



[SpartaCodingClub] HTML&CSS 101 - Chap.2



You can download the lecture notes in pdf below!

▼ PDF file

[Learning Objective]

1. Practice HTML and CSS by making a web card
2. Understand basic JavaScript
3. Produce an interactive website using JavaScript

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Shortcuts to expand/close all toggles

Windows : `Ctrl` + `alt` + `t`

Mac : `⌘` + `⌥` + `t`

01. Preview the Card

▼ 1) Let's see what it looks like



You can open the letter by clicking on the image of the card. Also, try clicking on the Rtanny character!



▼ [Code Snippet] Celebration Letter

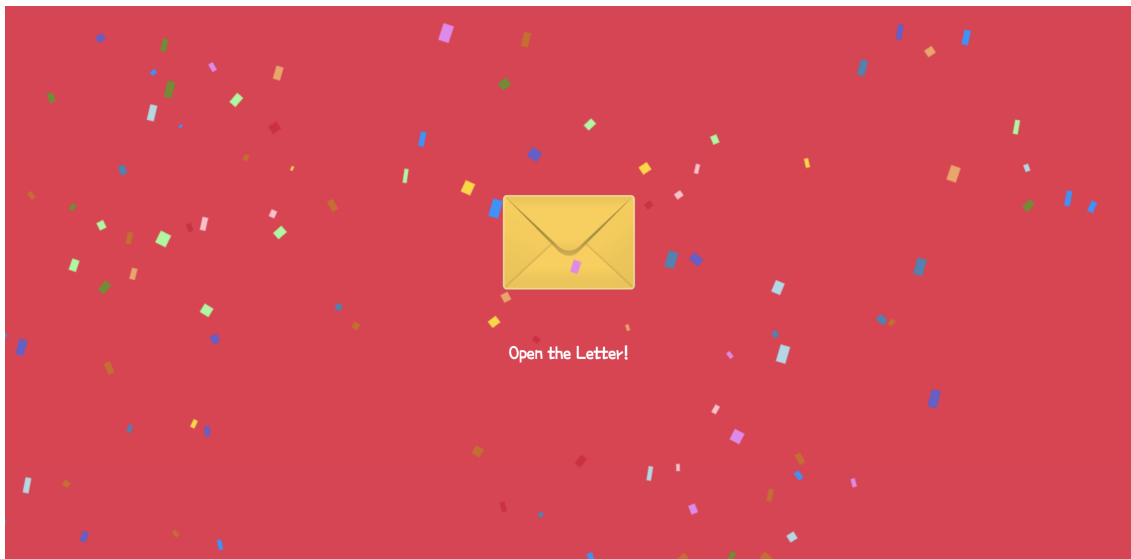
```
https://letter.spartacodingclub.kr/index.html
```

