

2019년 1학기 시스템프로그래밍실습 8주차

HTML-Is

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Contents

- HTML Tags
- 실습
- Assignment 3-1

Assignment#3 - description

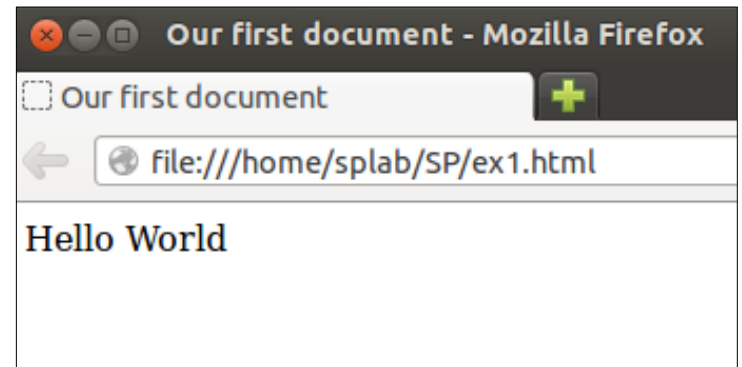
- **HTML Basic (Assignment 3-1)**
 - HTML-Is
- **HTTP / Socket System Call (Assignment 3-2)**
 - HTTP Protocol
 - socket(), bind(), listen(), accept(), connect()
- **Access Control (Assignment 3-3)**
 - String pattern matching

A First HTML Document

- **HTML**

- HyperText Markup Language, commonly referred to as HTML, is the standard markup language used to create web pages.
- The document in this slide would look like this when viewed with a WWW browser.
- The title is usually displayed in the title bar of the browser.

```
<html>
<head>
<title> Our first document </title>
</head>
<body>
Hello World
</body>
</html>
```



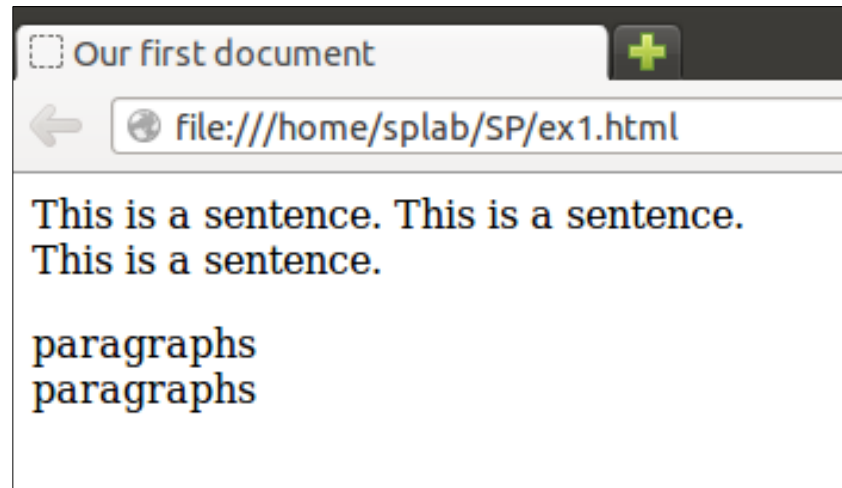
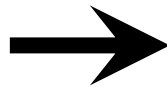
Important Facts About HTML

- **Extra spaces and blank lines are ignored by the WWW browser.**
 - `
`, ` `
- **HTML tags are case-insensitive.**
 - `<HTML>` = `<html>`

Formatting Text

- **
**
 - Causes a new line
- **<P>**
 - Separates paragraphs

```
<body>
This is a sentence.
This is a sentence.<br>This is a sentence.
<p>paragraphs<br>paragraphs
</body>
```



