Approaches to Learning Support for Students Studying Web Production

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Tools and sites to support independent learning in web production

Tag cloud based on advanced learners' search history

The website that outputs coding tips from web design

Coding

SA Support Site based on experiential learning cycle

The Faculty of Information Media Studies at Hokkaido Information University offers several courses for beginners in web production. In each subject, tools and websites have been developed to support students and attempt to support their independent learning.

Basic classes on web production at the Faculty of Information Media Studies

Subjects	Exercises	Course period
Web Design Basics Practical	Prototyping	1st semester of 1st year
HTML Coding Practical	Coding	2nd semester of 1st year

Tag Cloud based on advanced Learners' Search History

Students who are active in projects are able to solve problems by themselves. Those who can solve problems independently excel at web-based research and learning. During the web production process, students proficient in research and learning use many **design keywords** in their search terms [1].

Students who are **good** at web-based research and learning Haajime This webesite for experiments by Hajime Saito Lab Students who are **not good** at web-based research and learning カフェ Web デザイン デザイン Webデザイン カジュアルな おしゃれ カフェ Webサイト Presentation of Design Keywords

Design keywords are adjectives that describe impressions, e.g.

Neutral Transparent Pure Sophisticated Refreshing Youthful Fresh Cute Cute Romantic Casual Café-style Simple Casual Pop Vibrant Playful Playful Children's Warm Simple Life Force Business Mature Elegant Classy Chic Classical Impact Dynamic ...

[1] Hajime Saito, Manami Sugisawa, Kenji Saito, Mitsuyoshi Nagao, A Support System for Students' Investigative Learning on the Web (in Japanese), Memoirs of Hokkaido Information University, Vol.31, pp.97-103, 2022.

The website that outputs coding tips from web design

In learning web production, there are many cases where coding is difficult, especially for beginners. In this study, a website is developed for beginners in web production, utilizing image recognition technology and presenting coding tips from web design [2].

Teachable Machine

Google-provided service for easy handling of machine learning. https://teachablemachine.withgoogle.com/

Training data

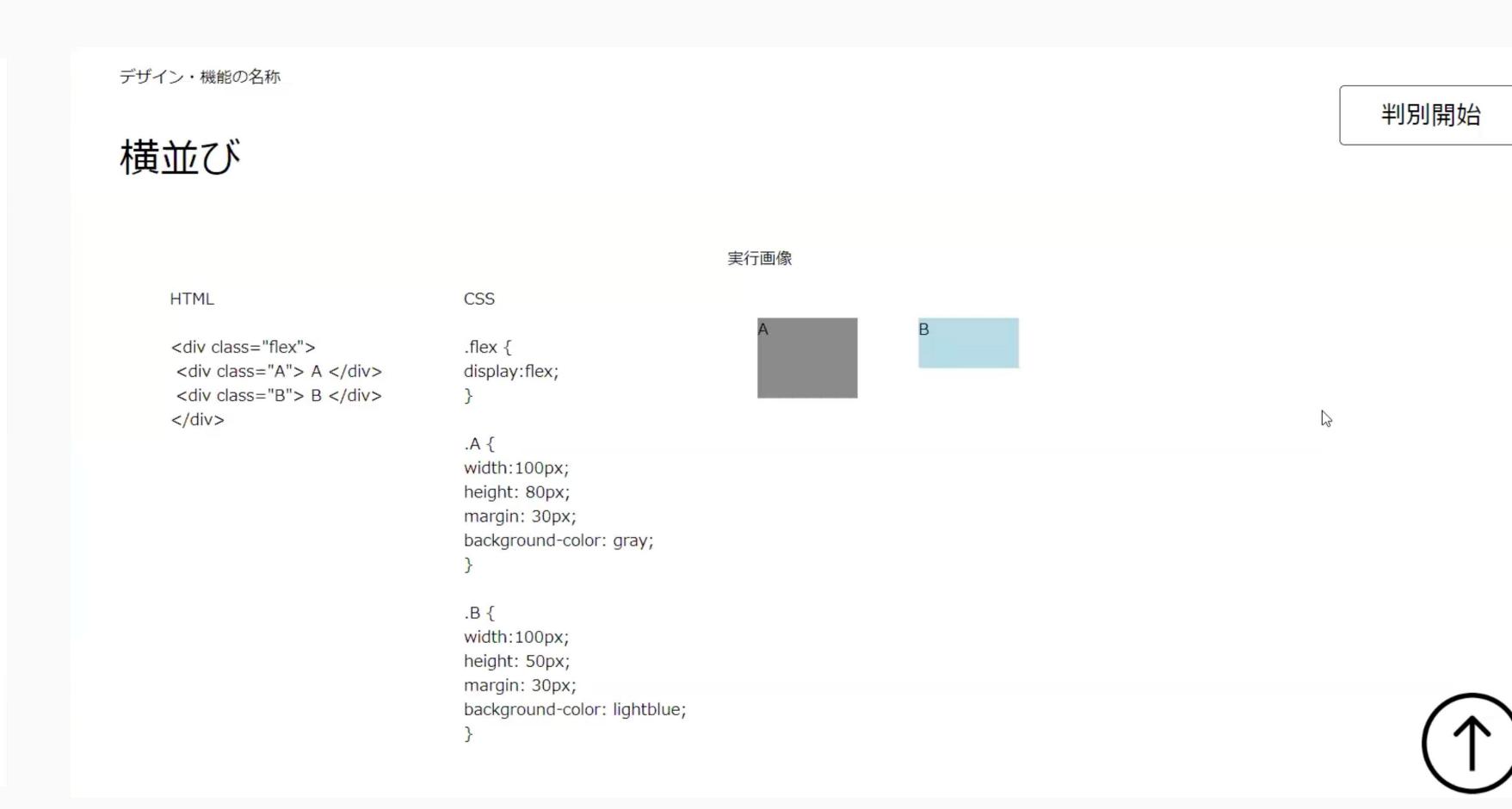
Website design submitted by students in the web design basic practical.
Designs presented by teachers in lectures.

Output tips

- 1. Names of parts of the web design
- 2. HTML and CSS code to complete part 1
- 3. Output (images) when 2 is displayed in a browser

How to Use





- ① Upload an image file of your design and select with the mouse where you want coding tips.
- ② Click on the 'Start detection' button to display coding hints.
- [2] Hajime Saito, Hiroki Sugawara, Development of a website that outputs coding tips from web design using the Teachable Machine (in Japanese), EC2024, 2024.09