▼ 2) Step-by-step Instructions

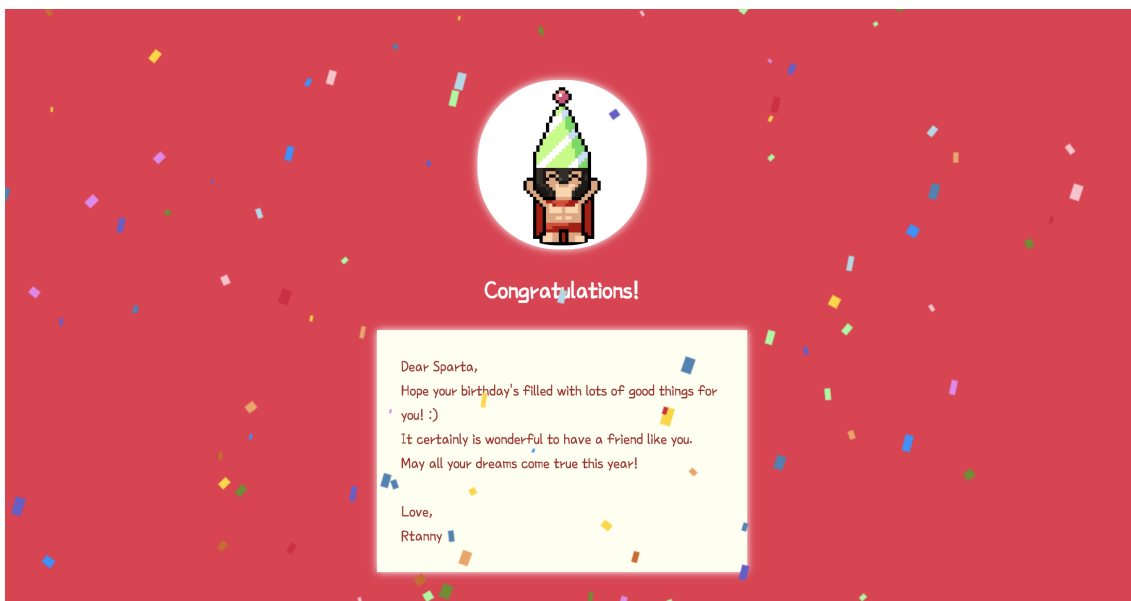


What elements are required? It's important to start with elements that are visible first!

