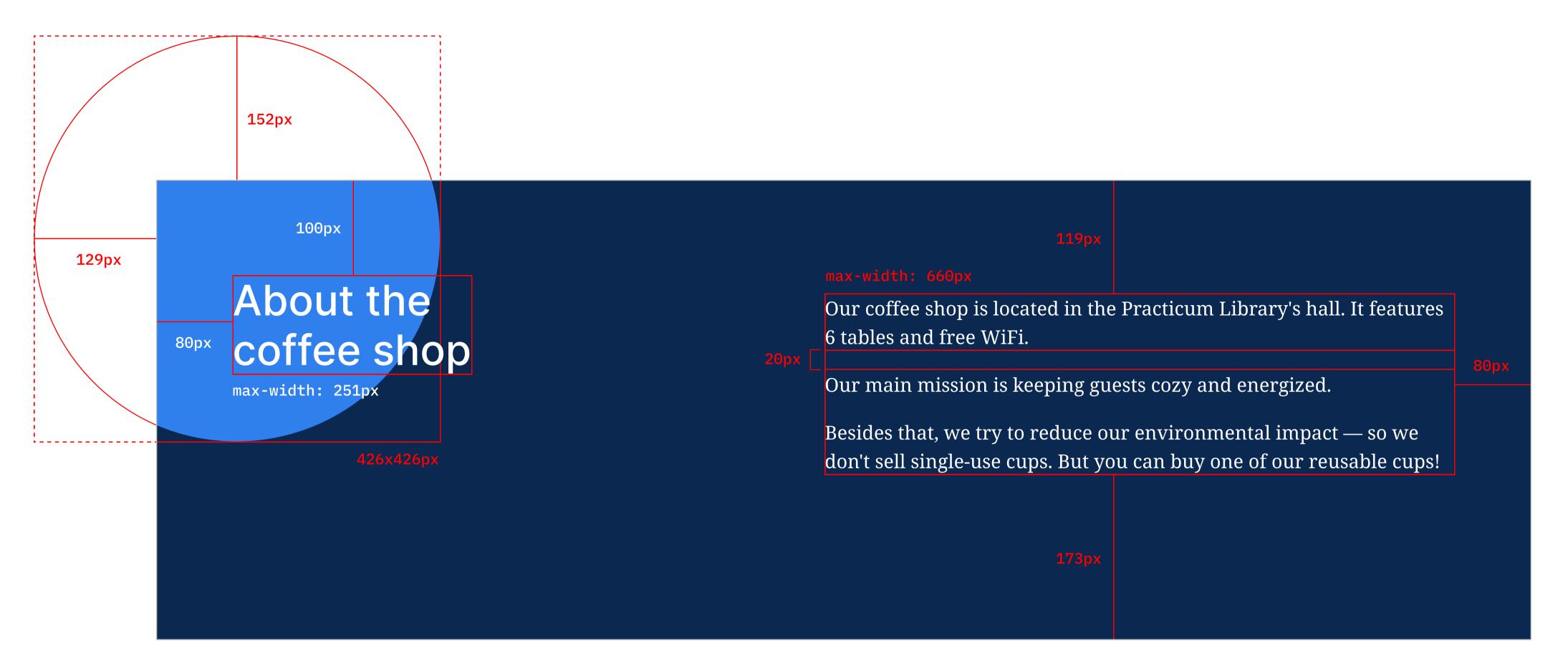
2. block: about, element: content.

3. block: about, element: paragraph.

4. block: about, element: circle.

