

## *ICT-Start – Session 01*

# Module 2: Creating static web pages using HTML5 and CSS3

### **E) Hyperlinks**

**December 2022**

★★★★★ & mehr  
★★★★★ & mehr  
★★★★★ & mehr  
★★★★★ & mehr

#### Marke

- ☐ Apple
- ☐ Microsoft
- ☐ Lenovo
- ☐ Samsung
- ☐ Blackview
- ☐ HUAWEI
- ☐ CHUWI

▼ Weitere

#### Preis

Bis 20 EUR  
20 bis 50 EUR  
50 bis 100 EUR  
100 bis 200 EUR  
200 bis 500 EUR  
500 EUR & mehr

#### Angebote & Ersparnis

Alle Angebote  
Angebote

#### Betriebssystem des Tablets

- ☐ Android
- ☐ Android 10
- ☐ Android 11
- ☐ Android 11 Go
- ☐ Android 4.1 Jelly Bean
- ☐ Android 7.0 Nougat
- ☐ Android 8.0 Oreo

▼ Weitere

#### Tablet Besondere Eigenschaften

<https://www.amazon.de/sspa/click?ie=UTF8&spc=MT00MDE2OTIwNjYxMTU3NDU4OjE2NzA...>

Erfahre mehr über diese Ergebnisse.



Gesponsert ⓘ

#### 2022 Apple 11" iPad Pro (Wi-Fi, 128 GB) - Space Grau (4. Generation)

★★★★★ ~ 27

969,01 € UVP: 1.049,00 €

✓prime Lieferung bis **Dienstag, 6. Dezember**  
GRATIS Versand durch Amazon

Optionen: 5 Größen

[+1 Farben/Muster](#)

Drahtlose  
Datenübertragung  
**WLAN**

Das Neueste von der Marke

Betriebssystem  
**iPadOS**

Displaygröße  
**11 Zoll**

Arbeitsspeicher  
**128 GB**



Gesponsert ⓘ

#### 2022 Apple 12,9" iPad Pro (Wi-Fi, 128 GB) - Space Grau (6. Generation)

★★★★★ ~ 28

1.338,99 € UVP: 1.449,00 €

✓prime Lieferung bis **Dienstag, 6. Dezember**  
GRATIS Versand durch Amazon

Optionen: 5 Größen

[+1 Farben/Muster](#)

Drahtlose  
Datenübertragung  
**WLAN**

Betriebssystem  
**iPadOS**

Displaygröße  
**12.9 Zoll**

Arbeitsspeicher  
**128 GB**



#### 2022 Apple 11" iPad Pro (Wi-Fi, 128 GB) - Space Grau (4. Generation)

★★★★★ ~ 27

969,01 € UVP: 1.049,00 €

✓prime Lieferung bis **Dienstag, 6. Dezember**  
GRATIS Versand durch Amazon

Optionen: 5 Größen

Andere Angebote

959,32 € (4 gebrauchte und neue Artikel)

[+1 Farben/Muster](#)

Drahtlose  
Datenübertragung  
**WLAN**

Das Neueste von der Marke

Betriebssystem  
**iPadOS**

Displaygröße  
**11 Zoll**

Arbeitsspeicher  
**128 GB**

★★★★★ & mehr  
★★★★★ & mehr  
★★★★★ & mehr  
★★★★★ & mehr

#### Marke

- ☐ Apple
- ☐ Microsoft
- ☐ Lenovo
- ☐ Samsung
- ☐ Blackview
- ☐ HUAWEI
- ☐ CHUWI

▼ Weitere

#### Preis

- Bis 20 EUR
- 20 bis 50 EUR
- 50 bis 100 EUR
- 100 bis 200 EUR
- 200 bis 500 EUR
- 500 EUR & mehr

#### Angebote & Ersparnis

Alle Angebote  
Angebote

#### Betriebssystem des Tablets

- ☐ Android
- ☐ Android 10
- ☐ Android 11
- ☐ Android 11 Go
- ☐ Android 4.1 Jelly Bean
- ☐ Android 7.0 Nougat
- ☐ Android 8.0 Oreo

▼ Weitere

#### Tabl. Besondere Eigenschaften

<https://www.amazon.de/sspa/click?ie=UTF8&spc=MT00MDE2OTlwNjYxMTU3NDU4OjE2NzA>

Erfahre mehr über diese Ergebnisse.



