

Applied Web System

Special Subjects
Elective 2 credit

SHIONOME. Takeaki

1. Course Description

In this lecture, we will learn about server side programming experientially using JavaScript environment such as JavaScript and Node.js.

First of all, we will outline these underlying technologies (network, web application, network security, etc.). Then we will conduct development project practice.

This lecture is related to DP4M.

2. Course Objectives

Learners will be able to explain the peripheral technology to realize web applications.

Learners can develop web applications that realize the following functions

- Interactive web page using HTML, CSS, JavaScript
- Receive data from users and store information on the server side
- Interaction between multiple users

3. Grading Policy

We will evaluate web applications to be developed as final issues.(50%), final reports (30%), and intermediate reports (20%).

We will give feedback on the application in the class, and on the report in LMS.

Each lesson will have a quiz in LMS. The notes about what you have learned will be the basis of the web application you will develop.

4. Textbook and Reference

Reference

松下温 応用Web技術 改訂2版 オーム社

5. Requirements(Assignments)

Those who take this course do not necessarily have to be familiar with JavaScript, but they are expected to have basic knowledge of IT (equivalent to Fundamental Information Technology Engineer Examination).

Also, in the latter half of this lecture, you will plan to have your system devised and built by yourself, so if you can prepare your own environment for development, it will be smooth.

6. Note

7. Schedule

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| [1] | Overview of Web System 1 / What is Web System? |
| [2] | Overview of Web System 2 / Network |
| [3] | Overview of Web System 3 / Security |
| [4] | Development environment |
| [5] | JavaScript, HTML, CSS, client side programming |
| [6] | JavaScript / user interface |
| [7] | jQuery and Ajax |
| [8] | Node.js |
| [9] | Database 1 / XML |
| [10] | Database 2 / SQL |
| [11] | User authentication |
| [12] | System design |
| [13] | System development |
| [14] | System development and operation |
| [15] | Review and summary |