Second Project: Advanced HTML and CSS

Stage 2. Step by step implementation / About

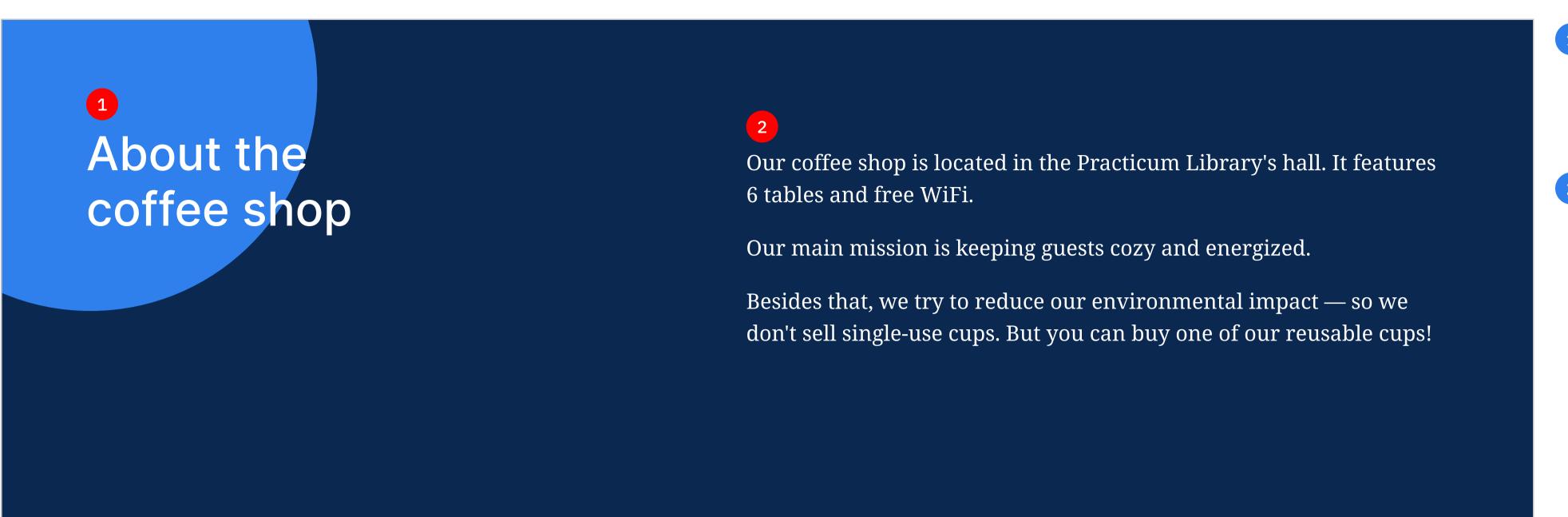


Sizes and spacings

Add all the sizes according to the picture above. You can position the circle absolutely.

Second Project: Advanced HTML and CSS

Stage 2. Step by step implementation / About

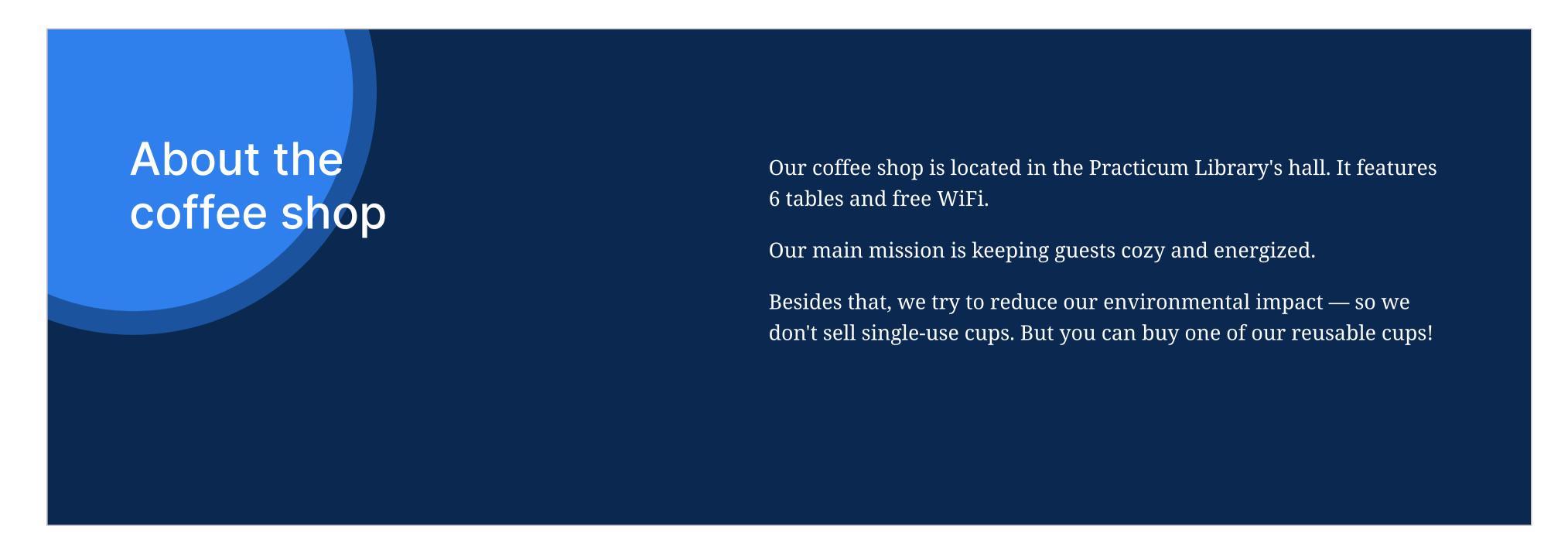


font-family: Inter;
font-style: normal;
font-weight: 500;
font-size: 44px;
line-height: 52px;

font-family: Noto Serif;
font-style: normal;
font-weight: normal;
font-size: 20px;
line-height: 30px;

Typography

The numbered code snippets correspond to their respective numbered text elements.



