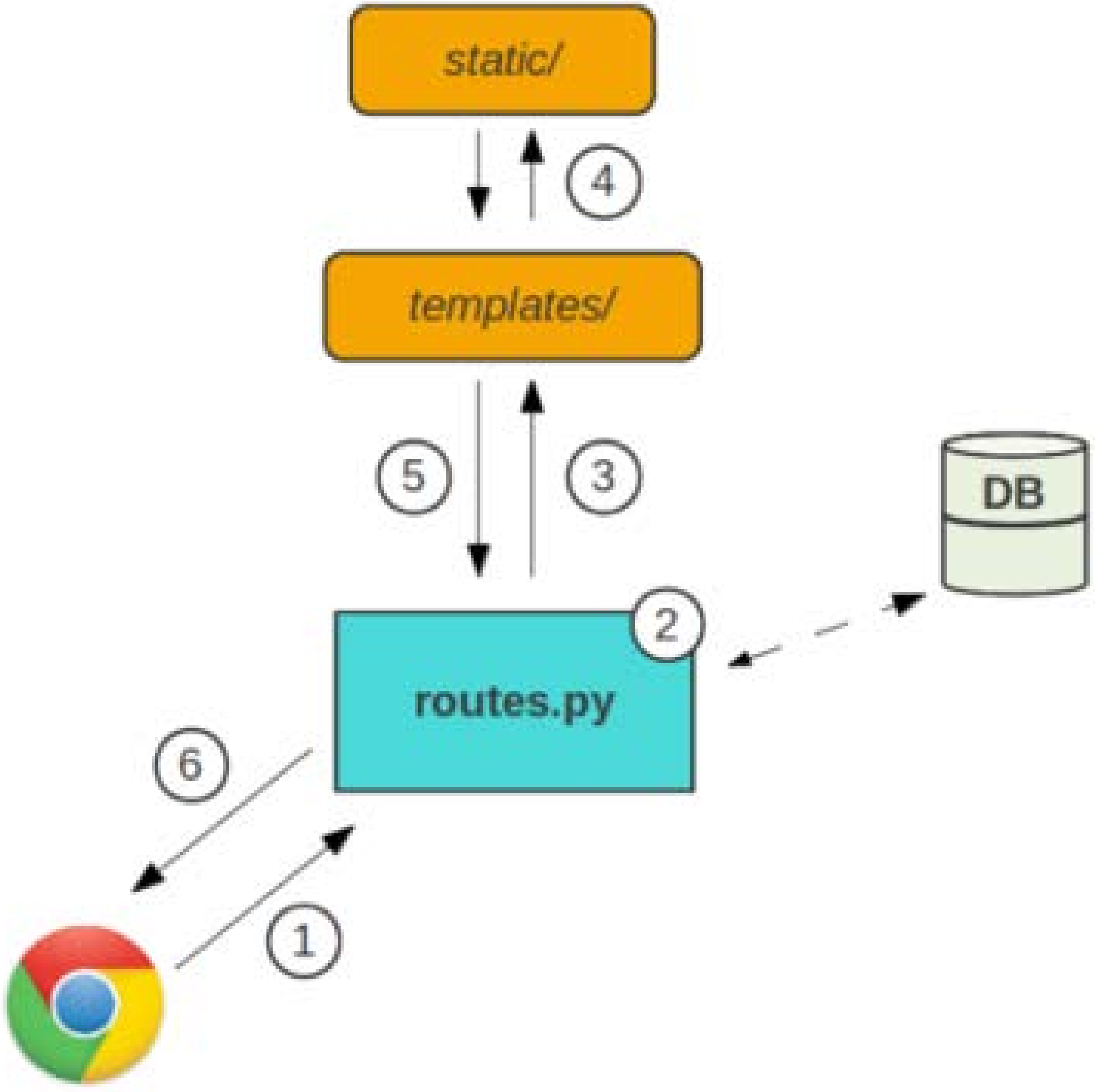
Walk through previous lectures

Flask

1. A user issues a request for a domain's root URL / to go to its home page.
2. routes.py maps the URL / to a Python function.
3. The Python function finds a web template living in the *templates/* folder.
4. A web template will look in the *static/* folder for any images, CSS, or JavaScript files it needs as it renders to HTML
5. Rendered HTML is sent back to routes.py
6. routes.py sends the HTML back to the browser



Flask

Example: (hello.py)

```python
from flask import Flask
app = Flask(__name__)

@app.route("/")
def hello():
    return "Hello World!"
if __name__ == "__main__":
    app.run()
```

