

# Programming Applications

## Spring 2017-2018

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# Grading

- Midterm Exam : %25
- Project : %25
- Final Exam : %50

Project product should be a software developed with HTML, JSF and a relevant database.

- ❖ *Course Resources*
  - Textbook: How to Program JAVA  
Deitel & Deitel
  - Lecture Slides
- ❖ *Attendance*
  - Attendance at the lectures will not be taken.

# Outline

- HTML
- Java Server Faces (JSF)
- Java Managed Beans
- Database Connection in JSF
- SQL Commands
- Multithreading in Java
- Project Control and Grading

# What is HTML?

- HTML is a language for describing web pages.
- HTML stands for **Hyper Text Markup Language**
- HTML is a **markup** language
- A markup language is a set of markup **tags**
- The tags **describe** document content
- HTML documents contain HTML **tags** and plain **text**
- HTML documents are also called **web pages**
- A "markup language" is a computer language that describes how a page should be formatted.
- If you want to change fonts, add colors, create headlines and embed graphics in your page, HTML is the language you use to do it.



İSTANBUL ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ  
**BİLGİSAYAR MÜHENDİSLİĞİ**



Kullanıcı Adı

Şifremi Unuttum  
Yeni Üyelik
[ANA SAYFA](#) [LİSANS](#) [LİSANSÜSTÜ](#) [BÖLÜM BİLGİLERİ](#) [DUYURULAR](#) [İLETİŞİM](#)


Arama..

**RSS****BAĞLANTILAR**

- İstanbul Üniversitesi
- Mühendislik Fakültesi
- Fen Bilimleri Enstitüsü
- Microsoft DreamSpark
- Bilgisayar Kulübü
- Öğrenci Otomasyon Sistemi
- Oracle Üyelik Kılavuzu

**Bilgisayar Kulübü Bilişim Festivali**

13 tarihlerinde İstanbul Üniversitesi Mühendislik Fakültesi - Prof.Dr. Ali Riza Salonda...

2013-2013 Verdi BİLFEST  
Bileşenler ve İletişim Kısıtları2011-2012 Bitirme Projesi  
Yeni Yönetimi ve KararlılıkBilgisayar  
Mühendisliği  
2013-2014  
Yeni Yönetimi ve Kararlılık

- Gerj
- İleği
- Tazele
- Sayfayı yer imlecline ekle
- Sayfayı farklı kaydet...
- Arka plan resmini göster
- Tümünü seç
- Sayfa kaynağını göster
- Sayfa bilgilerini göster
- Ögeyi incele

**ER**iTÜ Çekirdek BulutBizden  
Yarışması Tanıtım Semineri2014  
21  
ŞubatDerya YILTAŞ KAPLAN  
danışmanlığındaki  
ogrenciler2014  
20  
ŞubatYrd.Doc.Dr.Sibel Senan  
Kucur Danışmanlığındaki  
Ogrenciler2014  
18  
Şubat

M. Dağtekin'in dersleri

2014  
18

TEK DERS SINAVI

2014  
18M. Dağtekin  
danışmanlığındaki**etkinlikler**iTüCekirdek Bulut  
Deneyimi (Yarışma)

e-Düzenlet Venitilik Proje

# A Simple HTML Code

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```

- The DOCTYPE declaration defines the document type
- The text between <html> and </html> describes the web page
- The text between <body> and </body> is the visible page content
- The text between <h1> and </h1> is displayed as a heading
- The text between <p> and </p> is displayed as a paragraph

# HTML Tags

- HTML markup tags are usually called **HTML tags**
- Start and end tags are also called **opening tags** and **closing tags**
- HTML tags are keywords (tag names) surrounded by **angle brackets** like **<html>**
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- The end tag is written like the start tag, with a **forward slash** before the tag name
- HTML tags normally **come in pairs** like **<b>** and **</b>**

<tagname>content</tagname>

# HTML Elements

- "HTML tags" and "HTML elements" are often used to describe the same thing.
- The tags are simple instructions that tell the Web browser how the page should look when it is displayed.
- But strictly speaking, an HTML element is everything between the start tag and the end tag.
- <html> The whole content comes here  
</html>

# A Web Page



# HTML Versions

Version	Year
HTML	1991
HTML+	1993
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML 1.0	2000
HTML5	2012
XHTML5	2013

# The <!DOCTYPE> Declaration

- The <!DOCTYPE> declaration helps the browser to display a web page correctly.
- There are many different documents on the web, and a browser can only display an HTML page 100% correctly if it knows the HTML type and version used.

