Міністерство освіти і науки України

Національний університет «Запорізька Політехніка»

Кафедра програмних засобів

ЗВІТ

з лабораторної роботи №5

з дисципліни «Веб технології та Веб дизайн» на тему:

«Відображення документа на багатьох пристроях»

Виконав:

Студент групи КНТ-122 О. А. Онищенко

Прийняли:

Старший викладач: С. Д. Леощенко

2023

5 ВІДОБРАЖЕННЯ ДОКУМЕНТА НА БАГАТЬОХ ПРИСТРОЯХ

Мета роботи

Дослідити проблеми відображення web-сторінок на різних пристроях та вивчити способи їх усунення.

Завдання до роботи

1. Ознайомитися з теоретичними відомостями, необхідними для виконання роботи.
2. Змінити стилі сторінок, розроблених в лабораторній роботі No4 таким чином, щоб вони стали зручними для використання на пристроях з розмірами екрану від 320px до 1920px. Для перевірки відображення можна використовувати вбудований емулятор інспектора коду Google Chrome.
3. Оформити звіт з роботи.
4. Відповісти на контрольні питання.

Результати виконання роботи

Python Wiki 

Table of Contents

History of Python

Creator: Guido van Rossum
Year of Origin: 1991
Programming Paradigms: Object-oriented, Procedural, Functional
Type System: Duck-typing, Dynamic, Strong typing
Official Website: www.python.org

Python History

Introduction

Python is a widely-used high-level programming language with a rich history. This quick reference provides an overview of key milestones and events in the development of Python.

Inception

Creation of Python: Python was created by Guido van Rossum and first released in 1991.
Motivation: Guido aimed to create a language that emphasized code readability and allowed programmers to express concepts in fewer lines of code.

Major Versions

Python 2.x: The Python 2 series (e.g., 2.7) was widely used for many years but officially reached end-of-life in 2020.
Python 3.x: Python 3 introduced significant changes to improve consistency and eliminate some of the inconsistencies present in Python 2.

Python Enhancement Proposals (PEP)

PEP 8: This style guide for Python code has been influential in shaping Python's code formatting conventions.
PEP 20 (Zen of Python): A collection of guiding principles for writing computer programs in Python, providing insights into Python's design philosophy.

Notable Contributors

Guido van Rossum: Python's creator and "Benevolent Dictator For Life" (BDFL) until he stepped down in 2018.
Python Software Foundation (PSF): Established in 2001 to promote, protect, and advance Python and its community.

Community and Growth

Python Community: Python has a vibrant and welcoming community of developers, with conferences and user groups worldwide.
Python's Popularity: Python's simplicity and versatility have contributed to its popularity in various fields, including web development, data science, and artificial intelligence.

Onyshchenko - Resume Link

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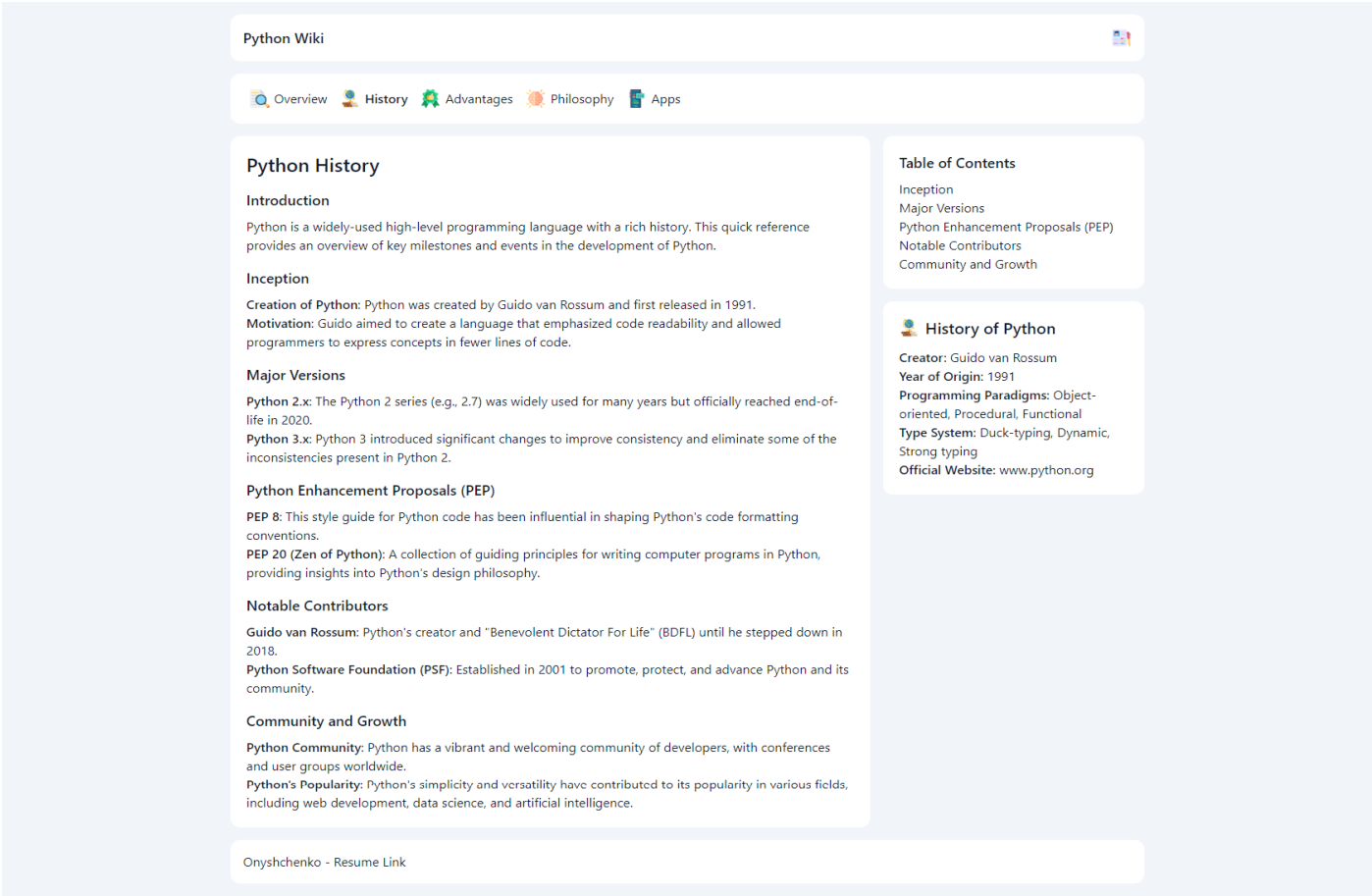

