

30 November 2019

Week 1 Project Introduction, Time Planning and Documentation

项目启动，时间规划和文档记录

Brainstorming what a useful machine or robot that they possibly made in the FabLab and prepare a documentation.

头脑风暴下自己可以在 Fablab 制造什么样的机器人

Week 1 Assignments: **Create about page and progress of the week.**

第一周任务：制作网页

Note: You need to bring your personal Laptop and mouse every week.

每周都需要带上个人电脑和鼠标，系统不限，但是要有电脑管理员账号，准备一个邮箱（登陆名和密码）

You need to install the following software: 需要装的软件

1. **Brackets** : <http://brackets.io/>
2. **Google chrome** : <https://www.google.com/chrome/>

Next meeting, you need to install the following software: 下周需要装的软件

1. **Solidwoks**
2. **Arduino IDE** : <https://www.arduino.cc/en/main/software>

Schedule

Week	Description
1	Project Introduction and documentation 项目介绍和文档记录（制作个人网页）
2	2D Design and Laser Cutting 2D 设计和激光切割
3-5	3D CAD and 3D Printing 3D CAD 制图和 3D 打印
6-9	Input Device 输入设备
10-11	Output Device 输出设备
12-14	Finish Project 项目制作
15	Presentation 项目演讲演示

Boilerplate HTML 代码样例（在学生电脑桌面的文件夹也有）

```
<!DOCTYPE html>

<html>

<head>

<!-- metadata goes in head -->

    <title>My First Page</title>

</head>

<body>

<!-- content goes in the body -->

    <h1>This is my first tag!!!</h1>

</body>

</html>
```

```
<html>

  <head>

    <title>Page title</title>

  </head>

  <body>

    <h1>This is a heading</h1>

    <p>This is a paragraph.</p>

    <p>This is another paragraph.</p>

  </body>

</html>
```

List Exercise 课后作业练习

```
<!DOCTYPE html>
<html>
<head>
  <title>Things I've Learned</title>
</head>
<body>
<h1>Things I've Learned</h1>
<ol>
  <li>Setup Developer Environment</li>
  <li>Define roles of HTML, CSS and Java script</li>
  <li>Write properly structured HTML documents</li>
  <li>Write common closing and self closing tags</li>
</ol>
<h2>HTML</h2>
<ul>
  <li>Stands for <strong>Hyper Text Markup Language</strong></li>
  <li>Lots of Tags
    <ul>
      <li>Boilerplate
        <ol>
          <li>Doctype</li>
          <li>HTML</li>
          <li>Head
            <ol>
              <li>Title</li>
            </ol>
          </li>
          <li>Body</li>
        </ol>
      </li>
      <li>Headings</li>
      <li>Paragraph</li>
      <li><strong>strong</strong></li>
    </ul>
  </li>
</ul>

</body>

</html>
```

Your First Website 你的第一个网页

```
<!DOCTYPE html>

<html>

<head>

    <title>Marcello Tania</title>

</head>

<body>

<h1>About Me</h1>

<p>Hi, I'm a cello. hi!</p>



<h3>Some of my favorite hobbies:</h3>

<ul>

    <li>Drawing</li>

    <li>Diving</li>

    <li>Building machines</li>

</ul>

<p>Make sure to follow me on <a href="https://fablabo.com/">Fablab O Website</a></p>

</body>

</html>
```

HTML Element references HTML 代码元素解释

This is a page list all the HTML elements that we are going to use today, which are created using tags. 这些是我们今天要用到的代码元素标签，这些元素和描述不需要全部记住，每节课尝试一些，忘记了就查询，不断写更多代码的过程中，会反复记忆和练习，从而熟练掌握。

Main root

Element	Description
---------	-------------

<code><html></code>	The HTML <code><html></code> element represents the root (top-level element) of an HTML document, so it is also referred to as the <i>root element</i> . All other elements must be descendants of this element.
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Document metadata

Metadata contains information about the page. This includes information about styles, scripts and data to help software ([search engines](#), [browsers](#), etc.) use and render the page. Metadata for styles and scripts may be defined in the page or link to another file that has the information.

Element	Description
---------	-------------

<code><head></code>	The HTML <code><head></code> element contains machine-readable information (metadata) about the document, like its title , scripts , and style sheets .
<code><meta></code>	The HTML <code><meta></code> element represents metadata that cannot be represented by other HTML meta-related elements, like <code><base></code> , <code><link></code> , <code><script></code> , <code><style></code> or <code><title></code> .
<code><style></code>	The HTML <code><style></code> element contains style information for a document, or part of a document.
<code><title></code>	The HTML Title element (<code><title></code>) defines the document's title that is shown in a browser 's title bar or a page's tab.

Sectioning root

Element	Description
---------	-------------

<code><body></code>	The HTML <code><body></code> Element represents the content of an HTML document. There can be only one <code><body></code> element in a document.
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Content sectioning

Content sectioning elements allow you to organize the document content into logical pieces. Use the sectioning elements to create a broad outline for your page content, including header and footer navigation, and heading elements to identify sections of content.

Element

Description

`<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`

The **HTML `<h1>`—`<h6>` elements** represent six levels of section headings. `<h1>` is the highest section level and `<h6>` is the lowest.

`<main>`

The **HTML `<main>` element** represents the dominant content of the `<body>` of a document. The main content area consists of content that is directly related to or expands upon the central topic of a document, or the central functionality of an application.

Image and multimedia

HTML supports various multimedia resources such as images, audio, and video.

Element

Description

``

The **HTML `` element** embeds an image into the document.

Text content

Use HTML text content elements to organize blocks or sections of content placed between the opening `<body>` and closing `</body>` tags. Important for [accessibility](#) and [SEO](#), these elements identify the purpose or structure of that content.

Element

Description

``

The **HTML `` element** is used to represent an item in a list.

`<main>`

The **HTML `<main>` element** represents the dominant content of the `<body>` of a document. The main content area consists of content that is directly related to or expands upon the central topic of a document, or the central functionality of an application.

``

The **HTML `` element** represents an ordered list of items — typically rendered as a numbered list.

`<p>`

The **HTML `<p>` element** represents a paragraph.

``

The **HTML `` element** represents an unordered list of items, typically rendered as a bulleted list.

Reference : <https://developer.mozilla.org/en-US/docs/Web/HTML/Element>