

Web Programming (1)

Lesson 02

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HTML Structure



Create a file: lecture2_1.html

```
<!DOCTYPE html>
```

```
<html>
```

Invisible Part

```
<head>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

Visible Part

```
<!DOCTYPE html>
```

```
<html>
```

```
    <head>
```

```
        <title>Title of Page</title>
```

```
    </head>
```

```
    <body>
```

```
        <h1>Header 1</h1>
```

```
    </body>
```

```
</html>
```



```
<!DOCTYPE html>
<html>
  <head>
    <title>Title of Page</title>
  </head>
  <body>
    <h1>Header 1</h1>
    <p> This is a Paragraph </p>
  </body>
</html>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>Title of Page</title>
```

```
  </head>
```

```
  <body>
```

```
    <h1>Header 1</h1>
```

```
    <p> This is a Paragraph </p>
```

```
    <p> This is a <br/> Paragraph </p>
```

```
  </body>
```

```
</html>
```

- Attributes provide additional information about the contents of an element.
- They appear on the opening tag of the element and are made up of two parts: a **name** and a **value**, separated by an equals sign.

Attribute name Attribute value
<body bgcolor="AliceBlue">

The Background Color Attribute

For colors : https://www.w3schools.com/colors/colors_names.asp

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>This is the Title of the Page</title>
```

```
  </head>
```

```
  <body bgcolor="AliceBlue">
```

```
    <h1>Header 1 </h1>
```

```
    <p>This is a Paragraph</p>
```

```
    <p> This is a <br/> Paragraph </p>
```

```
  </body>
```

```
</html>
```



```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>This is the Title of the Page</title>
  </head>
  <body bgcolor="AliceBlue">
    <h1>Header 1 </h1>
    <h2>Header 2 </h2>
    <h3>Header 3 </h3>
    <h4>Header 4 </h4>
    <h5>Header 5 </h5>
    <h6>Header 6 </h6>
    <p>This is a Paragraph</p>
    <p> This is a <br/> Paragraph </p>
  </body>
</html>
```

- <hr /> You can add a horizontal line between sections using the <hr /> tag.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>This is the Title of the Page</title>
  </head>
  <body bgcolor="AliceBlue">
    <h1>Header 1 </h1>
    <h2>Header 2 </h2>
    <h3>Header 3 </h3>
    <h4>Header 4 </h4>
    <h5>Header 5 </h5>
    <h6>Header 6 </h6>
    <p>This is a Paragraph</p>
    <p> This is a <br/> Paragraph </p>
    <hr/>
    <p> This is another Paragraph </p>
  </body>
</html>
```

HTML Text



Tags used for Text

- `.....` make characters appear bold
- `<i>.....</i>` italic tag
- `<u>.....</u>` underline tag

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>This is the Title of the Page</title>
```

```
  </head>
```

```
  <body bgcolor="AliceBlue">
```

```
    <h1>Biography</h1>
```

```
    <p>My name in <u> Tom </u>. I am studying <b>web programming</b>  
    at the <i>Kyoto College of Graduate Studies for Informatics </i> </p>
```

```
  </body>
```

```
</html>
```


More Tags used for Text

- `^{.....}`superscript

Superscript is used for mathematical concepts like raising a number to a power of 2.

2^3 is 8. The cube of 2 is 8.

`<p>2³ is 8. The cube of 2 is 8 </p>`

- `_{.....}`subscript

Subscript is commonly used with foot notes or chemical formulas such as H₂O.

H₂O

`<p>H₂O is the chemical name for Water </p>`

Exercise

I am from Nepal

I am from Nepal

I am from Nepal

I am from Nepal

2^3 is 8. The cube of 2 is 8

H₂O is the chemical name for Water.

Do it by yourself. Save it as
[lecture2_3.html](#)

First find out which tags are used?

- White space collapsing:

- When the browser comes across two or more spaces next to each other, it only displays one space. Similarly if it comes across a line break, it treats that as a single space too. This is known as White space collapsing.

- Reference: JON DUCKETT, HTML&CSS design and build websites, JOHN WILEY & SONS, INC., 2014

- Example: add the following part to lecture 2_2.html.

```
<p>Kyoto is a beautiful city</p>
```

```
<p>Kyoto is a    beautiful city</p>
```

```
<p>Kyoto is a beautiful  
city</p>
```

Kyoto is a beautiful city

Kyoto is a beautiful city

Kyoto is a beautiful city

Abbreviation

- `<abbr>.....</abbr>`

- If you use an abbreviation or an acronym, then the `<abbr>` element can be used.

- Reference: JON DUCKETT, HTML&CSS design and build websites, JOHN WILEY & SONS, INC., 2014

- Example: Add the following part to lecture2_2.html

```
<p><abbr title="The Kyoto College of Graduate Studies for Informatics">KCGI</abbr>
has four courses.</p>
```

KCGI has four courses.

The Kyoto College of Graduate Studies for Informatics
KCGI has four courses.

Address

- `<address>.....</address>`

- It has a specific use: to contain contact details for the author of the page.
- Browsers often display the content of the `<address>` element in italics.