# Common <!DOCTYPE> Declarations

## **HTML5**

```
<!DOCTYPE html>
```

## **HTML 4.01**

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML  
4.01 Transitional//EN"
```

```
"http://www.w3.org/TR/html4/loose.dtd">
```

## **XHTML 1.0**

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Transitional//EN"
```

```
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
transitional.dtd">
```

# HTML Headings

- HTML headings are defined with the <h1> to <h6> tags.

## Example

- <h1>This is a heading</h1>  
<h2>This is a heading</h2>  
<h3>This is a heading</h3>

**Note:** Use HTML headings for headings only. Don't use headings to make text **BIG** or **bold**.

Search engines use your headings to index the structure and content of your web pages.

# HTML Paragraphs

- HTML paragraphs are defined with the `<p>` tag.
- **Example**
- `<p>This is a paragraph.</p>`  
`<p>This is another paragraph.</p>`

# Adding Background Color

- Change the background color of your page by adding bgcolor="color" **within** the tag.

- Example:

```
<body bgcolor="yellow">
```

- Again, as was described in the section on changing font color, you can use most standard colors, or use a Hexadecimal Color Code.

# HTML Unordered Lists

- An unordered list starts with the `<ul>` tag.  
Each list item starts with the `<li>` tag.
- The list items are marked with bullets  
(typically small black circles).

```
<ul>
<li>Coffee</li>
<li>Milk</li>
</ul>
```

How the HTML code above looks in a browser:

- Milk
- Coffee

# HTML Ordered Lists

- An ordered list starts with the `<ol>` tag.  
Each list item starts with the `<li>` tag.
- The list items are marked with numbers.
- `<ol>`  
`<li>Coffee</li>`  
`<li>Milk</li>`  
`</ol>`
- How the HTML code above looks in a browser:
  1. Coffee
  2. Milk

# HTML Ordered Lists

- `<ol type="A">` orders the list by capital letters: (A, B, C...)
- `<ol type="a">` orders the list by small letters: (a, b, c...)
- `<ol type="I">` orders the list by Roman numerals: (I, II, III...)
- `<ol type="i">` orders the list by small Roman numerals: (i, ii, iii...)
- If you would like to start your ordered list with a specified value, such as "6," use the following "start" and "value" tags:
  - `<ol start=5> <li value=6>`

# Some Additional HTML Elements

- HTML elements with no content are called empty elements.  
`<br>` is used to position at the beginning of the next line.
- The `<hr>` tag creates a horizontal line in an HTML page.
- `<!-- This is a comment-->`
- `<sub>` `<sup>` `<i>` `<strong>`
- `<b>`

# HTML Layouts

- Web page layout is very important to make your website look good.
- Most websites have put their content in multiple columns (formatted like a magazine or newspaper).
- Multiple columns are created by using `<div>` or `<table>` elements. CSS are used to position elements, or to create backgrounds or colorful look for the pages.
- Even though it is possible to create advanced layouts with HTML tables, tables were designed for presenting tabular data - NOT as a layout tool!

# HTML Links and HTML Images

- HTML links are defined with the `<a>` tag.

```
<a href="http://www.istanbul.edu.tr">This is a link</a>
```

- HTML images are defined with the `<img>` tag.

```

```

# HTML Tables

- <table border="1">  
<tr>  
<td>row 1, cell 1</td>  
<td>row 1, cell 2</td>  
</tr>  
<tr>  
<td>row 2, cell 1</td>  
<td>row 2, cell 2</td>  
</tr>  
</table>

row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

# Table Size

- The width and height of rows and columns in a table will expand automatically to fit the length of data and/or the space of the browser window. To specify a width and height, include either pixels or percentage values within the starting "table" tag:
- Example: `<table width=300 height=400>`
- Width and height can also be specified for an individual data cell, as opposed to the table as a whole. To do this, add `width="value"` to the `<tr>` or `<td>` tag in question.
- Again, it's a good idea to simply experiment with pixel and percentage values to find out what they look like in a browser.

# Table Size

- **Cellpadding**
- The "cellpadding" tag specifies (in pixels) the amount of space between the edges of each cell and the data inside each cell. Use it within the starting "table" tag:
- Example 1: <table border=1 cellpadding=5>
- Example 2: <table border=1 cellpadding=15>
- **Cellspacing**
- The "cellspacing" tag specifies (in pixels) the amount of space between each cell. Use it within the "table" tag:
- Example 1: <table border=1 cellspacing=5>
- Example 2: <table border=1 cellspacing=15>

# HTML Table Headers

- <table border="1">  
  <tr>  
    <th>Header 1</th>  
    <th>Header 2</th>  
  </tr>  
  <tr>  
    <td>row 1, cell 1</td>  
    <td>row 1, cell 2</td>  
  </tr>  
  <tr>  
    <td>row 2, cell 1</td>  
    <td>row 2, cell 2</td>  
  </tr>  
</table>