Код

```
<!-- examples.html -->

<!DOCTYPE html>
<html lang="en" class="scroll-smooth">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
    <title>App Examples - Python Wiki</title>
    <link rel="stylesheet" href="./css/base.css" />
    <link rel="stylesheet" href="./css/classes.css" />
    <link rel="stylesheet" href="./css/custom.css" />
    <link rel="shortcut icon" href="./img/snake.png" type="image/x-icon"
/>
  </head>
  <body>
    <div class="min-h-screen w-full bg-slate-100 text-slate-900">
      <div class="mx-auto grid max-w-6xl gap-4 p-4">
        <header
```

```
          class="flex items-center justify-between rounded-md lg:rounded-
lg xl:rounded-xl bg-white p-4"
        >
          <a href="./index.html" class="text-lg font-medium">Python
Wiki</a>
          <a href="./lab3/index.html" title="View resume">
            <img
              src="./img/cv.png"
              alt="resume logo image link"
              class="h-6 w-6"
            />
          </a>
        </header>

        <nav
          class="bg-white rounded-md lg:rounded-lg xl:rounded-xl p-4 flex
items-center"
        >
          <a
            href="./index.html"
            title="Overview"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/overview.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Overview</span>
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          </a>
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            href="./examples.html"
            title="Code examples"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer font-medium"
          >
            <img
              src="./img/apps.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Apps</span>
          </a>
        </nav>

        <section class="grid gap-4 md:flex md:flex-row-reverse">
          <div class="grid gap-4 md:flex md:flex-col md:w-[17rem] lg:w-
[20rem]">
            <nav
              class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
            >
              <h2 class="pb-2">Table of Contents</h2>
              <ol>
                <li><a href="#hello-world">Hello, World!</a></li>
                <li><a href="#web-development">Web Development</a></li>
                <li><a href="#data-analysis">Data Analysis</a></li>
```

```
              <li><a href="#machine-learning">Machine Learning</a></li>
              <li><a href="#automation">Automation</a></li>
              <li><a href="#game-development">Game Development</a></li>
            </ol>
          </nav>

          <aside
            class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
          >
            <div class="flex items-center gap-2 pb-3">
              <img
                src="./img/apps.png"
                alt="python logo image"
                class="h-6 w-6"
              />
              <h2 class="text-xl font-medium">Apps with Python</h2>
            </div>

            <ul>
              <li>
                <strong>Popular Libraries:</strong> Django, Flask,
NumPy,
                SciPy, TensorFlow
              </li>
              <li>
                <strong>Common Use Cases:</strong> Web Development,
Data
                Analysis, Machine Learning, AI
              </li>
              <li>
                <strong>Notable Python Programs:</strong> YouTube,
Instagram,
                Spotify, Reddit
              </li>
              <li><strong>Python Version:</strong> Python 3.x</li>
              <li>
                <strong>Official Python Documentation:</strong>
                <a
href="https://docs.python.org/3/">docs.python.org/3</a>
              </li>
            </ul>
          </aside>
        </div>

        <main
          class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5 flex-1"
```

```
          >
            <h1>Python Examples of Programs</h1>

            <h2 class="first-heading">Introduction</h2>
            <p>
              Python is a versatile programming language that can be used
for a
              wide range of applications. This quick reference provides
examples
              of Python programs across various domains to showcase its
              practicality and versatility.
            </p>

            <h2 id="hello-world">Hello, World!</h2>
            <p>
              <strong>Hello, World!</strong>: The classic introductory
program
              that displays "Hello, World!" on the screen.
            </p>
            <code>
              <pre>
print("Hello, World!")
        </pre
              >
            </code>

            <h2 id="web-development">Web Development</h2>
            <p>
              <strong>Simple Web Server</strong>: Create a basic web
server
              using Python's built-in <code>http.server</code> module.
            </p>
            <code>
              <pre>
import http.server
import socketserver

PORT = 8000

with socketserver.TCPServer(
  ("", PORT),
  http.server.SimpleHTTPRequestHandler
) as httpd:
    print("Serving at port", PORT)
    httpd.serve_forever()
        </pre
              >
            </code>
```

```
            <h2 id="data-analysis">Data Analysis</h2>
            <p>
              <strong>Data Visualization</strong>: Use libraries like
Matplotlib
              and Pandas to create interactive data visualizations.
            </p>
            <code>
              <pre>
import matplotlib.pyplot as plt
import pandas as pd

# Create a simple plot
data = {'x': [1, 2, 3, 4, 5],
  'y': [10, 12, 5, 8, 7]}
df = pd.DataFrame(data)
plt.plot(df['x'], df['y'])
plt.xlabel('X-axis')
plt.ylabel('Y-axis')
plt.title('Simple Data Plot')
plt.show()
        </pre
              >
            </code>

            <h2 id="machine-learning">Machine Learning</h2>
            <p>
              <strong>Linear Regression</strong>: Implement a simple
linear
              regression model using Scikit-Learn.
            </p>
            <code>
              <pre>
from sklearn import linear_model

# Sample data
X = [[1], [2], [3], [4], [5]]
y = [10, 12, 5, 8, 7]

# Create a linear regression model
model = linear_model.LinearRegression()
model.fit(X, y)

# Predict values
predicted = model.predict([[6]])
print("Predicted:", predicted[0])
        </pre
              >
```

```
            </code>

            <h2 id="automation">Automation</h2>
            <p>
              <strong>File Backup Script</strong>: Create a Python script
to
              automate file backups to a specified location.
            </p>
            <code>
              <pre>
import shutil

source_dir = '/path/to/source'
backup_dir = '/path/to/backup'

shutil.copytree(source_dir, backup_dir)
        </pre
              >
            </code>

            <h2 id="game-development">Game Development</h2>
            <p>
              <strong>Simple Game Using Pygame</strong>: Develop a basic
game
              using the Pygame library.
            </p>
            <code>
              <pre>
import pygame
import sys

# Initialize Pygame
pygame.init()

# Create a game window
screen = pygame.display.set_mode(
  (800, 600)
)
pygame.display.set_caption(
  "Simple Game"
)

# Main game loop
while True:
    for event in pygame.event.get():
        if event.type == pygame.QUIT:
            pygame.quit()
            sys.exit()
```

```
    pygame.display.update()
        </pre
              >
            </code>
          </main>
        </section>

        <footer
          class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white p-
4"
        >
          <a href="./lab3/index.html">Onyshchenko - Resume Link</a>
        </footer>
      </div>
    </div>
  </body>
</html>
```

```
<!-- advantages.html -->

<!DOCTYPE html>
<html lang="en" class="scroll-smooth">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
    <title>Advantages - Python Wiki</title>
    <link rel="stylesheet" href="./css/base.css" />
    <link rel="stylesheet" href="./css/classes.css" />
    <link rel="stylesheet" href="./css/custom.css" />
    <link rel="shortcut icon" href="./img/snake.png" type="image/x-icon"