Gesponsert ⓘ

#### 2022 Apple 11" iPad Pro (Wi-Fi, 128 GB) - Space Grau (4. Generation)

★★★★★ ~ 27

969,01 € UVP: 1.049,00 €

✓prime Lieferung bis **Dienstag, 6. Dezember**  
GRATIS Versand durch Amazon

Optionen: 5 Größen

[+1 Farben/Muster](#)

Drahtlose  
Datenübertragung  
**WLAN**

Das Neueste von der Marke

Betriebssystem  
**iPadOS**

Displaygröße  
**11 Zoll**

Arbeitsspeicher  
**128 GB**



Gesponsert ⓘ

#### 2022 Apple 12,9" iPad Pro (Wi-Fi, 128 GB) - Space Grau (6. Generation)

★★★★★ ~ 28

1.338,99 € UVP: 1.449,00 €

✓prime Lieferung bis **Dienstag, 6. Dezember**  
GRATIS Versand durch Amazon

Optionen: 5 Größen

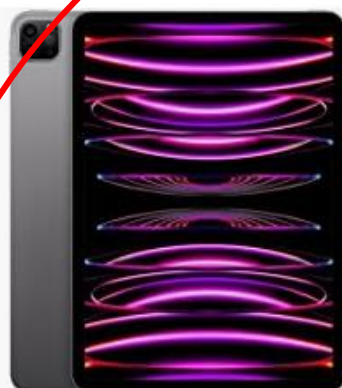
[+1 Farben/Muster](#)

Drahtlose  
Datenübertragung  
**WLAN**

Betriebssystem  
**iPadOS**

Displaygröße  
**12.9 Zoll**

Arbeitsspeicher  
**128 GB**



#### 2022 Apple 11" iPad Pro (Wi-Fi, 128 GB) - Space Grau (4. Generation)

★★★★★ ~ 27

969,01 € UVP: 1.049,00 €

✓prime Lieferung bis **Dienstag, 6. Dezember**  
GRATIS Versand durch Amazon

Optionen: 5 Größen

Andere Angebote

959,32 € (4 gebrauchte und neue Artikel)

[+1 Farben/Muster](#)

Drahtlose  
Datenübertragung  
**WLAN**

Das Neueste von der Marke

Betriebssystem  
**iPadOS**

Displaygröße  
**11 Zoll**

Arbeitsspeicher  
**128 GB**



# Hyperlinks using `<a>` Element

- The hyperlinks probably belong to the most important elements of HTML because they make it possible to switch from one web page to another.
- The corresponding HTML Element is the `<a>` Tag (anchor)
- Example:



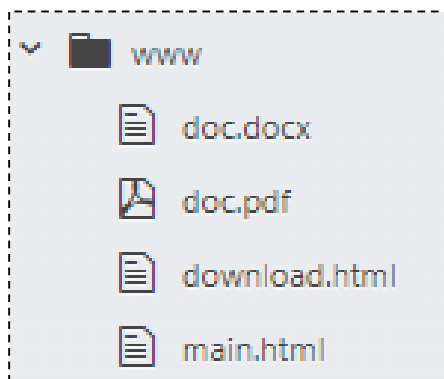
*destination (**absolute** path)* *Visible, clickable part*

```
<a href="https://www.google.com">Google</a>
```

<https://www.google.com>

# Relative references

- The hyperlinks can reference other local HTML files (*relative path*)



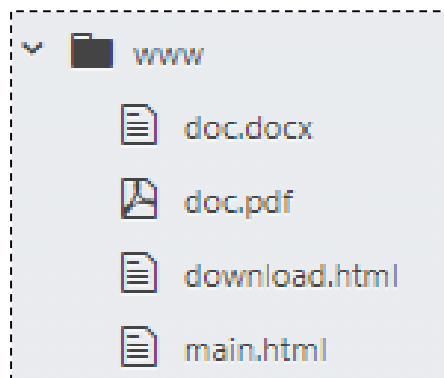
## Main Page

Click [here](#) to visit the Download page.

```
<h1>Main Page</h1>
```

```
Click <a href="download.html">here</a> to visit the Download page.
```

# Relative references



## Download

Welcome to the Download page.