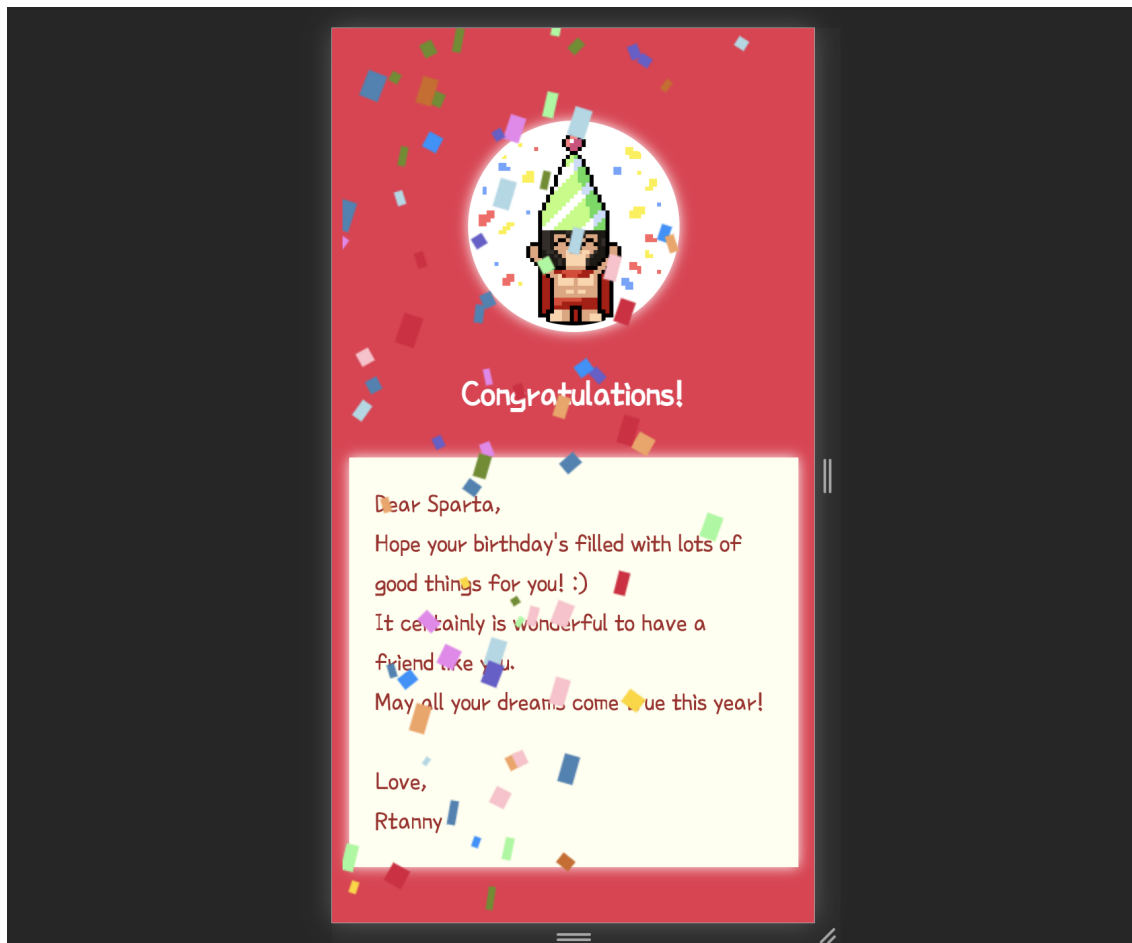
1. Create an envelope in HTML



2. Create a letter in HTML



3. Then, set up the mobile version of the site



4. Use javascript to open the letter when clicking on the envelope

👉 Let's get a small taste of javascript here! We will copy and paste some JavaScript code for this tutorial! 🏠

5. Then, apply a falling confetti animation
6. Add a hidden message that is revealed by clicking on Rtanny
7. Finally, we will set up the image and text for sharing on social media!

02. Create an envelope HTML

- ▼ 3) First, create a new HTML file

👉 Create a new file, `card.html`

- Again, type `html:5` to auto complete the HTML template

- ▼ 4) Change the title and the background color of the body of your HTML document

1. Change the title

```
<title>Hello, Sparta!</title>
```

2. Apply the background color



Try to use our signature Sparta Pink color, `#e8344e`



▼ 5) Insert some HTML for an envelope



Let's insert an envelope in the middle of the page!

▼ [Code Snippet] - Envelope Image URL

```
https://pngimg.com/uploads/envelope/envelope_PNG18366.png
```

```
.envelope {  
  background-image: url('https://pngimg.com/uploads/envelope/envelope_PNG18366.png');  
  background-size: cover;  
  background-position: center;  
  
  width: 200px;  
  height: 200px;  
}
```

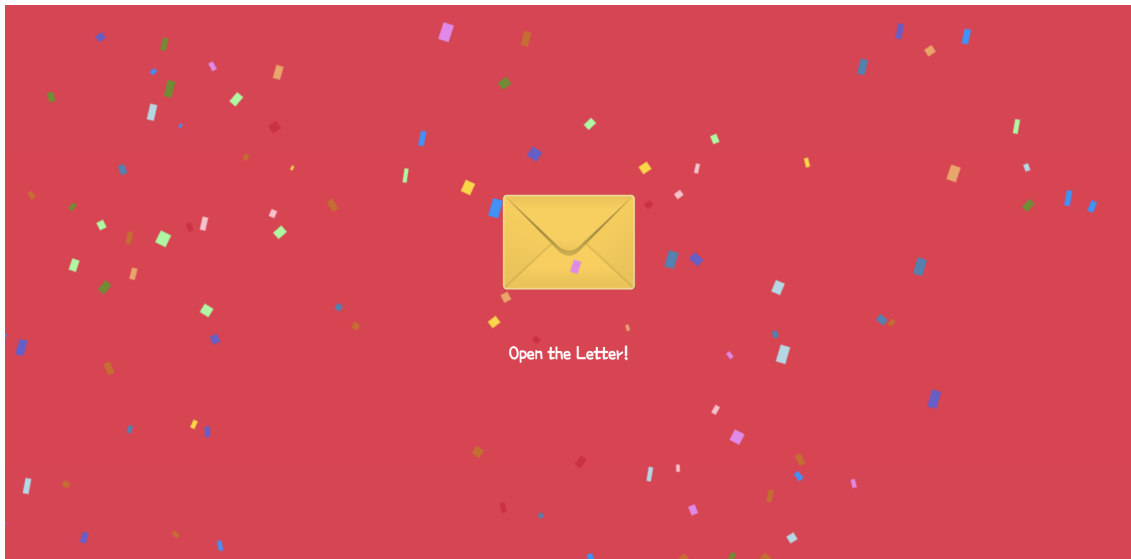
```
<div class="envelope"></div>
```

- Now that we have added the envelope, let's bring it to the center and leave some space above it.

```
.envelope {  
  background-image: url('https://pngimg.com/uploads/envelope/envelope_PNG18366.png');  
  background-size: cover;  
  background-position: center;  
  
  width: 200px;  
  height: 200px;  
  
  margin: 20px auto 0px auto;  
}
```

▼ 6) Put a message under the envelope

▼ Do you remember 'Open the Letter!' ?



```
.envelope-msg {  
  color: white;  
  text-align: center;  
}
```

```
<h2 class="envelope-msg">Open the Letter!</h2>
```

▼ 7) Lastly, group the envelope and the message together!