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  </head>
  <body>
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              <ol>
                <li><a href="#readability">Readability</a></li>
                <li><a href="#versatility">Versatility</a></li>
                <li><a href="#community-support">Community
Support</a></li>
                <li>
                  <a href="#vast-library-ecosystem">Vast Library
Ecosystem</a>
                </li>
                <li><a href="#cross-platform">Cross-Platform</a></li>
                <li><a href="#simplicity">Simplicity</a></li>
              </ol>
            </nav>
```

```
            <aside
              class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
            >
              <div class="flex items-center gap-2 pb-3">
                <img
                  src="./img/advantages.png"
                  alt="python logo image"
                  class="h-6 w-6"
                />
                <h2 class="text-xl font-medium">Advantages of Python</h2>
              </div>

              <ul>
                <li><strong>Creator:</strong> Guido van Rossum</li>
                <li><strong>Year of Origin:</strong> 1991</li>
                <li>
                  <strong>Readability:</strong> Python's syntax promotes
code
                  readability.
                </li>
                <li>
                  <strong>Large Standard Library:</strong> Python has a
                  comprehensive standard library.
                </li>
                <li>
                  <strong>Versatility:</strong> Python can be used for
web
                  development, data analysis, and more.
                </li>
                <li>
                  <strong>Official Documentation:</strong>
                  <a
href="https://docs.python.org/3/">docs.python.org/3</a>
                </li>
              </ul>
            </aside>
          </div>

          <main
            class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5 flex-1"
          >
            <h1>Python Advantages</h1>

            <h2 class="first-heading">Introduction</h2>
            <p>
```

```
            Python is a versatile programming language known for its
numerous
            advantages in various domains. This quick reference
provides an
            overview of the key benefits of using Python.
          </p>

          <h2 id="readability">Readability</h2>
          <p>
            <strong>Clear and Readable Syntax</strong>: Python's syntax
            emphasizes readability and reduces the cost of program
            maintenance.
          </p>
          <p>
            <strong>Indentation-based Structure</strong>: Python
enforces code
            indentation, making the code structure visually clear and
            consistent.
          </p>

          <h2 id="versatility">Versatility</h2>
          <p>
            <strong>General-Purpose Language</strong>: Python can be
used for
            a wide range of applications, including web development,
data
            analysis, machine learning, and more.
          </p>
          <p>
            <strong>Integration Capabilities</strong>: Python easily
            integrates with other languages and tools, facilitating
complex
            projects.
          </p>

          <h2 id="community-support">Community Support</h2>
          <p>
            <strong>Active Community</strong>: Python has a large and
active
            community of developers who provide support, share
knowledge, and
            create open-source libraries.
          </p>
          <p>
            <strong>Documentation and Resources</strong>: Abundant
            documentation and online resources are available for Python
users,
            making it easy to learn and troubleshoot.
```

```
            </p>

            <h2 id="vast-library-ecosystem">Vast Library Ecosystem</h2>
            <p>
              <strong>Rich Standard Library</strong>: Python's standard
library
              includes modules for various tasks, reducing the need for
external
              dependencies.
            </p>
            <p>
              <strong>Third-Party Libraries</strong>: Python boasts a
vast
              ecosystem of third-party libraries and frameworks for
specific
              domains, enhancing productivity.
            </p>

            <h2 id="cross-platform">Cross-Platform</h2>
            <p>
              <strong>Platform Independence</strong>: Python code can run
on
              multiple platforms without modification, increasing
portability.
            </p>
            <p>
              <strong>Support for Major Operating Systems</strong>:
Python
              supports Windows, macOS, Linux, and more.
            </p>

            <h2 id="simplicity">Simplicity</h2>
            <p>
              <strong>Minimalistic Syntax</strong>: Python's clean and
              minimalistic syntax reduces the learning curve for
beginners.
            </p>
            <p>
              <strong>Expressive and Concise Code</strong>: Python allows
              developers to express complex ideas in fewer lines of code.
            </p>
          </main>
        </section>

        <footer
          class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white p-
4"
        >
```

```
          <a href="./lab3/index.html">Onyshchenko - Resume Link</a>
        </footer>
      </div>
    </div>
  </body>
</html>
```

```
<!-- history.html -->

<!DOCTYPE html>
<html lang="en" class="scroll-smooth">
  <head>
    <meta charset="UTF-8" />
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    <link rel="stylesheet" href="./css/classes.css" />
    <link rel="stylesheet" href="./css/custom.css" />
    <link rel="shortcut icon" href="./img/snake.png" type="image/x-icon"
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  </head>
  <body>
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            />
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        </header>

        <nav
          class="bg-white rounded-md lg:rounded-lg xl:rounded-xl p-4 flex
items-center"
        >
          <a
            href="./index.html"
            title="Overview"
```

```
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/overview.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Overview</span>
          </a>
          <a
            href="./history.html"
            title="History"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer font-medium"
            ><img
              src="./img/history.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">History</span>
          </a>
          <a
            href="./advantages.html"
            title="Advantages"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/advantages.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Advantages</span>
          </a>
          <a
            href="./philosophy.html"
            title="Philosophy"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/philosophy.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Philosophy</span>
          </a>
```

```
          <a
            href="./examples.html"
            title="Code examples"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/apps.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Apps</span>
          </a>
        </nav>

        <section
          class="grid gap-4 md:flex md:flex-row-reverse flex-row-reverse"
        >
          <div class="grid gap-4 md:flex md:flex-col md:w-[17rem] lg:w-
[20rem]">
            <nav
              class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
            >
              <h2 class="pb-2">Table of Contents</h2>
              <ol>
                <li><a href="#inception">Inception</a></li>
                <li><a href="#major-versions">Major Versions</a></li>
                <li>
                  <a href="#python-enhancement-proposals-pep"
                    >Python Enhancement Proposals (PEP)</a
                  >
                </li>