Here you can open and download a PDF-Document: [PDF](#)

Here you can download a Word-Document: [DOCX](#)

---

Click [here](#) to go back to the main page.

```
<h1>Download</h1>
```

```
<p>Welcome to the Download page.</p>
```

```
<p>Here you can open and download a PDF-Document: <a href="doc.pdf">PDF</a> </p>
```

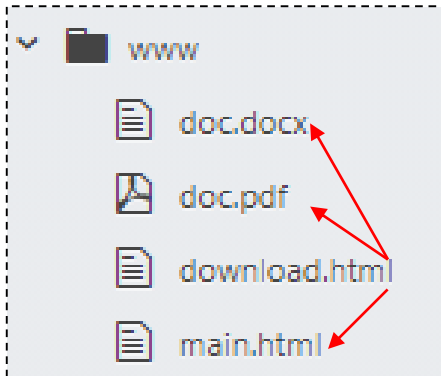
```
<p>Here you can download a Word-Document: <a href="doc.docx">DOCX</a></p>
```

```
<hr>
```

```
<p>Click <a href="main.html">here</a> to go back to the main page.</p>
```

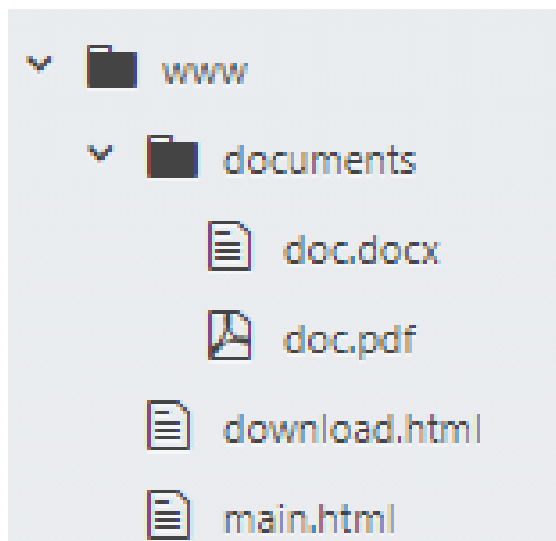
# Relative references

- The reference is called *relative* because the path points to a file relative to the current page (download.html)



# Relative references

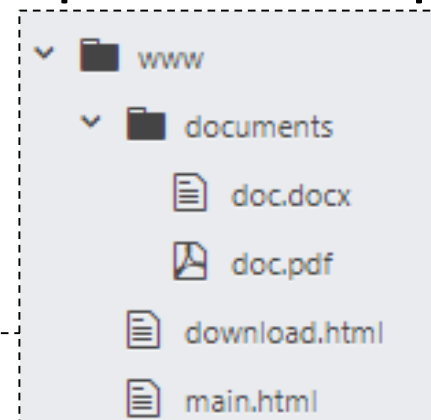
- Assuming we have the following structure, and the user visits the download.html file. What would be the correct path to the pdf and word file?





# Relative references

- Assuming we have the following structure, and the user visits the download.html file. What would be the correct path to the pdf and word file?



```
<h1>Download</h1>
```

```
<p>Welcome to the Download page.</p>
```

```
<p>Here you can open and download a PDF-Document: <a href="documents/doc.pdf">PDF</a> </p>
```

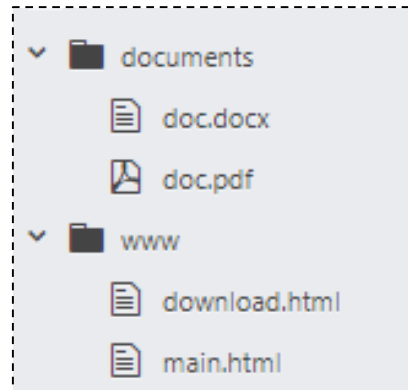
```
<p>Here you can download a Word-Document: <a href="documents/doc.docx">DOCX</a></p>
```

```
<hr>
```

```
<p>Click <a href="main.html">here</a> to go back to the main page.</p>
```

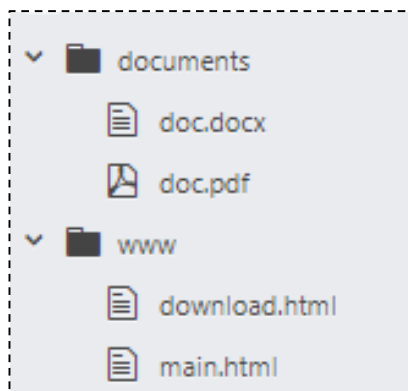
# Relative references

- What would be the correct path to the pdf and word file if we move the documents folder one level up?