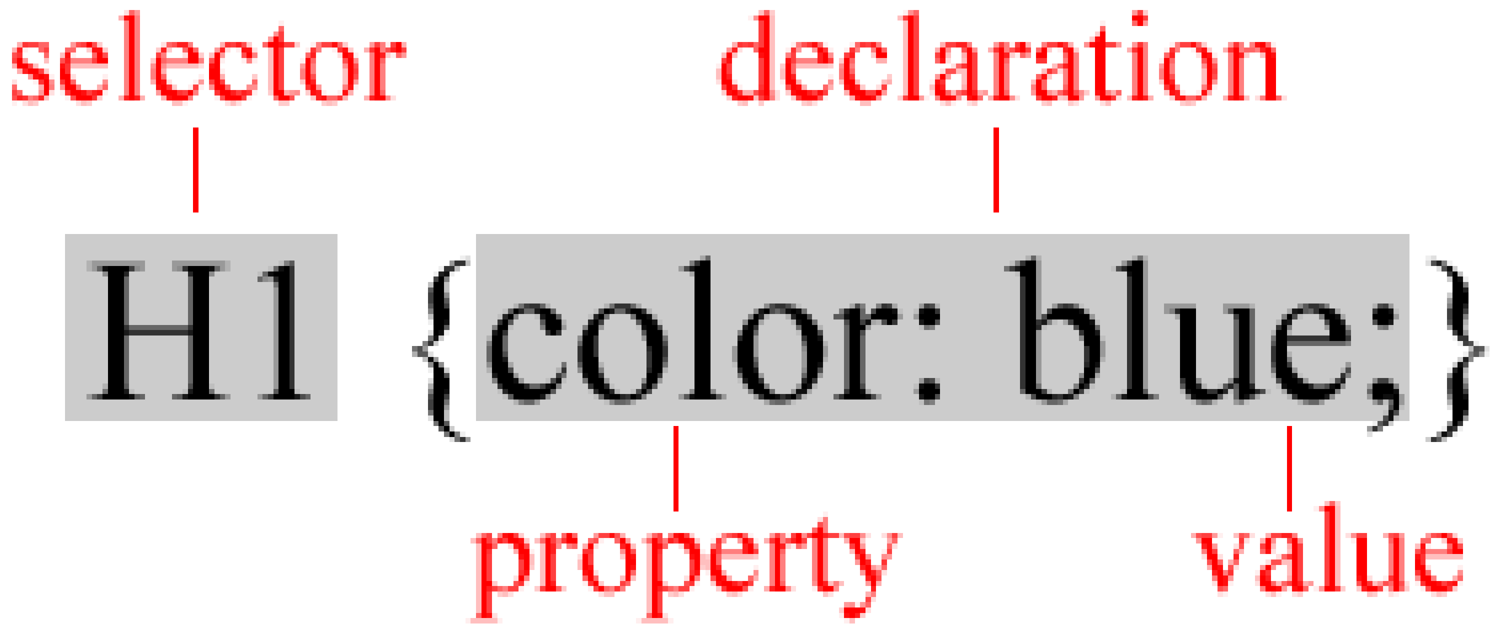
CSS!

What are Cascading Style Sheets?

- Separates design elements from structural logic
- Has become the W3C standard for controlling visual presentation of web pages
- You get control and maintain the integrity of your data

Let’s See Some Code

- Rule Structure



```
H1 {color: blue;}
```

Selectors

- **Element Selectors**
  H1 {color: purple;}
  H1, H2, P {color: purple;}

- **Class Selectors**
  <H1 CLASS=“warning”>Danger!</H1>
  <P CLASS=“warning”>Be careful…</P>

Applying CSS to HTML

- Style rules can be applied in 3 ways:

Embedded style sheets

External style sheets:

```
<HEAD>
<LINK REL=stylesheet" TYPE="text/css"
HREF="styles/mystyles.css">
</HEAD>
```

This is true "separation" of style and content. Keeping all your styles in an external document is simpler

</HTML

JavaScript™

What is JavaScript

- Scripting language (object-oriented)
  - Lightweight programming language developed by Netscape
  - Interpreted, not compiled

- Designed to be embedded in browsers
  - Ideal for adding interactivity to HTML pages
  - Detect browser versions
  - Work with info from user via HTML forms
  - Create cookies
  - Validate form data
  - Read and write HTML elements

What is JavaScript

- HelloWorld example program…

```
<html>
    <head><title>JavaScript HelloWorld!</title></head>
    <body>
      <script type="text/javascript">

        document.write('Javascript says "Hello World!"')

      </script>
    </body>
</html>
```