                <li>
                  <a href="#notable-contributors">Notable
Contributors</a>
                </li>
                <li>
                  <a href="#community-and-growth">Community and
Growth</a>
                </li>
              </ol>
            </nav>

            <aside
              class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
            >
```

```
            <div class="flex items-center gap-2 pb-3">
              <img
                src="./img/history.png"
                alt="python logo image"
                class="h-6 w-6"
              />
              <h2 class="text-xl font-medium">History of Python</h2>
            </div>

            <ul>
              <li><strong>Creator:</strong> Guido van Rossum</li>
              <li><strong>Year of Origin:</strong> 1991</li>
              <li>
                <strong>Programming Paradigms:</strong> Object-
oriented,
                Procedural, Functional
              </li>
              <li>
                <strong>Type System:</strong> Duck-typing, Dynamic,
Strong
                typing
              </li>
              <li>
                <strong>Official Website:</strong>
                <a href="https://www.python.org/">www.python.org</a>
              </li>
            </ul>
          </aside>
        </div>

        <main
          class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5 flex-1"
        >
          <h1 class="text-2xl font-semibold pb-4">Python History</h1>

          <h2 class="first-heading">Introduction</h2>
          <p>
            Python is a widely-used high-level programming language
with a
            rich history. This quick reference provides an overview of
key
            milestones and events in the development of Python.
          </p>

          <h2 id="inception">Inception</h2>
          <p>
```

```
              <strong>Creation of Python</strong>: Python was created by
Guido
              van Rossum and first released in 1991.
            </p>
            <p>
              <strong>Motivation</strong>: Guido aimed to create a
language that
              emphasized code readability and allowed programmers to
express
              concepts in fewer lines of code.
            </p>

            <h2 id="major-versions">Major Versions</h2>
            <p>
              <strong>Python 2.x</strong>: The Python 2 series (e.g.,
2.7) was
              widely used for many years but officially reached end-of-
life in
              2020.
            </p>
            <p>
              <strong>Python 3.x</strong>: Python 3 introduced
significant
              changes to improve consistency and eliminate some of the
              inconsistencies present in Python 2.
            </p>

            <h2 id="python-enhancement-proposals-pep">
              Python Enhancement Proposals (PEP)
            </h2>
            <p>
              <strong>PEP 8</strong>: This style guide for Python code
has been
              influential in shaping Python's code formatting
conventions.
            </p>
            <p>
              <strong>PEP 20 (Zen of Python)</strong>: A collection of
guiding
              principles for writing computer programs in Python,
providing
              insights into Python's design philosophy.
            </p>

            <h2 id="notable-contributors">Notable Contributors</h2>
            <p>
              <strong>Guido van Rossum</strong>: Python's creator and
```

```
              "Benevolent Dictator For Life" (BDFL) until he stepped down
in
              2018.
            </p>
            <p>
              <strong>Python Software Foundation (PSF)</strong>:
Established in
              2001 to promote, protect, and advance Python and its
community.
            </p>

            <h2 id="community-and-growth">Community and Growth</h2>
            <p>
              <strong>Python Community</strong>: Python has a vibrant and
              welcoming community of developers, with conferences and
user
              groups worldwide.
            </p>
            <p>
              <strong>Python's Popularity</strong>: Python's simplicity
and
              versatility have contributed to its popularity in various
fields,
              including web development, data science, and artificial
              intelligence.
            </p>
          </main>
        </section>

        <footer
          class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white p-
4"
        >
          <a href="./lab3/index.html">Onyshchenko - Resume Link</a>
        </footer>
      </div>
    </div>
  </body>
</html>
```

```
<!-- index.html -->

<!DOCTYPE html>
<html lang="en" class="scroll-smooth">
  <head>
    <meta charset="UTF-8" />
```

```
    <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
    <title>Overview - Python Wiki</title>
    <link rel="stylesheet" href="./css/base.css" />
    <link rel="stylesheet" href="./css/classes.css" />
    <link rel="stylesheet" href="./css/custom.css" />
    <link rel="shortcut icon" href="./img/snake.png" type="image/x-icon"
/>
  </head>
  <body>
    <div class="min-h-screen w-full bg-slate-100 text-slate-900">
      <div class="mx-auto grid max-w-6xl gap-4 p-4">
        <header
          class="flex items-center justify-between rounded-md lg:rounded-
lg xl:rounded-xl bg-white p-4"
        >
          <a href="./index.html" class="text-lg font-medium">Python
Wiki</a>
          <a href="./lab3/index.html" title="View resume">
            <img
              src="./img/cv.png"
              alt="resume logo image link"
              class="h-6 w-6"
            />
          </a>
        </header>

        <nav
          class="bg-white rounded-md lg:rounded-lg xl:rounded-xl p-4 flex
items-center"
        >
          <a
            href="./index.html"
            title="Overview"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer font-medium"
          >
            <img
              src="./img/overview.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Overview</span>
          </a>
          <a
            href="./history.html"
            title="History"
```

```
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
            ><img
              src="./img/history.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">History</span>
          </a>
          <a
            href="./advantages.html"
            title="Advantages"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/advantages.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Advantages</span>
          </a>
          <a
            href="./philosophy.html"
            title="Philosophy"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/philosophy.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Philosophy</span>
          </a>
          <a
            href="./examples.html"
            title="Code examples"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/apps.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Apps</span>
          </a>
```

```
        </nav>

        <section class="grid gap-4 md:flex md:flex-row-reverse">
          <div class="grid gap-4 md:flex md:flex-col md:w-[17rem] lg:w-
[20rem]">
            <nav
              class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
            >
              <h2 class="pb-2">Table of Contents</h2>

              <ol>
                <li>
                  <a href="#variables-and-data-types"
                    >Variables and Data Types</a
                  >
                </li>
                <li>
                  <a href="#conditional-statements">Conditional
Statements</a>
                </li>
                <li><a href="#loops">Loops</a></li>
                <li><a href="#functions">Functions</a></li>
                <li><a href="#lists">Lists</a></li>
                <li><a href="#dictionaries">Dictionaries</a></li>
                <li><a href="#strings">Strings</a></li>
                <li><a href="#file-handling">File Handling</a></li>
              </ol>
            </nav>