👉 Both should be shown and hidden at the same time!
→ As they have to act together, we will group them using a `<div>` tag! 👍

```
<div>  
  <div class="envelope"></div>  
  <h2 class="envelope-msg">Open the Letter!</h2>  
</div>
```

- Obviously, nothing has changed. But, we'll see how it's used later! 😊

03. (Review) Apply Fonts

▼ 8) Before we move forward, let's apply some custom fonts!

👉 Do you remember how to apply a Google Web Font?

1. Go to Google Fonts

▼ [Code Snippet] - Google Fonts

```
https://fonts.google.com/
```

2. Choose the font you like (ex. - Yusei Magic)
3. Click [+ Select this style]
4. Copy the `<link>` code

```
<link rel="preconnect" href="https://fonts.gstatic.com">
<link href="https://fonts.googleapis.com/css2?family=Yusei+Magic&display=swap" rel="stylesheet">
```

5. Apply the font CSS to all HTML elements in your document

```
* {
  font-family: 'Yusei Magic', sans-serif;
}
```

04. Create a letter HTML - Rtanny

- ▼ 9) Hide the envelope HTML for now; we will come back to it soon

👉 Use `display: none;` to hide the envelope HTML

```
<div class="letter-close">
  <div class="envelope"></div>
  <h2 class="envelope-msg">Open the Letter!</h2>
</div>
```

```
.letter-close {
  display: none;
}
```

- ▼ 10) Show an image of Rtanny



Hello! My name is Rtanny, the mascot of SpartaCodingClub!

Add my image to the letter with the following features:
round div, white border, and shadow effect

▼ [Code Snippet] - Rtanny #1

```
https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon8.gif
```

1. Upload Rtanny image

```
.rtanny {
  width: 200px;
  height: 200px;

  background-image: url('https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon8.gif');
  background-size: cover;
  background-position: center;
}
```

```
<div class="rtanny"></div>
```

2. Make the image round + white border + center

```
.rtanny {
  width: 200px;
  height: 200px;

  background-image: url('https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon8.gif');
  background-size: cover;
  background-position: center;

  background-color: white;

  margin: auto;
  border-radius: 100px;
  border: 5px solid white;
}
```

3. Make space above the image

```
.rtanny {
  width: 200px;
  height: 200px;

  background-image: url('https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon8.gif');
  background-size: cover;
  background-position: center;

  background-color: white;

  margin: 100px auto 0px auto;
  border-radius: 100px;
  border: 5px solid white;
}
```

4. Add a shadow effect

```
.rtanny {
  width: 200px;
  height: 200px;

  background-image: url('https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon8.gif');
  background-size: cover;
  background-position: center;

  background-color: white;

  margin: 100px auto 0px auto;
  border-radius: 100px;
  border: 5px solid white;

  box-shadow: 0px 0px 10px 0px white;
}
```

05. Create a letter HTML - Message

▼ 11) Add the card title



You can create the card title by using a centered `<h1>` tag!

→ In this case, 1) put it in the center, 2) adjust the spacing around the tag later!

- White text + centered

```
h1 {
  text-align: center;
  color: white;
}
```

```
<h1>Congratulations!</h1>
```

▼ 12) Add a message for your recipients



Take some time to write a personalized letter! Use `
` wherever you need a line break!