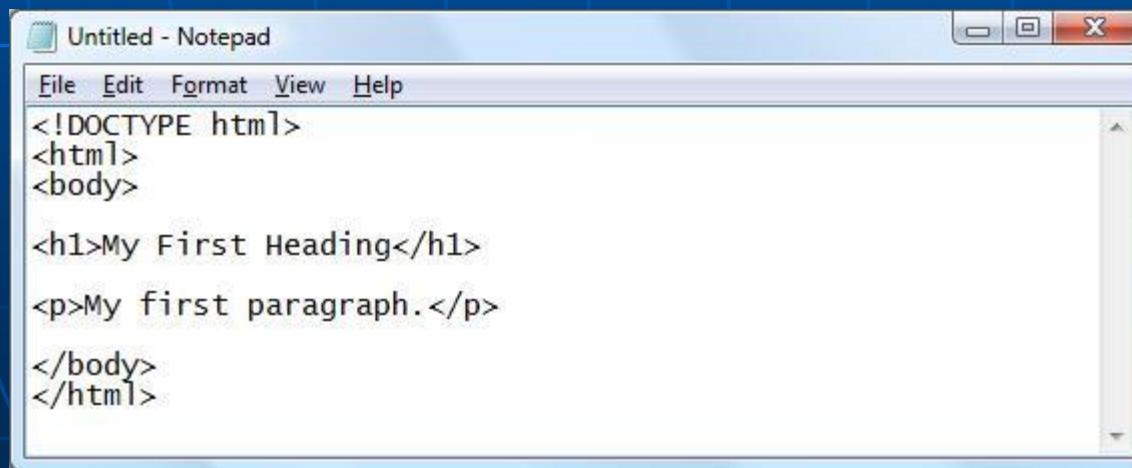
Header 1	Header 2
row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

# HTML Editors

- Adobe Dreamweaver
- Microsoft Expression Web
- CoffeeCup HTML Editor

# Writing HTML Using Notepad or Text Editors

- **Step 1: Start Notepad**
- To start Notepad go to:
  - **Start**
  - All Programs**
  - Accessories**
  - Notepad**
- **Step 2: Edit Your HTML with Notepad**
- **Type your HTML code into your Notepad:**



A screenshot of the Windows Notepad application window titled "Untitled - Notepad". The window has a standard menu bar with File, Edit, Format, View, and Help. The main text area contains the following HTML code:

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

# Writing HTML Using Notepad or Text Editors

- Step 3: Save Your HTML
- Step 4: Run the HTML in Your Browser



# HTML Forms

- The forms are used to pass data to a server.
- HTML forms can contain input components like text fields, checkboxes, radio-buttons, submit buttons and more.

# Text Fields

- <form>  
First name: <input type="text" name="firstname"> <br>  
Last name: <input type="text" name="lastname">  
</form>

First name:

Last name:

# Password Field

- `<input type="password">` defines a password field:

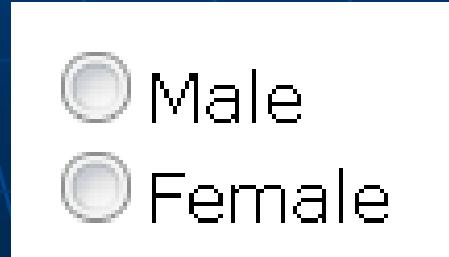
```
<form>  
  Password: <input type="password"  
  name="pwd">  
</form>
```

Password:

# Radio Buttons

- `<input type="radio">` defines a radio button. Radio buttons let a user select ONLY ONE of a limited number of choices:

```
<form>
<input type="radio" name="gender"
value="male">Male<br>
<input type="radio" name="gender"
value="female">Female
</form>
```



The image shows a white rectangular box with a thin black border. Inside the box, there are two radio buttons, each preceded by a label. The first radio button is labeled "Male" and the second is labeled "Female". Both radio buttons have a standard gray circular appearance with a small white circle in the center.

Male

Female

# Checkboxes

- `<input type="checkbox">` defines a checkbox. Checkboxes let a user select ZERO or MORE options of a limited number of choices.

```
<form>
<input type="checkbox" name="vehicle"
value="Bike">I have a bike<br>
<input type="checkbox" name="vehicle"
value="Car">I have a car
</form>
```

# Submit Button

- `<input type="submit">` defines a submit button.
- A submit button is used to send form data to a server.
- The data is sent to the page specified in the form's action attribute.

# Submit Button (Continued)

- <form name="input" action="html\_form\_action.asp" method="get">  
    Username: <input type="text" name="user">  
    <input type="submit" value="Submit">  
  </form>

Username:  Submit