            <aside
              class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
            >
              <div class="flex items-center gap-2 pb-3">
                <img
                  src="./img/overview.png"
                  alt="python logo image"
                  class="h-6 w-6"
                />
                <h2 class="text-xl font-medium">Python Lanugage</h2>
              </div>

              <ul>
                <li><strong>Designed by:</strong> Guido van Rossum</li>
                <li><strong>First appeared:</strong> 1991</li>
                <li>
```

```
                  <strong>Paradigms:</strong> Object-oriented,
procedural,
                  functional
                </li>
                <li>
                  <strong>Typing discipline:</strong> Duck, dynamic,
strong
                  typing
                </li>
                <li>
                  <strong>Website:</strong>
                  <a href="https://www.python.org/">www.python.org</a>
                </li>
              </ul>
            </aside>
          </div>

          <main
            class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5 flex-1"
          >
            <h1 class="pb-4 text-2xl font-semibold">Python Overview</h1>

            <h2 class="first-heading">Introduction</h2>

            <p>
              Python is a high-level, versatile programming language
known for
              its simplicity and readability. This quick reference
provides an
              overview of essential Python concepts and syntax.
            </p>

            <h2 id="variables-and-data-types">Variables and Data
Types</h2>

            <ul>
              <li>
                <strong>Variables:</strong> In Python, you can assign
values to
                variables using the <code>=</code> operator. Example:
                <code>x = 10</code>.
              </li>
              <li>
                <strong>Data Types:</strong> Python supports various data
types,
                including integers, floats, strings, booleans, and more.
              </li>
```

```
              <li>
                <strong>Type Conversion:</strong> You can convert between
data
                types using functions like <code>int()</code>,
                <code>float()</code>, and <code>str()</code>.
              </li>
            </ul>

            <h2 id="conditional-statements">Conditional Statements</h2>

            <ul>
              <li>
                <strong>if Statement:</strong> Use <code>if</code> to
execute
                code conditionally based on a Boolean expression.
              </li>
              <li>
                <strong>elif and else:</strong> Extend
                <code>if</code> statements with <code>elif</code> (else
if) and
                <code>else</code> for multiple branching.
              </li>
            </ul>

            <h2 id="loops">Loops</h2>

            <ul>
              <li>
                <strong>for Loop:</strong> Iterate over a sequence (e.g.,
list,
                string) using a <code>for</code> loop.
              </li>
              <li>
                <strong>while Loop:</strong> Execute code repeatedly as
long as
                a condition is true with a <code>while</code> loop.
              </li>
            </ul>

            <h2 id="functions">Functions</h2>

            <ul>
              <li>
                <strong>Defining Functions:</strong> Create reusable code
blocks
                using the <code>def</code> keyword.
              </li>
              <li>
```

```
                <strong>Parameters:</strong> Pass arguments to functions,
which
                can be optional or required.
              </li>
              <li>
                <strong>Return Values:</strong> Functions can return
values
                using the <code>return</code> statement.
              </li>
            </ul>

            <h2 id="lists">Lists</h2>

            <ul>
              <li>
                <strong>Creating Lists:</strong> Define lists using
square
                brackets, e.g., <code>my_list = [1, 2, 3]</code>.
              </li>
              <li>
                <strong>Indexing:</strong> Access list elements using
their
                index (zero-based).
              </li>
              <li>
                <strong>Slicing:</strong> Extract portions of a list
using
                slicing, e.g., <code>my_list[1:3]</code>.
              </li>
            </ul>

            <h2 id="dictionaries">Dictionaries</h2>

            <ul>
              <li>
                <strong>Creating Dictionaries:</strong> Define key-value
pairs
                using curly braces, e.g.,
                <code>my_dict = {'name': 'John', 'age': 30}</code>.
              </li>
              <li>
                <strong>Accessing Values:</strong> Retrieve values by
specifying
                the key.
              </li>
            </ul>

            <h2 id="strings">Strings</h2>
```

```
            <ul>
              <li>
                <strong>Creating Strings:</strong> Define strings with
single or
                double quotes, e.g., <code>"Hello, World!"</code>.
              </li>
              <li>
                <strong>String Methods:</strong> Use built-in string
methods for
                operations like concatenation and splitting.
              </li>
            </ul>

            <h2 id="file-handling">File Handling</h2>

            <ul>
              <li>
                <strong>Opening Files:</strong> Use <code>open()</code>
to open
                files for reading or writing.
              </li>
              <li>
                <strong>Reading and Writing:</strong> Read file contents
with
                <code>read()</code>, write data with
<code>write()</code>.
              </li>
            </ul>

            <h3 id="read-more" class="pb-2 font-medium border-t-2 pt-2
mt-6">
              Read more
            </h3>

            <ul>
              <li><a href="./history.html">History</a></li>
              <li><a href="./advantages.html">Advantages</a></li>
              <li><a href="./philosophy.html">Philosophy</a></li>
              <li><a href="./examples.html">Examples of programs</a></li>
            </ul>
          </main>
        </section>

        <footer
          class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white p-
4"
        >
```

```
          <a href="./lab3/index.html">Onyshchenko - Resume Link</a>
        </footer>
      </div>
    </div>
  </body>
</html>
```

```
<!-- philosophy.html -->

<!DOCTYPE html>
<html lang="en" class="scroll-smooth">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
    <title>Philosophy - Python Wiki</title>
    <link rel="stylesheet" href="./css/base.css" />
    <link rel="stylesheet" href="./css/classes.css" />
    <link rel="stylesheet" href="./css/custom.css" />
    <link rel="shortcut icon" href="./img/snake.png" type="image/x-icon"
/>
  </head>
  <body>
    <div class="min-h-screen w-full bg-slate-100 text-slate-900">
      <div class="mx-auto grid max-w-6xl gap-4 p-4">
        <header
          class="flex items-center justify-between rounded-md lg:rounded-
lg xl:rounded-xl bg-white p-4"
        >
          <a href="./index.html" class="text-lg font-medium">Python
Wiki</a>
          <a href="./lab3/index.html" title="View resume">
            <img
              src="./img/cv.png"
              alt="resume logo image link"
              class="h-6 w-6"
            />
          </a>
        </header>

        <nav
          class="bg-white rounded-md lg:rounded-lg xl:rounded-xl p-4 flex
items-center"
        >
          <a
            href="./index.html"
            title="Overview"
```

```
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/overview.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Overview</span>
          </a>
          <a
            href="./history.html"
            title="History"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
            ><img