1. First, write down the message!

```
<div class="messagebox">
  Dear Sparta, <br/>
  Hope your birthday's filled with lots of good things for you! :)<br/>
  It certainly is wonderful to have a friend like you. <br/>
  May all your dreams come true this year! <br/><br/>
  Love, <br/>
  Rtanny</div>
```

▼ [Code Snippet] - Message Example

```
Dear Sparta, <br/>
Hope your birthday's filled with lots of good things for you! :) <br/>
It certainly is wonderful to have a friend like you. <br/>
May all your dreams come true this year! <br/>
<br/>
Love, <br/>
Rtanny </br>
```

2. Bring the message to the center

```
.messagebox {
  width: 400px;
  margin: auto;

  font-size: 20px;
  line-height: 30px;
}
```

3. Add color to the messagebox

```
.messagebox {
  width: 400px;
  margin: auto;

  font-size: 20px;
  line-height: 30px;

  background-color: ivory;
  color: brown;
  padding: 30px;
}
```

4. Add a shadow effect

```
.messagebox {
  width: 400px;
  margin: auto;

  font-size: 20px;
  line-height: 30px;

  background-color: ivory;
  color: brown;
  padding: 30px;

  box-shadow: 0px 0px 10px 0px white;
}
```

5. Lastly, add margin to the text


```
h1 {
  text-align: center;
  color: white;

  margin-top: 30px;
  margin-bottom: 30px;
}
```

- ▼ 13) Finally, group the elements of the letter HTML together using a `<div>` tag

👉 The tags of the letter HTML should be shown and hidden at the same time!
→ As they have to act together, we will group them using a `<div>` tag! 👍

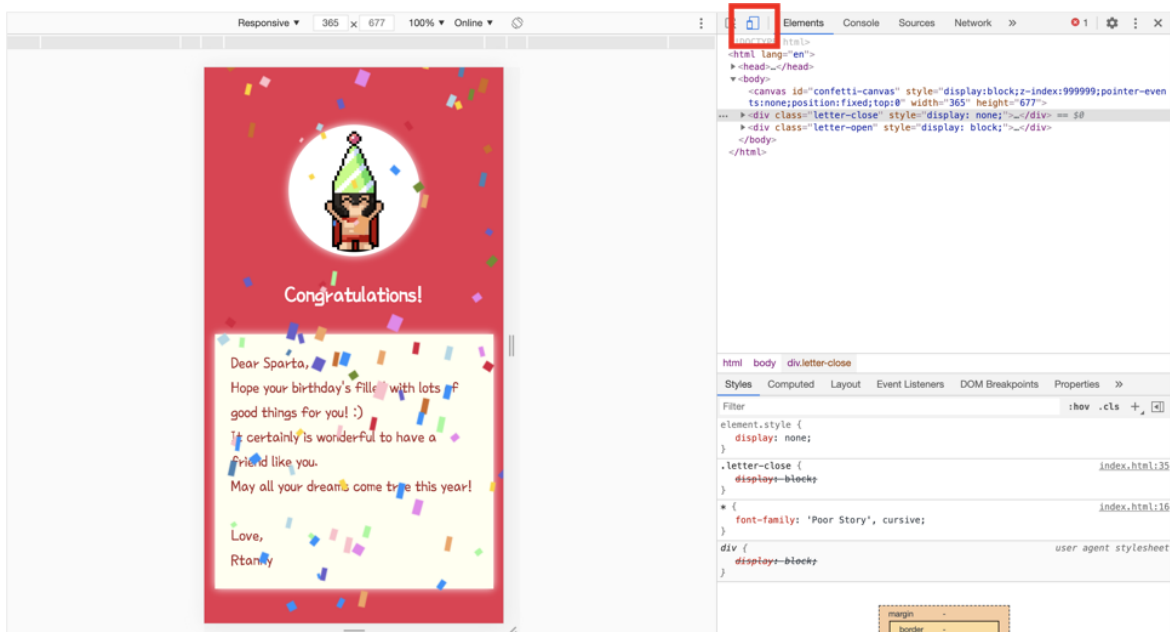
```
</div>
<div class="rtanny"></div>
<h1>Congratulations!</h1>
<div class="messagebox">
  Dear Sparta, <br/>
  Hope your birthday's filled with lots of good things for you! :)<br/>
  It certainly is wonderful to have a friend like you. <br/>
  May all your dreams come true this year! <br/>
<br/>
  Love, <br/>
  Rtanny<br/>
</div>
</div>
```