# Relative references

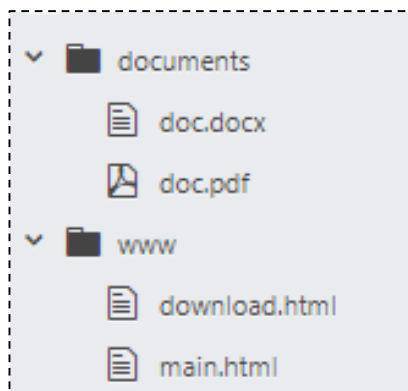
- What would be the correct path to the pdf and word file if we move the documents folder one level up?



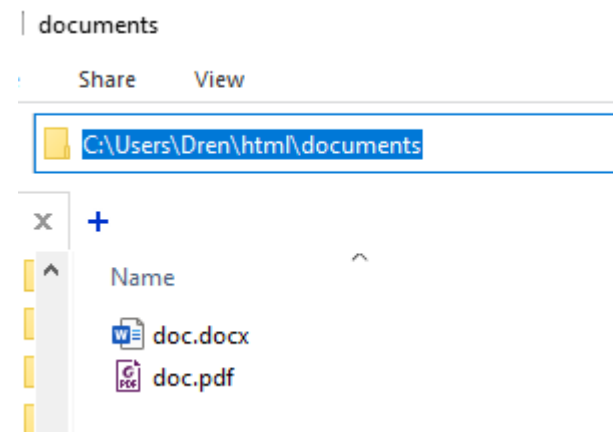
<p>Here you can open and download a PDF-Document: <a href=" ../documents/doc.pdf">PDF</a> </p>  
<p>Here you can download a Word-Document: <a href=" ../documents/doc.docx">DOCX</a></p>

# Relative references (Alternatives)

- What would be the correct path to the pdf and word file if we move the documents folder one level up?



Which one  
is the best  
way to go?



<p>Here you can open and download a PDF-Document: <a href=" ../documents/doc.pdf">PDF</a> </p>

<p>Here you can download a Word-Document: <a href=" ../documents/doc.docx">DOCX</a></p>

<p>Here you can open and download a PDF-Document: <a href="C:\Users\Dren\html\documents\doc.pdf">PDF</a> </p>

<p>Here you can download a Word-Document: <a href="C:\Users\Dren\html\documents\doc.docx">DOCX</a></p>

<p>Here you can open and download a PDF-Document: <a href="/Users/Dren/html/documents/doc.pdf">PDF</a> </p>

<p>Here you can download a Word-Document: <a href="/Users/Dren/html/documents/doc.docx">DOCX</a></p>

# Absolute references

- An absolute file reference requires the full URL/path to a file:

```
<p>Here you can open and download a PDF-Document: <a href="https://dlh.gashi.lu/documents/doc.pdf">PDF</a> </p>  
<p>Here you can download a Word-Document: <a href="https://dlh.gashi.lu/documents/doc.docx">DOCX</a></p>
```

- Absolute file paths should only be used when the referenced file is not on your webserver!



# The `target` Attribute

- Anchor elements have an optional `target` attribute in addition to the `href` attribute
- The value `_blank` specifies that the linked document should be opened in a new window or tab

```
<h1>Main Page</h1>
```

```
Click <a target="_blank" href="download.html">here</a> to visit the Download page.
```



Try it!

# The mailto: prefix

- Using the anchor element, we can redirect the user to the installed e-mail client