              src="./img/history.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">History</span>
          </a>
          <a
            href="./advantages.html"
            title="Advantages"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/advantages.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Advantages</span>
          </a>
          <a
            href="./philosophy.html"
            title="Philosophy"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer font-medium"
          >
            <img
              src="./img/philosophy.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Philosophy</span>
          </a>
```

```
          <a
            href="./examples.html"
            title="Code examples"
            class="flex items-start gap-1.5 navbar-link-container
rounded-md px-2 py-1 cursor-pointer"
          >
            <img
              src="./img/apps.png"
              alt="section icon image"
              class="w-6 h-6"
            />
            <span class="hidden sm:block">Apps</span>
          </a>
        </nav>

        <section class="grid gap-4 md:flex md:flex-row-reverse">
          <div class="grid gap-4 md:flex md:flex-col md:w-[17rem] lg:w-
[20rem]">
            <nav
              class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
            >
              <h2 class="pb-2">Table of Contents</h2>
              <ol>
                <li><a href="#zen-of-python">Zen of Python</a></li>
                <li><a href="#readability-counts">Readability
Counts</a></li>
                <li>
                  <a href="#simple-is-better-than-complex"
                    >Simple is Better Than Complex</a
                  >
                </li>
                <li>
                  <a href="#explicit-is-better-than-implicit"
                    >Explicit is Better Than Implicit</a
                  >
                </li>
                <li>
                  <a href="#community-and-collaboration"
                    >Community and Collaboration</a
                  >
                </li>
                <li>
                  <a href="#practicality-beats-purity"
                    >Practicality Beats Purity</a
                  >
                </li>
              </ol>
```

```
            </nav>

            <aside
              class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5"
            >
              <div class="flex items-center gap-2 pb-3">
                <img
                  src="./img/philosophy.png"
                  alt="python logo image"
                  class="h-6 w-6"
                />
                <h2 class="text-xl font-medium">Philosophy of Python</h2>
              </div>

              <ul>
                <li><strong>Creator:</strong> Guido van Rossum</li>
                <li><strong>Year of Origin:</strong> 1991</li>
                <li>
                  <strong>Design Philosophy:</strong> Readability,
Simplicity,
                  Explicit is better than implicit
                </li>
                <li><strong>Key Principles:</strong> Zen of Python (PEP
20)</li>
                <li>
                  <strong>Notable Quote:</strong> "There should be one--
and
                  preferably only one --obvious way to do it."
                </li>
                <li>
                  <strong>Official Python Documentation:</strong>
                  <a
href="https://docs.python.org/3/">docs.python.org/3</a>
                </li>
              </ul>
            </aside>
          </div>

          <main
            class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white
p-4 lg:p-5 flex-1"
          >
            <h1>Python Philosophy</h1>

            <h2 class="first-heading">Introduction</h2>
            <p>
```

```
              Python is not just a programming language; it also embodies
a set
              of guiding principles and philosophies that shape its
design and
              usage. This quick reference provides an overview of the key
              philosophies that define Python's ethos.
            </p>

            <h2 id="zen-of-python">Zen of Python</h2>
            <p>
              <strong>The Zen of Python</strong>: A collection of guiding
              aphorisms that capture Python's design philosophy and
principles.
            </p>
            <p>
              <strong>Readability Counts</strong>: Python code should be
easy to
              read and understand, even by those who didn't write it.
            </p>

            <h2 id="readability-counts">Readability Counts</h2>
            <p>
              <strong>Readability</strong>: Python's emphasis on clean
and
              readable code makes it easier to maintain and collaborate
on
              projects.
            </p>
            <p>
              <strong>Code as Communication</strong>: Python code should
              communicate its purpose clearly, making it accessible to
others.
            </p>

            <h2 id="simple-is-better-than-complex">
              Simple is Better Than Complex
            </h2>
            <p>
              <strong>Simplicity</strong>: Python values simplicity in
design
              and implementation, favoring straightforward solutions over
              complex ones.
            </p>
            <p>
              <strong>Minimize Cognitive Load</strong>: Simple code
reduces
              cognitive load, making it easier for developers to
understand and
```

```
              modify.
            </p>

            <h2 id="explicit-is-better-than-implicit">
              Explicit is Better Than Implicit
            </h2>
            <p>
              <strong>Clarity</strong>: Python encourages explicit code
that
              leaves no room for ambiguity or hidden behavior.
            </p>
            <p>
              <strong>Obviousness</strong>: Code should be obvious in its
intent
              and actions, minimizing surprises.
            </p>

            <h2 id="community-and-collaboration">
              Community and Collaboration
            </h2>
            <p>
              <strong>Community</strong>: Python's community-driven
development
              fosters collaboration, knowledge sharing, and support.
            </p>
            <p>
              <strong>Open Source</strong>: Python's open-source nature
promotes
              transparency, allowing anyone to contribute and improve the
              language.
            </p>

            <h2 id="practicality-beats-purity">Practicality Beats
Purity</h2>
            <p>
              <strong>Real-World Solutions</strong>: Python prioritizes
              practical solutions that address real-world problems over
rigid
              purity.
            </p>
            <p>
              <strong>Flexibility</strong>: Python's flexibility allows
              developers to choose the best tool for the job.
            </p>
          </main>
        </section>

        <footer
```

```
          class="grid rounded-md lg:rounded-lg xl:rounded-xl bg-white p-
4"
        >
          <a href="./lab3/index.html">Onyshchenko - Resume Link</a>
        </footer>
      </div>
    </div>
  </body>
</html>
```

```
/* base.css */

*,
::before,
::after {
  box-sizing: border-box;
  border-width: 0;
  border-style: solid;
  border-color: #e5e7eb;
}

::before,
::after {
  --tw-content: "";
}

html {
  line-height: 1.5;
  -webkit-text-size-adjust: 100%;
  -moz-tab-size: 4;
  tab-size: 4;
  font-family: ui-sans-serif, system-ui, -apple-system,
BlinkMacSystemFont,
    "Segoe UI", Roboto, "Helvetica Neue", Arial, "Noto Sans", sans-serif,
    "Apple Color Emoji", "Segoe UI Emoji", "Segoe UI Symbol", "Noto Color
Emoji";
  font-feature-settings: normal;
  font-variation-settings: normal;
}

body {
  margin: 0;
  line-height: inherit;
}

hr {
  height: 0;
```

```
  color: inherit;
  border-top-width: 1px;
}

abbr:where([title]) {
  -webkit-text-decoration: underline dotted;
  text-decoration: underline dotted;
}

h1,
h2,
h3,
h4,