- Obviously, nothing has changed. But, we'll see how it's used later! 😊

06. Adapt Your Site For Mobile Browsers

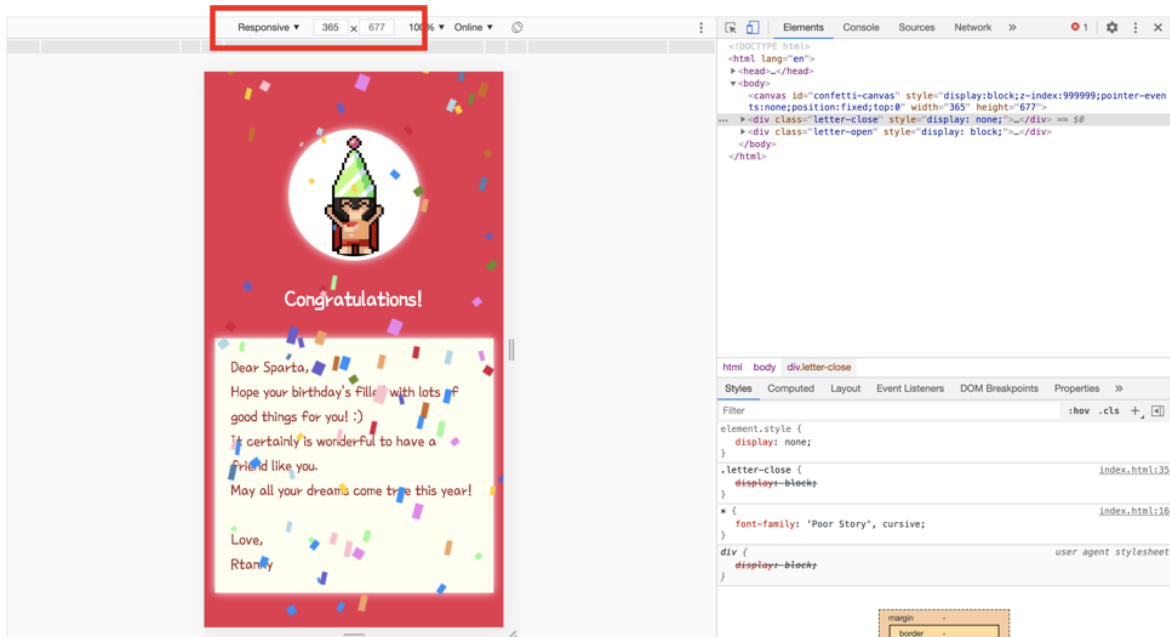
- ▼ 14) Use Chrome Devtools

👉 Mouse right click → `Inspect` → Click device mode



- Set the screen settings to be the following:

👉 Responsive & width around 365px !



▼ 15) Adjust the letter HTML for mobile browsers

▼ [Code Snippet] - Mobile Version Code

```
@media screen and (max-width: 760px) {  
  
}
```

👉 Let's adjust the size of messagebox, rtan and h1!
(It's very easy when you use Chrome DevTools!☺)

```
@media screen and (max-width: 760px) {  
  .messagebox {  
    width: 300px;  
    padding: 20px;  
  }  
  .rtanny {  
    width: 150px;  
    height: 150px;  
    margin: 70px auto 0px auto;  
  }  
  h1 {  
    font-size: 28px;  
  }  
}
```

▼ 16) Adjust the envelope HTML for mobile browsers

👉 First, let's hide the letter, then show the envelope!

```
.letter-close {  
  display: block;  
}
```

```
.letter-open {
  display: none;
}
```

- We'll adjust the location of the envelope a little bit!

```
@media screen and (max-width: 760px) {
  .messagebox {
    width: 300px;
    font-size: 20px;
    line-height: 30px;
    padding: 20px;
  }
  .rtanny {
    width: 150px;
    height: 150px;
    margin: 70px auto 0px auto;
  }
  h1 {
    font-size: 28px;
  }
  .envelope {
    margin: 150px auto 0px auto;
  }
}
```

07. Experience Some Simple JavaScript

- ✓ We'll not learn all of Javascript's syntax in this course.
Let's briefly see how it's used by [copy and pasting](#) the code!