What is JavaScript

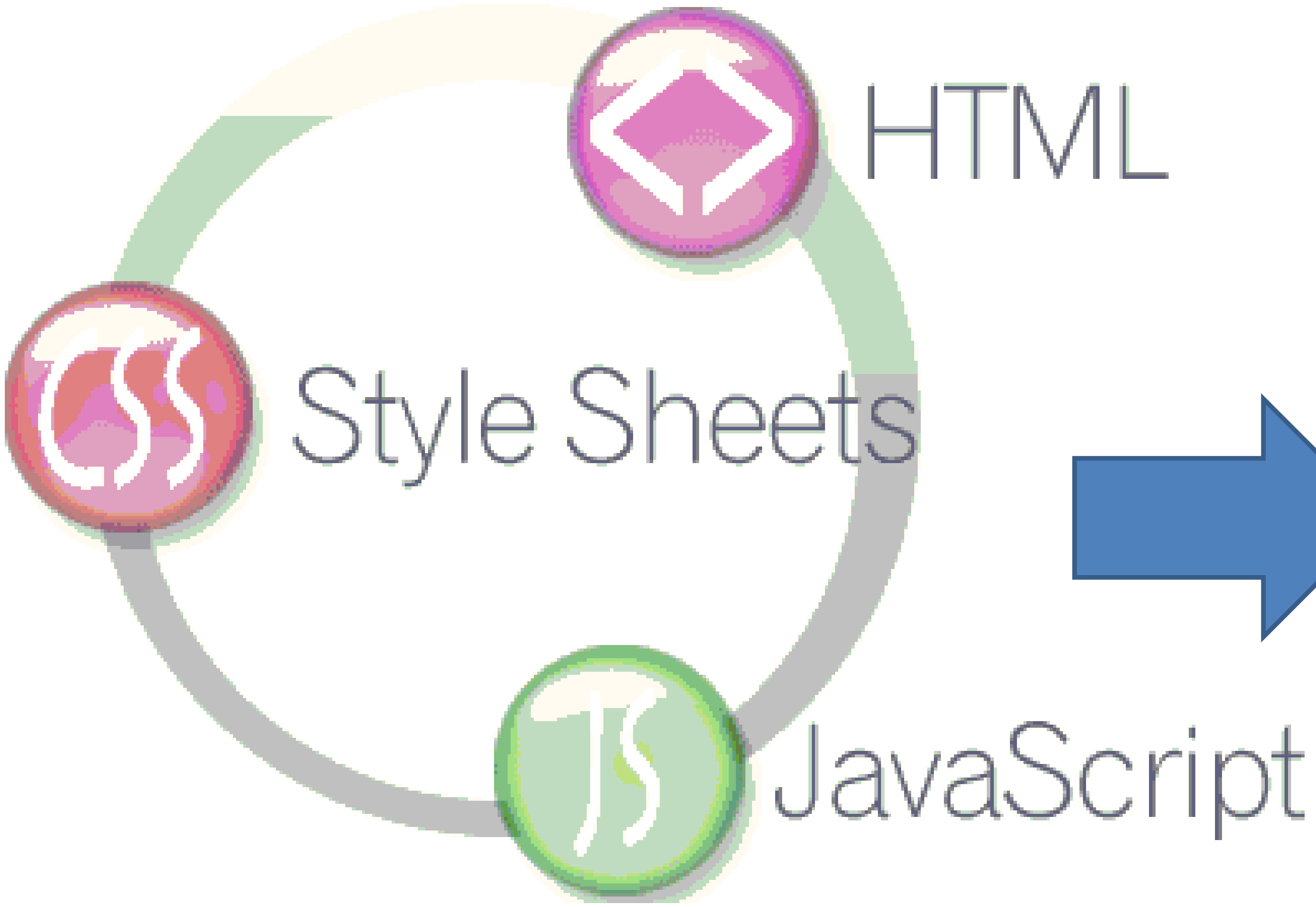
- Javascript can be located in the head, body or external file
  - Head section
    Ensures script is loaded before trigger event
  - Body section
    Script executes when body loads
  - External
    Allows scripts to run on several pages
  - Examples:
    http://www.w3schools.com/js/js_whereto.asp

HTML from JavaScript

```
<html>
  <head><title>JavaScript
HelloWorld!</title></head>
  <body>
    <script laguage="JavaScript">

      document.write("<h2>Javascript-
Generated output:</h2>
<p>This paragraph generated by
JavaScript</p>
<p>It can even insert an image</p>
<img src='../images/cathedral.jpg' />")

    </script>
  </body>
</html>
```



Flask

to be continued...