

选修课

Multimedia Technology

多媒体

Multimedia technology is to use computers to digitize media information such as text, graphics, images, animation, sound and video, and integrate them into a certain interactive interface, so that the computer has the ability to interactively display different media forms. It has greatly changed the traditional method of people's access to information, and is in line with the way people read in the information age.

In this class, we learned about various media forms and the software for editing them, such as word or txt for text editing, photoshop or the drawing software that comes with your computer for editing pictures, and flash or players for editing videos, there are also many apps for editing videos that are very simple. Also learned various multimedia formats, such as .txt, .jpg, .png, .mp3, .mp4, .avi, etc.

WebPage Design and Making

网页设计与制作

A web page (or webpage) is a hypertext document provided by a website and displayed to a user in a web browser.

The core element of a web page is one or more text files written in the **Hypertext Markup Language (HTML)**. Many web pages also make use of **JavaScript** code for dynamic behavior and **Cascading Style Sheets (CSS)** code for presentation semantics.

Images, videos, and other multimedia files are often embedded in web pages.

- HTML is the standard markup language for documents designed to be displayed in a web browser.

```
<!DOCTYPE html>
<html>
  <head>
    <title>This is a title</title>
  </head>
  <body>
    <div>
      <p>Hello world!</p>
    </div>
  </body>
</html>
```

- CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility.

```
body {  
  overflow: hidden;  
  background-color: #000000;  
  background-image: url(images/bg.gif);  
  background-repeat: no-repeat;  
  background-position: left top;  
}
```

- JavaScript, often abbreviated JS, is a programming language that is one of the core technologies of the World Wide Web. Javascript controls the triggering and response of interactive events in webpage, and can also exchange information with the background through the interface.

```
function factorial(n) {  
  if (n === 0)  
    return 1; // 0! = 1  
  
  return n * factorial(n - 1);  
}  
  
factorial(3); // returns 6
```

User Interface Design

用户界面设计

User interface (UI) design is the design of user interfaces for software, such as computers or mobile devices, with the focus on maximizing usability and the user experience. The goal of user interface design is to make the user's interaction as simple and efficient as possible, in terms of accomplishing user goals (user-centered design).

- **Structure Design:** Structural design is also called Conceptual Design, which is the skeleton of interface design. Through user research and task analysis, the overall architecture of the product is formulated.
- **Interactive Design:** The purpose of interaction design is to make a product easy for users to use. The realization of any product function is done through the interaction of humans and machines. Therefore, the human factor should be embodied as the core of the design.
- **Visual Design:** On the basis of structural design, visual design is carried out with reference to the target group's mental model and task achievement. Including colors, fonts, pages, etc. Visual design should achieve the purpose of user-pleasant use.

References:

[多媒体技术 – 百度百科](#)

[Multimedia – Wikipedia](#)

[Webpage – Wikipedia](#)

[HTML – Wikipedia](#)

[CSS – Wikipedia](#)

[User Interface Design – Wikipedia](#)

[什么是用户界面设计](#)