h5,
h6 {
  font-size: inherit;
  font-weight: inherit;
}

a {
  color: inherit;
  text-decoration: inherit;
}

b,
strong {
  font-weight: bolder;
}

code,
kbd,
samp,
pre {
  font-family: ui-monospace, SFMono-Regular, Menlo, Monaco, Consolas,
    "Liberation Mono", "Courier New", monospace;
  font-size: 1em;
}

small {
  font-size: 80%;
}

sub,
sup {
  font-size: 75%;
  line-height: 0;
  position: relative;
  vertical-align: baseline;
```

```
}

sub {
  bottom: -0.25em;
}

sup {
  top: -0.5em;
}

table {
  text-indent: 0;
  border-color: inherit;
  border-collapse: collapse;
}

button,
input,
optgroup,
select,
textarea {
  font-family: inherit;
  font-feature-settings: inherit;
  font-variation-settings: inherit;
  font-size: 100%;
  font-weight: inherit;
  line-height: inherit;
  color: inherit;
  margin: 0;
  padding: 0;
}

button,
select {
  text-transform: none;
}

button,
[type="button"],
[type="reset"],
[type="submit"] {
  -webkit-appearance: button;
  background-color: transparent;
  background-image: none;
}

:-moz-focusring {
  outline: auto;
```

```
}

:-moz-ui-invalid {
  box-shadow: none;
}

progress {
  vertical-align: baseline;
}

::-webkit-inner-spin-button,
::-webkit-outer-spin-button {
  height: auto;
}

[type="search"] {
  -webkit-appearance: textfield;
  outline-offset: -2px;
}

::-webkit-search-decoration {
  -webkit-appearance: none;
}

::-webkit-file-upload-button {
  -webkit-appearance: button;
  font: inherit;
}

summary {
  display: list-item;
}

blockquote,
dl,
dd,
h1,
h2,
h3,
h4,
h5,
h6,
hr,
figure,
p,
pre {
  margin: 0;
}
```

```
fieldset {
  margin: 0;
  padding: 0;
}

legend {
  padding: 0;
}

ol,
ul,
menu {
  list-style: none;
  margin: 0;
  padding: 0;
}

dialog {
  padding: 0;
}

textarea {
  resize: vertical;
}

input::placeholder,
textarea::placeholder {
  opacity: 1;
  color: #9ca3af;
}

button,
[role="button"] {
  cursor: pointer;
}

:disabled {
  cursor: default;
}

img,
svg,
video,
canvas,
audio,
iframe,
embed,
```

```
object {
  display: block;
  vertical-align: middle;
}

img,
video {
  max-width: 100%;
  height: auto;
}

[hidden] {
  display: none;
}

*,
::before,
::after {
  --tw-border-spacing-x: 0;
  --tw-border-spacing-y: 0;
  --tw-translate-x: 0;
  --tw-translate-y: 0;
  --tw-rotate: 0;
  --tw-skew-x: 0;
  --tw-skew-y: 0;
  --tw-scale-x: 1;
  --tw-scale-y: 1;
  --tw-pan-x: ;
  --tw-pan-y: ;
  --tw-pinch-zoom: ;
  --tw-scroll-snap-strictness: proximity;
  --tw-gradient-from-position: ;
  --tw-gradient-via-position: ;
  --tw-gradient-to-position: ;
  --tw-ordinal: ;
  --tw-slashed-zero: ;
  --tw-numeric-figure: ;
  --tw-numeric-spacing: ;
  --tw-numeric-fraction: ;
  --tw-ring-inset: ;
  --tw-ring-offset-width: 0px;
  --tw-ring-offset-color: #fff;
  --tw-ring-color: rgb(59 130 246 / 0.5);
  --tw-ring-offset-shadow: 0 0 #0000;
  --tw-ring-shadow: 0 0 #0000;
  --tw-shadow: 0 0 #0000;
  --tw-shadow-colored: 0 0 #0000;
  --tw-blur: ;
```

```
  --tw-brightness: ;
  --tw-contrast: ;
  --tw-grayscale: ;
  --tw-hue-rotate: ;
  --tw-invert: ;
  --tw-saturate: ;
  --tw-sepia: ;
  --tw-drop-shadow: ;
  --tw-backdrop-blur: ;
  --tw-backdrop-brightness: ;
  --tw-backdrop-contrast: ;
  --tw-backdrop-grayscale: ;
  --tw-backdrop-hue-rotate: ;
  --tw-backdrop-invert: ;
  --tw-backdrop-opacity: ;
  --tw-backdrop-saturate: ;
  --tw-backdrop-sepia: ;
}

::backdrop {
  --tw-border-spacing-x: 0;
  --tw-border-spacing-y: 0;
  --tw-translate-x: 0;
  --tw-translate-y: 0;
  --tw-rotate: 0;
  --tw-skew-x: 0;
  --tw-skew-y: 0;
  --tw-scale-x: 1;
  --tw-scale-y: 1;
  --tw-pan-x: ;
  --tw-pan-y: ;
  --tw-pinch-zoom: ;
  --tw-scroll-snap-strictness: proximity;
  --tw-gradient-from-position: ;
  --tw-gradient-via-position: ;
  --tw-gradient-to-position: ;
  --tw-ordinal: ;
  --tw-slashed-zero: ;
  --tw-numeric-figure: ;
  --tw-numeric-spacing: ;
  --tw-numeric-fraction: ;
  --tw-ring-inset: ;
  --tw-ring-offset-width: 0px;
  --tw-ring-offset-color: #fff;
  --tw-ring-color: rgb(59 130 246 / 0.5);
  --tw-ring-offset-shadow: 0 0 #0000;
  --tw-ring-shadow: 0 0 #0000;
  --tw-shadow: 0 0 #0000;
```

```
  --tw-shadow-colored: 0 0 #0000;
  --tw-blur: ;
  --tw-brightness: ;
  --tw-contrast: ;
  --tw-grayscale: ;
  --tw-hue-rotate: ;
  --tw-invert: ;
  --tw-saturate: ;
  --tw-sepia: ;
  --tw-drop-shadow: ;
  --tw-backdrop-blur: ;
  --tw-backdrop-brightness: ;
  --tw-backdrop-contrast: ;
  --tw-backdrop-grayscale: ;
  --tw-backdrop-hue-rotate: ;
  --tw-backdrop-invert: ;
  --tw-backdrop-opacity: ;
  --tw-backdrop-saturate: ;
  --tw-backdrop-sepia: ;
}
```

```
/* classes.css */

.mx-auto {
  margin-left: auto;
  margin-right: auto;
}

.-mb-5 {
  margin-bottom: -1.25rem;
}

.flex {
  display: flex;
}

.grid {
  display: grid;
}

.hidden {
  display: none;
}

.h-6 {
  height: 1.5rem;
}
```

```css
.min-h-screen {
  min-height: 100vh;
}

.w-6 {
  width: 1.5rem;
}

.w-full {
  width: 100%;
}

.max-w-6xl {
  max-width: 72rem;
}

.flex-1 {
  flex: 1 1 0%;
}

.cursor-pointer {
  cursor: pointer;
}

.items-start {
  align-items: flex-start;
}

.items-center {
  align-items: center;
}

.justify-between {
  justify-content: space-between;
}

.gap-1 {
  gap: 0.25rem;
}

.gap-1\.5 {
  gap: 0.375rem;
}

.gap-2 {
  gap: 0.5rem;
}
```

```css
.gap-4 {
  gap: 1rem;
}

.scroll-smooth {
  scroll-behavior: smooth;
}

.rounded-md {
  border-radius: 0.375rem;
}

.bg-slate-100 {
  --tw-bg-opacity: 1;
  background-color: rgb(241 245 249 / var(--tw-bg-opacity));
}

.bg-slate-800 {
  --tw-bg-opacity: 1;
  background-color: rgb(30 41 59 / var(--tw-bg-opacity));
}

.bg-white {
  --tw-bg-opacity: 1;
  background-color: rgb(255 255 255 / var(--tw-bg-opacity));
}

.p-4 {
  padding: 1rem;
}

.px-2 {
  padding-left: 0.5rem;
  padding-right: 0.5rem;
}

.py-1 {
  padding-top: 0.25rem;
  padding-bottom: 0.25rem;
}

.pb-2 {
  padding-bottom: 0.5rem;
}

.pb-3 {
  padding-bottom: 0.75rem;
```

```css
}

.pt-4 {
  padding-top: 1rem;
}

.text-2xl {
  font-size: 1.5rem;
  line-height: 2rem;
}

.text-lg {
  font-size: 1.125rem;
  line-height: 1.75rem;
}

.text-xl {
  font-size: 1.25rem;
  line-height: 1.75rem;
}

.font-medium {
  font-weight: 500;
}

.font-semibold {
  font-weight: 600;
}

.text-slate-50 {
  --tw-text-opacity: 1;
  color: rgb(248 250 252 / var(--tw-text-opacity));
}

.text-slate-900 {
  --tw-text-opacity: 1;
  color: rgb(15 23 42 / var(--tw-text-opacity));
}

.underline {
  -webkit-text-decoration-line: underline;
  text-decoration-line: underline;
}

@media (min-width: 640px) {
  .sm\:block {
    display: block;
  }
```

```
}

@media (min-width: 768px) {
  .md\:flex {
    display: flex;
  }

  .md\:w-\[17rem\] {
    width: 17rem;
  }

  .md\:flex-row-reverse {
    flex-direction: row-reverse;
  }

  .md\:flex-col {
    flex-direction: column;
  }
}

@media (min-width: 1024px) {
  .lg\:w-\[20rem\] {
    width: 20rem;
  }

  .lg\:rounded-lg {
    border-radius: 0.5rem;
  }

  .lg\:p-5 {
    padding: 1.25rem;
  }
}

@media (min-width: 1280px) {
  .xl\:rounded-xl {
    border-radius: 0.75rem;
  }
}
```

```
/* custom.css */

h2 {
  font-size: 1.125rem /* 18px */;
  line-height: 1.75rem /* 28px */;
  font-weight: 500;
}
```

```css
a:hover {
  text-underline-offset: 2px;
  text-decoration-line: underline;
}
strong {
  font-weight: 500;
}
h1 {
  font-weight: 600;
  font-size: 1.5rem /* 24px */;
  line-height: 2rem /* 32px */;
  padding-bottom: 1rem /* 16px */;
}
main h2:not(.first-heading) {
  padding-bottom: 0.5rem /* 8px */;
  padding-top: 1rem /* 16px */;
}
main .first-heading {
  padding-bottom: 0.5rem /* 8px */;
}
code {
  overflow: hidden;
}
code pre {
  margin-bottom: -1.25rem /* -20px */;
  --tw-bg-opacity: 1;
  background-color: rgb(30 41 59 / var(--tw-bg-opacity));
  padding: 1rem /* 16px */;
  --tw-text-opacity: 1;
  color: rgb(248 250 252 / var(--tw-text-opacity));
  margin-top: 0.5rem /* 8px */;
}
.navbar-link-container:hover {
  --tw-bg-opacity: 1;
  background-color: rgb(241 245 249 / var(--tw-bg-opacity));
  text-decoration-line: none;
}
.navbar-link-container a:hover {
  text-decoration-line: none;
}
```