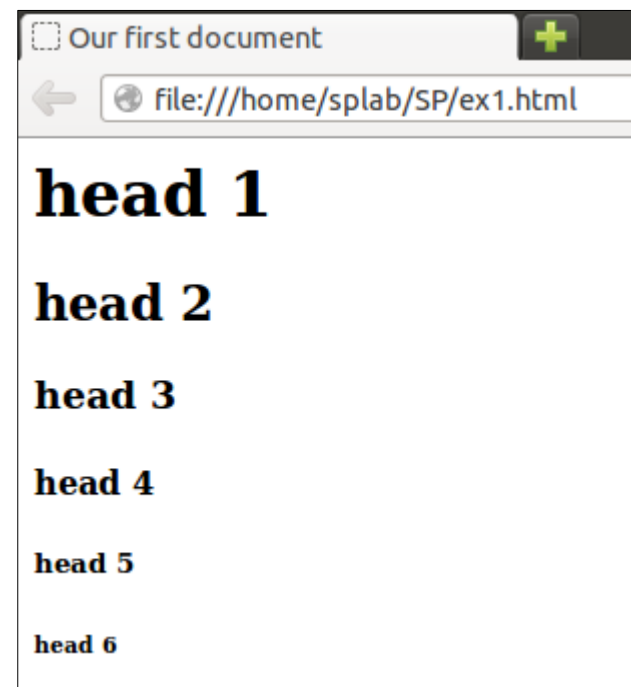
Emphasizing Text

- ** text **
 - Set text in **boldface**
- **<I> text </I>**
 - Set text in *italic*
- **<CENTER> text </CENTER>**
 - arrange text in the middle

Document Headings

- **<Hn> text </Hn>**
 - Where n = 1 ... 6
 - n = 1 is the largest heading
- **Headings are automatically bold**
- **The equivalent of a <P> automatically occurs when a heading is closed**

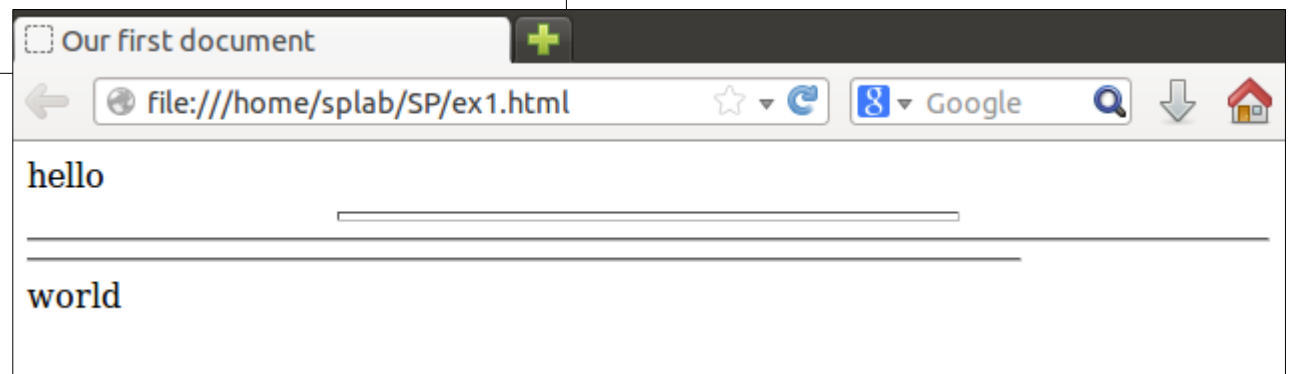
```
<body>
<h1>head 1</h1>
<h2>head 2</h2>
<h3>head 3</h3>
<h4>head 4</h4>
<h5>head 5</h5>
<h6>head 6</h6>
</body>
```



Horizontal Lines

- **<HR>**
 - Creates a basic horizontal line across the page
- **<HR SIZE="n" WIDTH="p%" ALIGN="how">**
 - n – The thickness of the line
 - p – Percentage of the page
 - how –LEFT or RIGHT or CENTER

```
<body>
hello
<hr size="5" width="50%" align="center">
<hr>
<hr width="80%" align="left">
world
</body>
```