Animation

The blue circle will be animated to pulsate like a heart. You can see the animated version in the project description on the platform.

We need our current circle element to remain static, so for the animation, we'll add a new one. Duplicate the <div> element with the static circle with its class, then add a BEM modifier to the duplicated one:

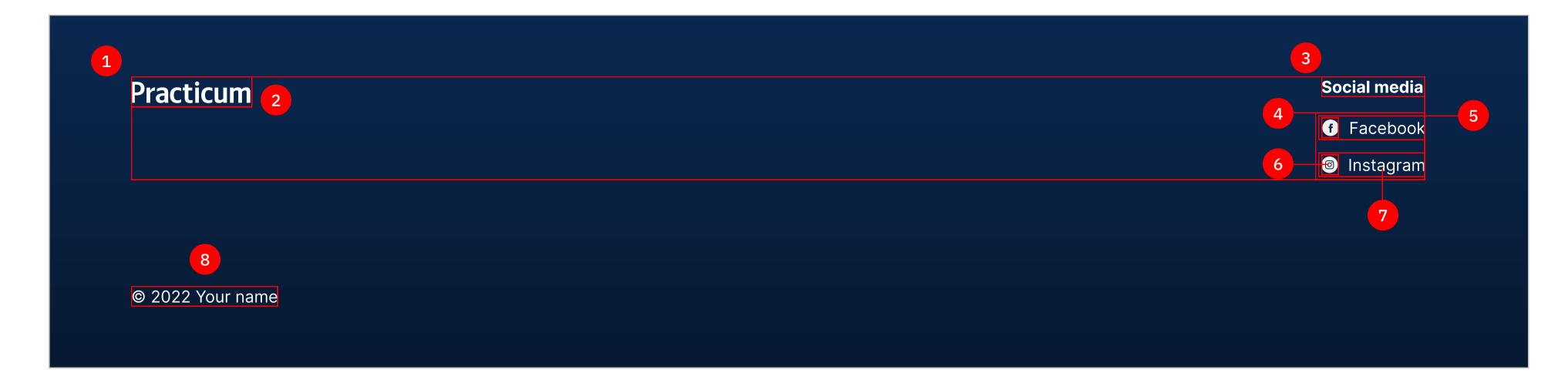
about__circle_animation_blurred.

Declare the animation with the @keyframes at-rule. You should give it a meaningful name, such as pulsate. The animation should have three frames:

- 1. At the start of the animation, make the animated circle invisible using the opacity property.
- 2. During the middle stage (50%), increase the opacity to 0.6.
- 3. When the animation is complete, apply the transform property to scale the circle. In the scale function, specify any value, to your liking, larger than 1 but not larger than 1.5. Make the circle invisible again.

Implement the animation to the circle by adding the animation property to the modifier. Specify the animation's duration (1.3s), the timing function should be ease-in-out. There should be no delay, and the animation should be infinite.

6. Footer



Required elements and class names

Background: notice the fancy gradient. Figma provides you with ready-made code for gradients, so let's use the code for this one:

```
background: linear-gradient(180deg, #0A2850 0%, #071931 100%);
1. block: footer, element: content.
2. block: footer, element: logo.
3. block: footer, element: social-heading.
4. block: footer, element: list.
5. block: footer, element: list-item.
6. block: footer, element: social-icon.
7. block: footer, element: social-link.
Create a hover state for links so they smoothly transition into a color of #C1C1C1. You can specify any transition properties you'd like, such as duration or timing function.
```

8. block: footer, element: copyright. Remember to write your name here. e

Second Project: Advanced HTML and CSS
Stage 2. Step by step implementation / Footer



Sizes and spacings

Add all the sizes according to the picture above.

Second Project: Advanced HTML and CSS Stage 2. Step by step implementation / Footer



Typography

The numbered code snippets correspond to their respective numbered text elements.

Second Project: Advanced HTML and CSS
Stage 3. Self-review

Stage 3. Self-review

You are nearing the project finish line, and you've already completed the hardest part. Still, there is one last crucial task before you complete your project: conducting the self-review. To help, we've prepared a checklist:

Compare each section of your webpage against the brief (open your project

side-by-side with the brief and go through each point. Consider jotting down notes for yourself with things that you want to remember).
 Check the validity of your code using a <u>validator</u>.
 Check your project against all the checklist items (you'll find this in the project description on the platform).
 Make sure to remove any redundant comment lines. Keep the comments that help you better understand the project structure and facilitate your understanding of complex features.

And with that, you've finally finished all the tasks for your second project at Practicum. Awesome job!

