

# Generating cards in HTML

## Page template

```
In [81]: page_title = "My Library Cards"
```

```
In [82]: all_cards = ""
```

```
In [83... html = f"""<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>flex</title>
    <link href="stylesheet.css"
rel="stylesheet">
  </head>
  <body>
    <header>
      <h1>{ page_title }</h1>
    </header>
    <section id="cards">
      { all_cards }
    </section>
  </body>
</html>"""
```

## Card template

```
In [84]: title = ""
img = ""
```

```
In [85]: card = f"""<div class="card">
          <h2>{ title }</h2>
          <p>{ img }</p>
        </div>"""
```

## Gather some materials

```
In [86]: import os
```

```
In [87]: images = []
         titles = []
```

```
         folder = "./images/"
```

```
         for image in os.listdir(folder):
             print(folder + image)
             print("----")
             titles.append(image)
             images.append(folder + image)
```

```
./images/cards2.jpg
```

```
---
```

```
./images/cards5.jpg
```

```
---
```

```
./images/cards3.jpg
```

```
---
```

```
./images/cards1.jpg
```

```
---
```

```
./images/cards4.jpg
```

```
---
```

```
In [88]: titles
```

```
Out[88]: ['cards2.jpg', 'cards5.jpg', 'cards3.jpg',
          'cards1.jpg', 'cards4.jpg']
```

```
In [89]: images
```

```
Out[89]: ['./images/cards2.jpg',
           './images/cards5.jpg',
           './images/cards3.jpg',
           './images/cards1.jpg',
           './images/cards4.jpg']
```

## Generate the cards

```
In ... counter = 0

for image in images:
    # --- we prepare the variables we need ---
    img = f"<img src='{ image }'>"
    title = titles[counter]

    # --- we declare the card template ---
    card = f"""
        <div class="card">
            <h2>{ title }</h2>
            <p>{ img }</p>
        </div>
        """

    # --- we print the card template (to see if
    # everything is going oke) ---
    print(card)

    # --- we add the card to the variable
    # "all_cards" (where we collect all the HTML) ---
    # "card" is a string, so we can just glue
    # the different "cards" together with the "+"
    all_cards = all_cards + card

    # --- we add +1 to our counter ---
    counter = counter + 1
```

```
<div class="card">
  <h2>cards2.jpg</h2>
  <p><img src='./images/cards2.jpg'></p>
</div>
```

```
<div class="card">
  <h2>cards5.jpg</h2>
  <p><img src='./images/cards5.jpg'></p>
</div>
```

```
<div class="card">
  <h2>cards3.jpg</h2>
  <p><img src='./images/cards3.jpg'></p>
</div>
```

```
<div class="card">
  <h2>cards1.jpg</h2>
  <p><img src='./images/cards1.jpg'></p>
</div>
```

```
<div class="card">
  <h2>cards4.jpg</h2>
  <p><img src='./images/cards4.jpg'></p>
</div>
```

```
In [9... # --- we check if all the cards are in the  
variable "cards" ---  
print(all_cards)
```

```
<div class="card">
  <h2>cards2.jpg</h2>
  <p><img src='./images/cards2.jpg'></p>
</div>
```

```
<div class="card">
  <h2>cards5.jpg</h2>
  <p><img src='./images/cards5.jpg'></p>
</div>
```

```
<div class="card">
  <h2>cards3.jpg</h2>
  <p><img src='./images/cards3.jpg'></p>
</div>
```

```
<div class="card">
  <h2>cards1.jpg</h2>
  <p><img src='./images/cards1.jpg'></p>
</div>
```

```
<div class="card">
  <h2>cards4.jpg</h2>
  <p><img src='./images/cards4.jpg'></p>
</div>
```

```
In [... # --- and we add the variable "all_cards" into  
the main html template ---  
html = f"""<!DOCTYPE html>  
<html>  
    <head>  
        <meta charset="utf-8">  
        <title>flex</title>  
        <link href="stylesheet.css"  
rel="stylesheet">  
    </head>  
    <body>  
        <header>  
            <h1>{ page_title }</h1>  
        </header>  
        <section id="cards">  
            { all_cards }  
        </section>  
    </body>  
</html>"""
```

```
In [93]: print(html)
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>flex</title>
    <link href="stylesheet.css" rel="stylesheet">
  </head>
  <body>
    <header>
      <h1>My Library Cards</h1>
    </header>
    <section id="cards">

      <div class="card">
        <h2>cards2.jpg</h2>
        <p><img src='./images/cards2.jpg'></p>
      </div>

      <div class="card">
        <h2>cards5.jpg</h2>
        <p><img src='./images/cards5.jpg'></p>
      </div>

      <div class="card">
        <h2>cards3.jpg</h2>
        <p><img src='./images/cards3.jpg'></p>
      </div>

      <div class="card">
        <h2>cards1.jpg</h2>
        <p><img src='./images/cards1.jpg'></p>
      </div>

      <div class="card">
        <h2>cards4.jpg</h2>
        <p><img src='./images/cards4.jpg'></p>
      </div>

    </section>
  </body>
</html>
```

# Write the HTML to a .html file

```
In [94]: import os
```

```
In [95]: with open("cards.html", "w") as output:  
         output.write(html)
```