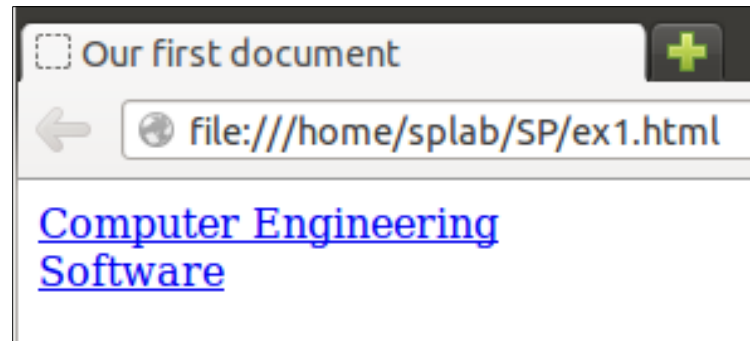
Linking Documents - URLs

- **Type://host:port/path**
 - Type :
 - http = a WWW site
 - ftp = an anonymous ftp site
 - File = a local file
 - host : the hostname of the remote site
 - port : TCP port of the remote server
 - path : where the resource is located on the server

Linking Documents – Creating Hyperlinks

- ** text **
 - URL = the resource to link to
 - text = the text for the link

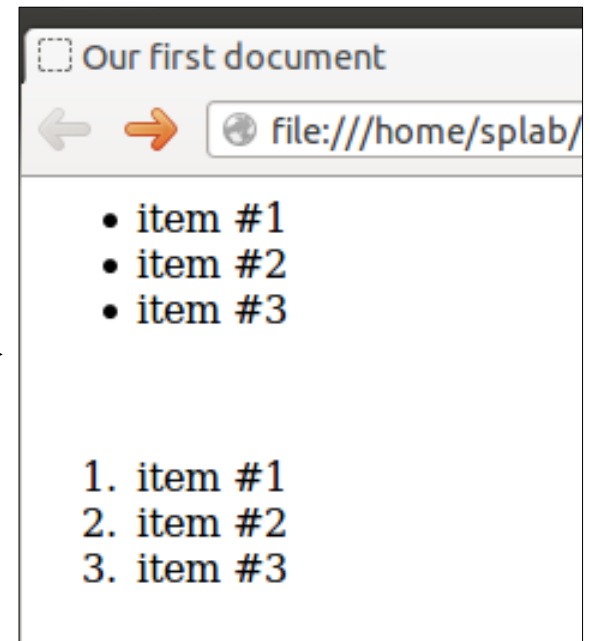
```
<body>  
<a href="http://ce.kw.ac.kr/">Computer Engineering</a><br>  
<a href="ftp://distro.ibiblio.org/">Software</a><br>  
</body>
```



List

- ` ... `
 - unordered list
- ` ... `
 - contents of list
- ` ... `
 - ordered list

```
<body>
<ul>
<li>item #1</li>
<li>item #2</li>
<li>item #3</li>
</ul><br>
<ol>
<li>item #1</li>
<li>item #2</li>
<li>item #3</li>
</ol>
</body>
```



Table

- **<TABLE> ... </TABLE>**
 - Marks the start and end of a table
- **<TR> ... </TR>**
 - Marks the start and end of a table row
- **<TH> ... </TH>**
 - Marks a cell containing a table heading
- **<TD> ... </TD>**
 - Marks a cell in the table

Tables (cont'd)

```
<body>
<table border="1">
<tr><th>Name</th><th>ID</th></tr>
<tr><td>Dick</td><td>100</td></tr>
<tr><td>Jane</td><td>101</td></tr>
</table>
</body>
```