Висновки

Таким чином, ми дослідили проблеми відображення web-сторінок на різних пристроях та вивчили способи їх усунення.

Контрольні питання

На що впливає тип, вказаний в медіа-запиті?

Тип, вказаний у медіазапиті, впливає на тип пристрою, на якому відображається документ, наприклад, screen, print або speech. Тип також можна не вказувати або встановити значення "all", що означає, що медіазапит застосовується до всіх пристроїв.

Які умови дозволяють встановлювати медіа-запити?

Умовами для встановлення медіазапитів є один або кілька виразів, які мають значення істина або хибність. Вирази можуть використовувати характеристики або значення пристрою, такі як ширина, висота, орієнтація, колір, роздільна здатність тощо. Вирази також можна комбінувати з логічними операторами, такими як and, not, or only.

Які існують можливості комбінувати запити?

Можливості комбінування запитів полягають у використанні ком для розділення декількох запитів, що означає, що будь-який з них може бути істинним для того, щоб медіа-запит був істинним. Наприклад, `@media (max-width: 600px), (orientation: portrait) { ... }` означає, що правила стилю застосовуються, якщо пристрій має максимальну ширину 600 пікселів або перебуває у книжковій орієнтації. Інша можливість - використання круглих дужок для групування виразів, що означає, що всі вони мають бути істинними для того, щоб медіа-запит був істинним.

Наприклад, `@media screen and (min-width: 480px) { ... }` означає, що правила стилів застосовуються, якщо пристрій є екраном і має мінімальну ширину 480 пікселів.