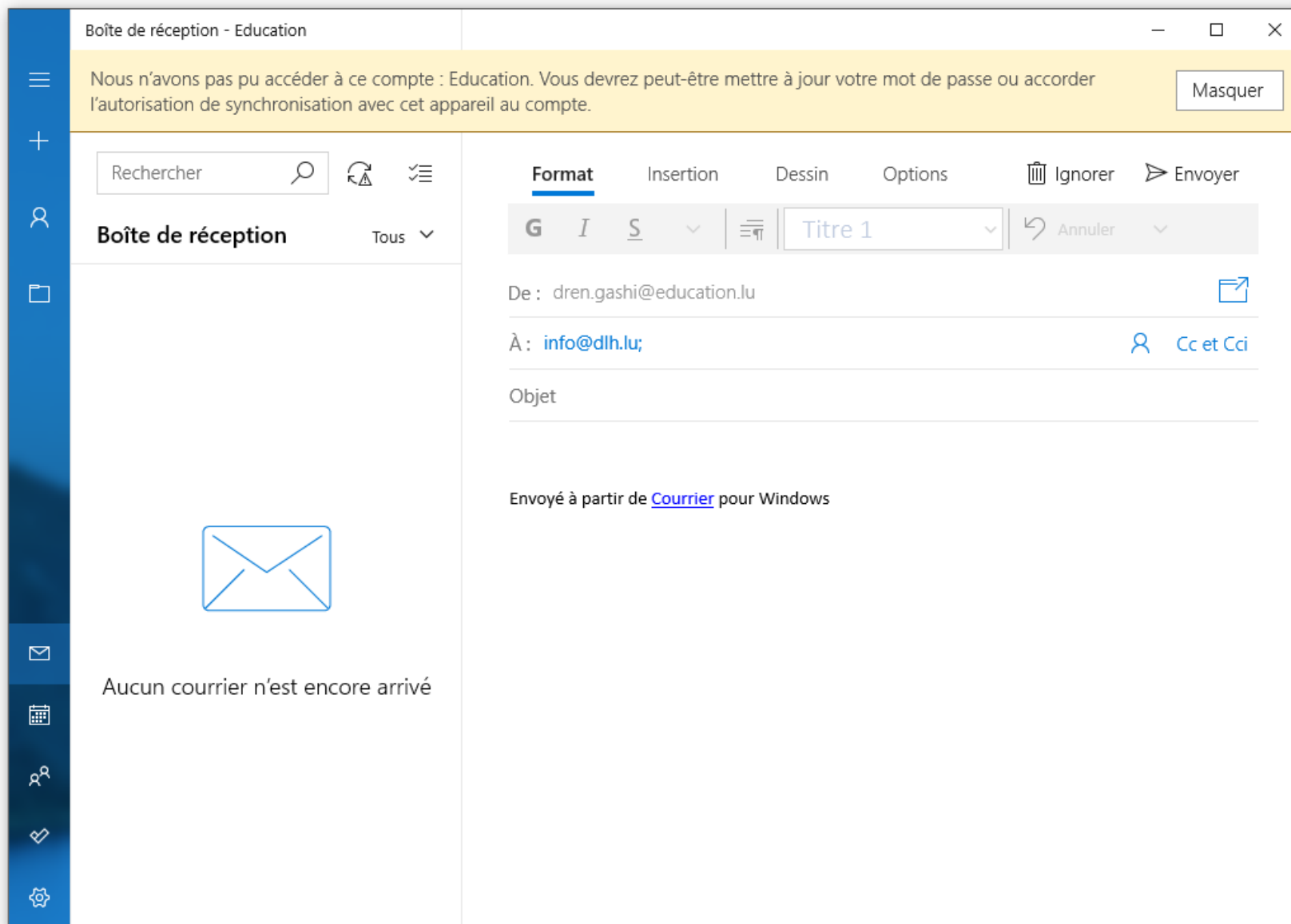
## Main Page

Contact us at [info@dlh.lu](mailto:info@dlh.lu).

mailto:info@dlh.lu

```
<body>  
  <h1>Main Page</h1>  
  Contact us at <a href="mailto:info@dlh.lu">info@dlh.lu</a>.  
</body>
```

Contact us at [info@dlh.lu](mailto:info@dlh.lu).



# Cybersecurity awareness

- Unfortunately, because of such e-mail addresses on the website, sooner or later you have to expect unsolicited commercial e-mails (spam)
- *Web crawlers* scan websites for email addresses
- Do you have some ideas how to protect against such tricks?

# Cybersecurity awareness

- Although there are no 100% guaranteed solutions, the most successful
- Use an image for the email address
- Do not use mailto: and replace @ with “[at]”
  - Example: info[at]dlh.lu
  - Encode the e-mail address with HTML entities:
    - `&#x69;&#x6e;&#x66;&#x6f;&#x40;&#x64;&#x6c;&#x68;&#x2e;&#x6c;&#x75;`
    - Output will still be the same 😊



# Exercices