Our first document

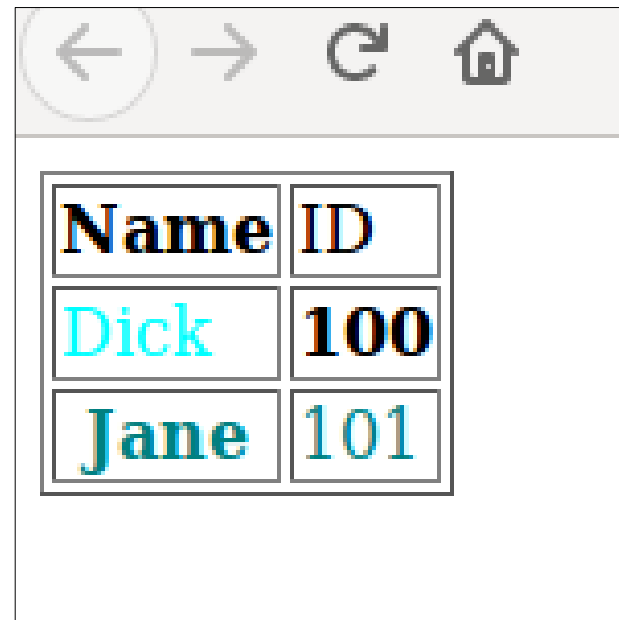
← → file:///home/spla

Name	ID
Dick	100
Jane	101

Font Color

- **Style="color:####"**
 - #### is type of color

```
<body>
<table border="1">
<tr><th>Name</th><td>ID</td></tr>
<tr><td style="color:aqua">Dick</td><th>100</th></tr>
<tr style="color:teal"><th>Jane</th><td>101</td></tr>
</table>
</body>
```



Name	ID
Dick	100
Jane	101

실습

- **‘simple ls’를 웹으로 출력**
 - HTML 코드로 변환
 - title bar에 current working directory 출력
 - 제목(head)으로 current working directory 출력
 - simple ls의 결과는 table로 출력

실습 (cont'd)

- 결과 화면



실습 (cont'd)

- sample code

```
#include <stdio.h>
#include <dirent.h>
#include <unistd.h>

int main()
{
    FILE *file=fopen("simple_ls.html","w");
    if(file==0)
    {
        printf("error\n");
        return -1;
    }

    /* Write your code */

    fclose(file);
    return 0;
}
```

Assignment 3-1

■ HTML-ls

- Make a HTML document using your ls command (**spls_final**)
- Output HTML document contains
 - current directory -> title
 - command -> heading
 - results of ls command -> **use TABLE**
 - file names -> **hyperlink** to the file
 - output file name : **html_ls.html**
- Open & check this html page on browser
- 기타 HTML 서식 제한 없음

■ Requirements

- Output different colors according to file type
 - Directory : Blue
 - Link file : Green
 - Other : Red
- Do not print output file 'html_ls.html' to the list

Assignment 3-1 (cont'd)

- HTML-ls
 - Result

file:///home/sslslab/8/html_ls.html

./html_ls -al . /opt

Directory path : .
total 84

Name	Permission	Link	Owner	Group	Size	Last Modified
.	drwxrwxr-x	2	sslslab	sslslab	4096	Apr 18 00:26
..	drwxr-xr-x	18	sslslab	sslslab	4096	Apr 18 00:23
a.html	-rw-rw-r--	1	sslslab	sslslab	93	Apr 11 22:17
a_link.html	lrwxrwxrwx	1	sslslab	sslslab	6	Apr 18 00:26
ass3-1_v2.c	-rw-rw-r--	1	sslslab	sslslab	13907	Apr 13 05:43
b.html	-rw-rw-r--	1	sslslab	sslslab	107	Apr 11 22:23
c.html	-rw-rw-r--	1	sslslab	sslslab	144	Apr 12 00:43
d.html	-rw-rw-r--	1	sslslab	sslslab	141	Apr 11 22:29
e.html	-rw-rw-r--	1	sslslab	sslslab	148	Apr 11 22:34
html_ls	-rwxrwxr-x	1	sslslab	sslslab	23008	Apr 18 00:11
MakeFile	-rw-rw-r--	1	sslslab	sslslab	13907	Apr 13 05:43