▼ 17) Add function on the envelope

1. Create a function

```
function open_letter() {
}
```

```
<div class="envelope" onclick="open_letter()"></div>
```

2. Make the letter open/close using Javascript

▼ [Code Snippet] - Open/close Code

```
document.getElementsByClassName("letter-close")[0].style.display = 'none'
document.getElementsByClassName("letter-open")[0].style.display = 'block'
```

```
function open_letter() {
  document.getElementsByClassName("letter-close")[0].style.display = 'none'
  document.getElementsByClassName("letter-open")[0].style.display = 'block'
}
```

▼ 18) Change the shape of the mouse pointer

```
.envelope {
  background-image: url('https://pngimg.com/uploads/envelope/envelope_PNG18366.png');
  background-size: cover;
  background-position: center;

  width: 200px;
  height: 200px;
}
```

```
margin: 200px auto 0px auto;  
  
cursor: pointer;  
}
```

08. Add Confetti Animation

▼ 19) Find the animation effect

👉 For example, search on Google like this!

▼ [Code Snippet] - Confetti falling animation

```
<script src="https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/confetti.js"></script>
```

09. Add a Hidden Message

▼ 20) Many more Rtanny...

▼ [Code Snippet] - Rtanny #2

```
https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon36.gif
```

▼ [Code Snippet] - Rtanny #3

```
https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon41.gif
```

▼ [Code Snippet] - Rtanny #4

```
https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon7.gif
```

▼ 21) Add function on Rtanny

```
function go_rtan() {  
  
}
```

```
<div class="rtanny" onclick="go_rtan()"></div>
```

▼ 22) Add a hidden message

👉 Pop up an alert message!

```
alert('Yay! You found it!')
```

👉 Move to the link.

▼ [Code Snippet] - Birthday Song

```
https://youtu.be/_z-1fTlSDF0
```

```
window.location.href="https://youtu.be/_z-1fTlSDF0"
```

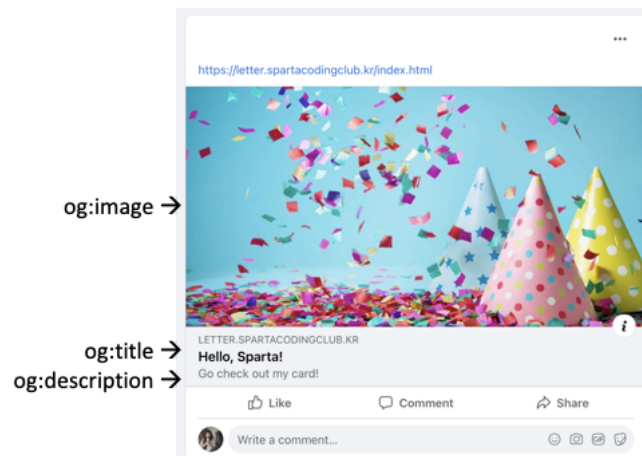
10. Set Up for Share

▼ 23) Share on Facebook

👉 You may have seen the image and text like below!

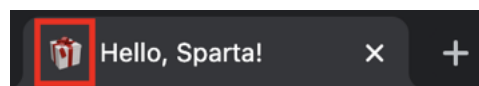
▼ [Code Snippet] - OG tags

```
<meta property="og:image" content="https://agiftidea.com/wp-content/uploads/2020/04/birthday-celebration.jpeg">
<meta property="og:description" content="Go check out my card!">
<meta property="og:title" content="Happy Birthday!">
```



▼ 24) Add favicon

👉 Favicon is this!