Directory path : /opt
total 8

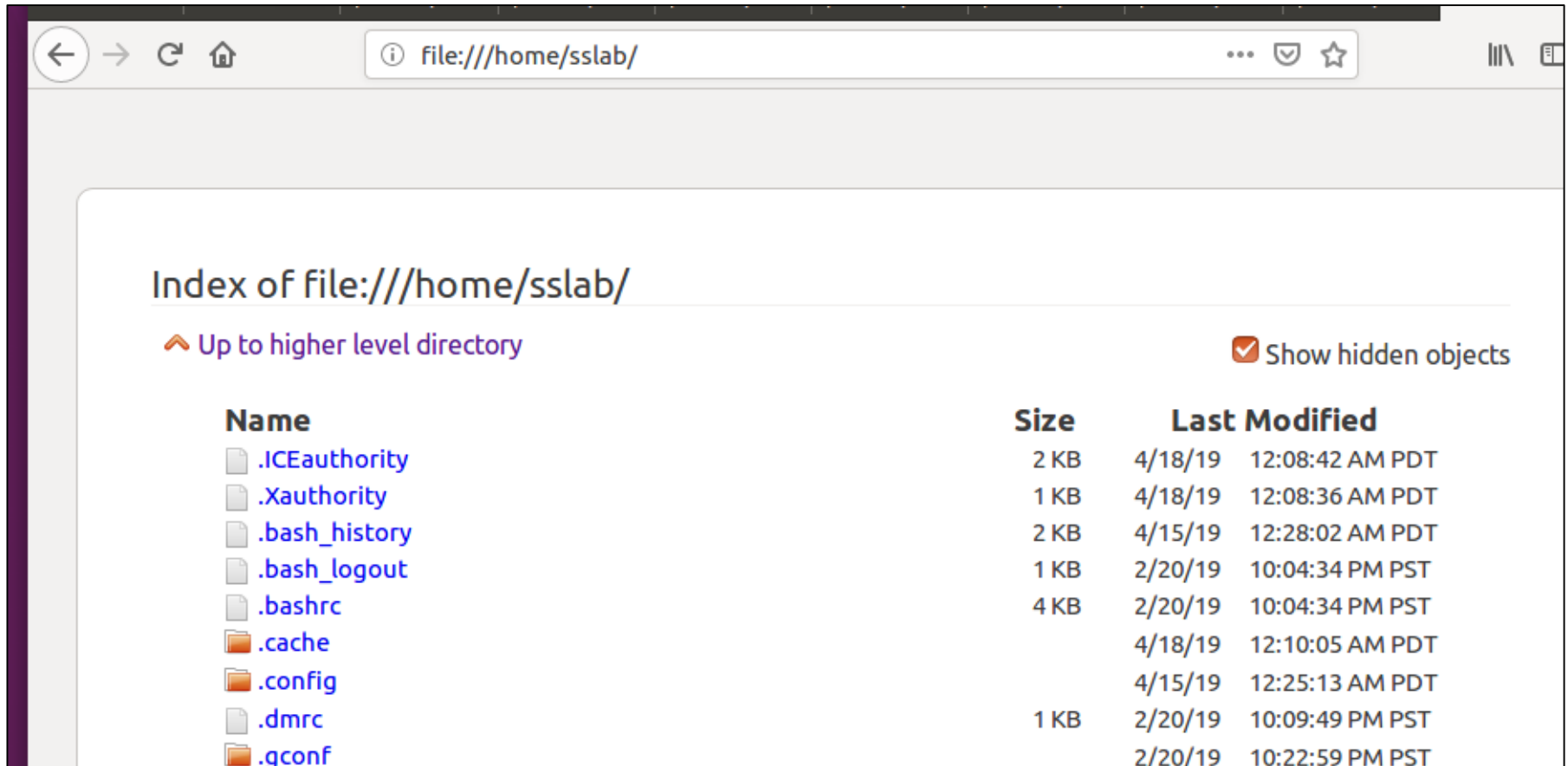
Name	Permission	Link	Owner	Group	Size	Last Modified
.	drwxr-xr-x	2	root	root	4096	Apr 18 00:25
..	drwxr-xr-x	24	root	root	4096	Apr 4 02:58
test_sslslab	-rw-r--r--	1	root	root	0	Apr 18 00:25

html_ls.html 파일이 출력되지 않게 구현!

Assignment 3-1 (cont'd)

- HTML-ls

- Result (hyperlink result : “..”)



Index of file:///home/sslabs/

[Up to higher level directory](#) ☒ Show hidden objects

Name	Size	Last Modified
.ICEauthority	2 KB	4/18/19 12:08:42 AM PDT
.Xauthority	1 KB	4/18/19 12:08:36 AM PDT
.bash_history	2 KB	4/15/19 12:28:02 AM PDT
.bash_logout	1 KB	2/20/19 10:04:34 PM PST
.bashrc	4 KB	2/20/19 10:04:34 PM PST
.cache		4/18/19 12:10:05 AM PDT
.config		4/15/19 12:25:13 AM PDT
.dmrc	1 KB	2/20/19 10:09:49 PM PST
.qconf		2/20/19 10:22:59 PM PST

Assignment 3-1 (cont'd)

- **Code Requirements**

- 이전 과제 부분에 문제가 있는 경우 감점
- 출력 형식에 맞지 않으면 감점
- 소스코드의 50% 이상 주석을 달지 않은 경우 감점

- **Makefile Requirements**

- 실행 파일이 “html_ls”로 생성되도록 Makefile 작성
- 컴파일 도중 warning 발생 시 감점
- “\$ make” 를 통해 실행파일이 생성되지 않는 경우, 0점

Assignment 3-1 (cont'd)

▪ Report Requirements

- 보고서 표지
 - 실습강의시간, 담당 교수님, 학번, 이름 필히 명시
- 아래의 내용은 보고서에 필히 포함
 - Introduction
 - 5줄 내외 작성
 - Flowchart
 - 본인이 작성한 코드에 대한 flowchart 작성
 - Pseudo code
 - 본인이 작성한 코드에 대한 pseudo code 작성
 - Reference
 - 참고한 자료 명시(웹 페이지, 친구 등)
 - 강의 자료만 활용한 경우 생략 가능
 - Conclusion

▪ 과제 질문 관련

- 해당 과제 출제 담당 조교에게 이메일로 문의 → 박준택 조교 (juntaek@kw.ac.kr)
- 과제 제출 마감 당일에는 **오후 4시까지 도착한 질문 메일에만 답변**

Assignment 3-1 (cont'd)

- **Softcopy Upload**

- 제출 파일
 - 보고서 (파일명: 실습요일_3-1_학번.pdf), ls.c, Makefile
- Sorce code copy 적발 시 예외 없이 0점 처리
- 위 파일들을 압축해서 제출 (파일명: 실습 요일_3-1_학번.tar.gz)
 - e.g. 월1,2 → **mon_3-1_2014722000.tar.gz**
 - e.g. 화3,4 → **thu_3-1_2014722000.tar.gz**
 - e.g. 금5,6 → **fri_3-1_2014722000.tar.gz**
- U-Campus의 과제 제출에 **5월 3일(금) 23:59:59까지** 제출
 - U-Campus에 올린 후 다시 다운로드 받아서 **파일에 문제가 없는지** 필히 확인
- 미리 공지한 바와 같이, **delay 받지 않음 (예외 없음)**
- **Ubuntu 16.04 64-bit 환경**에서 채점

| 2차 퀴즈

- **시간 및 장소 :**
 - 시간 : 4월 27일 토요일 오전 11시 ~ 12시
 - 오전 11시 30분 이후 입실 불가
 - 장소 : 새빛관 102호, 새빛관 205호
 - 자세한 내용은 공지 확인
- **내용**
 - 과제: 2차 과제
 - 강의 자료
 - 4주차
 - 5주차
 - 6주차