▼ [Code Snippet] - Favicon

```
<link rel="shortcut icon" href="https://freepngimg.com/download/gift/22649-9-birthday-gift.png">
```

▼ 25) Final code

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Hello, Sparta!</title>
```

```

<link rel="preconnect" href="https://fonts.gstatic.com">
<link href="https://fonts.googleapis.com/css2?family=Poor+Story&display=swap" rel="stylesheet">
<meta property="og:image" content="https://agiftidea.com/wp-content/uploads/2020/04/birthday-celebration.jpeg">
<meta property="og:description" content="Go check out my card!">
<meta property="og:title" content="Happy Birthday!">
<link rel="shortcut icon" href="https://freepngimg.com/download/gift/22649-9-birthday-gift.png">
<script src="https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/confetti.js"></script>
<style>
  * {
    font-family: 'Poor Story', cursive;
  }
  body {
    background-color: #e8344e;
  }
  .envelope {
    background-image: url('https://pngimg.com/uploads/envelope/envelope_PNG18366.png');
    background-size: cover;
    background-position: center;
    width: 200px;
    height: 200px;
    margin: 20px auto 0px auto;
    cursor: pointer;
  }
  .envelope-msg {
    color: white;
    text-align: center;
  }
  .letter-close {
    display: block;
  }
  .letter-open {
    display: none;
  }
  .rtanny {
    width: 200px;
    height: 200px;
    background-image: url('https://s3.ap-northeast-2.amazonaws.com/materials.spartacodingclub.kr/global/SpartaIcon8');
    background-size: cover;
    background-position: center;
    background-color: white;
    margin: 100px auto 0px auto;
    border-radius: 100px;
    border: 5px solid white;
    box-shadow: 0px 0px 10px 0px white;
  }
  h1 {
    text-align: center;
    color: white;
    margin-top: 30px;
    margin-bottom: 30px;
  }
  .messagebox {
    width: 400px;
    margin: auto;
    font-size: 20px;
    line-height: 30px;
    background-color: ivory;
    color: brown;
    padding: 30px;
    box-shadow: 0px 0px 10px 0px white;
  }
  @media screen and (max-width: 760px) {
    .messagebox {
      width: 300px;
      font-size: 20px;
      line-height: 30px;
      padding: 20px;
    }
    .rtanny {
      width: 150px;
      height: 150px;
      margin: 70px auto 0px auto;
    }
    h1 {
      font-size: 28px;
    }
    .envelope {
      margin: 150px auto 0px auto;
    }
  }
</style>
<script>
  function open_letter() {
    document.getElementsByClassName("letter-close")[0].style.display = 'none'
    document.getElementsByClassName("letter-open")[0].style.display = 'block'
  }
  function go_rtan() {

```

```

        alert('YAY! You found it!')
        window.location.href="https://youtu.be/_z-1fTlSDF0"
    }
</script>
</head>
<body>
    <div class="letter-close">
        <div class="envelope" onclick="open_letter()"></div>
        <h2 class="envelope-msg">Open the Letter!</h2>
    </div>
    <div class="letter-open">
        <div class="rtan" onclick="go_rtan()"></div>
        <h1>Congratulations!</h1>
        <div class="messagebox">
            Dear Sparta, <br/>
            Hope your birthday's filled with lots of good things for you! :)<br/>
            It certainly is wonderful to have a friend like you. <br/>
            May all your dreams come true this year! <br/>
            <br/>
            Love, <br/>
            Rtanny</div>
        </div>
    </div>
</body>
</html>

```

11. Publish Your Card



Since you haven't learned back-end part of web development yet, SpartaCodingClub has prepared publishing process for you!
(You can learn how to publish from our official Web Development course! 🤔)

▼ 26) Publish and get URL



Send URL to your friend to see whether OG tags work or not!

▼ [Code Snippet] - Publishing Page

```
http://spartacodingclub.shop/upload_letter
```



"Now, the course is OVER! Hope it was a meaningful time for you to experience Web Development Basics. You've learned half of the web development and the other half is still unveiled. Let's continue to code at SpartaCodingclub!"