- Reference: JON DUCKETT, HTML&CSS design and build websites, JOHN WILEY & SONS, INC., 2014

- Example: Add the following part to lecture2_2.html

`<address>`

`<p> The Kyoto College of Graduate Studies for Informatics

Hyakumanben Campus
Kyoto, Japan</p>`

`</address>`

● `.....`

- Indicates that its content has strong importance.
- By default, browsers will show the contents of a `` element in bold.

```
<p>I am from <strong> Nepal </strong> </p>
```

● Reference: JON DUCKETT, HTML&CSS design and build websites, JOHN WILEY & SONS, INC., 2014

● `<s>.....</s>`

- Indicates something that is no longer accurate or relevant (but that should not be deleted).

```
<p>Laptop computer:</p>
<p><s>Was $995</s></p>
<p>Now is only $375</p>
```

Laptop computer:

~~Was \$995~~

Now is only \$375

Add the following part to lecture2_2.html

<blockquote> quote for entire paragraph

<q> quote

<blockquote>

For 50 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million globally.

</blockquote>

Try the same with <q> instead of <blockquote>

<ins> show content that is inserted to documents

**** show content that is deleted in document

<p>My favorite color is ****blue**** **<ins>**red**</ins>**!**</p>**

HTML Lists



Let's look at the List Example Page

Scrambled Eggs

Eggs are one of my favorite foods. Here is a recipe for deliciously rich scrambled eggs.

Ingredients

- 2 eggs
- 1tbs butter
- 2tbs cream

Unordered Lists

Method

1. Melt butter in a frying pan over a medium heat
2. Gently mix the eggs and cream in a bowl
3. Once butter has melted add cream and eggs
4. Using a spatula fold the eggs from the edge of the pan to the center every 20 seconds (as if you are making an omelette)
5. When the eggs are still moist remove from the heat (it will continue to cook on the plate until served)

ordered Lists

Ordered lists

Save it as lists.html

- `.....`
 - Ordered list
- `.....`
 - Each item in the list

The list items will be marked with numbers by default:

- Example

``

`Business IT program`

`System development program`

`Multimedia Content program`

`Next-Generation industries program`

``

1. Business IT program
2. System development program
3. Multimedia Content program
4. Next-Generation industries program

Unordered lists

- `.....`
 - unordered list
- `.....`
 - Each item in the list

The list items will be marked with bullets (small black circles) by default:

- Business IT program
- System development program
- Multimedia Content program
- Next-Generation industries program

- Example

``

`Business IT program`

`System development program`

`Multimedia Content program`

`Next-Generation industries program`

``

add it to lists.html

Add something by yourself.

Recipe for scrambled eggs.

Ingredients

- 2 eggs
- 1tbs butter
- 2tbs cream

Method

1. Melt butter in a frying pan over a medium heat
2. Gently mix the eggs and cream in a bowl
3. Once butter has melted add cream and eggs
4. Using a spatula fold the eggs from the edge of the pan to the center every 20 seconds
5. When the eggs are still moist remove from the heat (it will continue to cook on the plate)

Exercise:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Lists</title>
  </head>
  <body>
    <h1>Scrambled Eggs</h1>
    <p>Eggs are one of my favorite foods. Here is a recipe for deliciously rich scrambled eggs.</p>
    <h2>Ingredients</h2>
    <ul>
      <li>2 eggs</li>
      <li>1tbs butter</li>
      <li>2tbs cream</li>
    </ul>
    <h2>Method</h2>
    <ol>
      <li>Melt butter in a frying pan over a medium heat</li>
      <li>Gently mix the eggs and cream in a bowl</li>
      <li>Once butter has melted add cream and eggs</li>
      <li>Using a spatula fold the eggs from the edge of the pan to the center every 20 seconds </li>
      <li>When the eggs are still moist remove from the heat (it will continue to cook on the
plate)</li>
    </ol>
  </body>
</html>
```

Nested lists

List inside List

```
<ul>
```

```
  <li>Business IT program
```

```
    <ul>
```

```
      <li>ERP</li>
```

```
      <li>CRM</li>
```

```
      <li>SCM</li>
```

```
      <li>Database</li>
```

```
    </ul>
```

```
  </li>
```

```
  <li>System development program</li>
```

```
  <li>Multimedia Content program</li>
```

```
  <li>Next-Generation industries program</li>
```

```
</ul>
```

- Business IT program
 - ERP
 - CRM
 - SCM
 - Database
- System development program
- Multimedia Content program
- Next-Generation industries program

Definition lists

`<dl>`

`<dt>.....</dt>`

`<dd>.....</dd>`

`<dl>`

A description list, with terms and descriptions:

- `<dl>.....</dl>`
 - The description list is created with the `<dl>` element and usually consists of a series of terms and their definitions.
- `<dt>.....</dt>`
 - Used to contain the term being defined.
- `<dd>.....</dd>`
 - Used to contain the definition.

Definition lists

<dl>

<dt>Sashimi</dt>

<dd>Sliced raw fish that is served with condiments such as shredded daikon radish or ginger root. wasabi and soy sauce.</dd>

<dt>Scamorze</dt>

<dt>Scamorzo</dt>

<dd>An Italian cheese usually made from whole cow's milk.</dd>

</dl>

Add the above part to lists.html, and then try to use definition lists by yourself.

Sashimi

Sliced raw fish that is served with condiments such as shredded daikon radish or ginger root. wasabi and soy sauce.

Scamorze

Scamorzo

An Italian cheese usually made from whole cow's milk.

Lists

- `` ordered lists (number)
- `` unordered lists (bullet points)
- `<dl>` definition lists
- `<dt>` definition term
- `<dd>` definition content
- `` lists

Let's try to include this in your page!

HTML Links



HTML links

Save it as link.html

- ` `

<https://global.kcg.edu/>

Link to the website

The text user click on

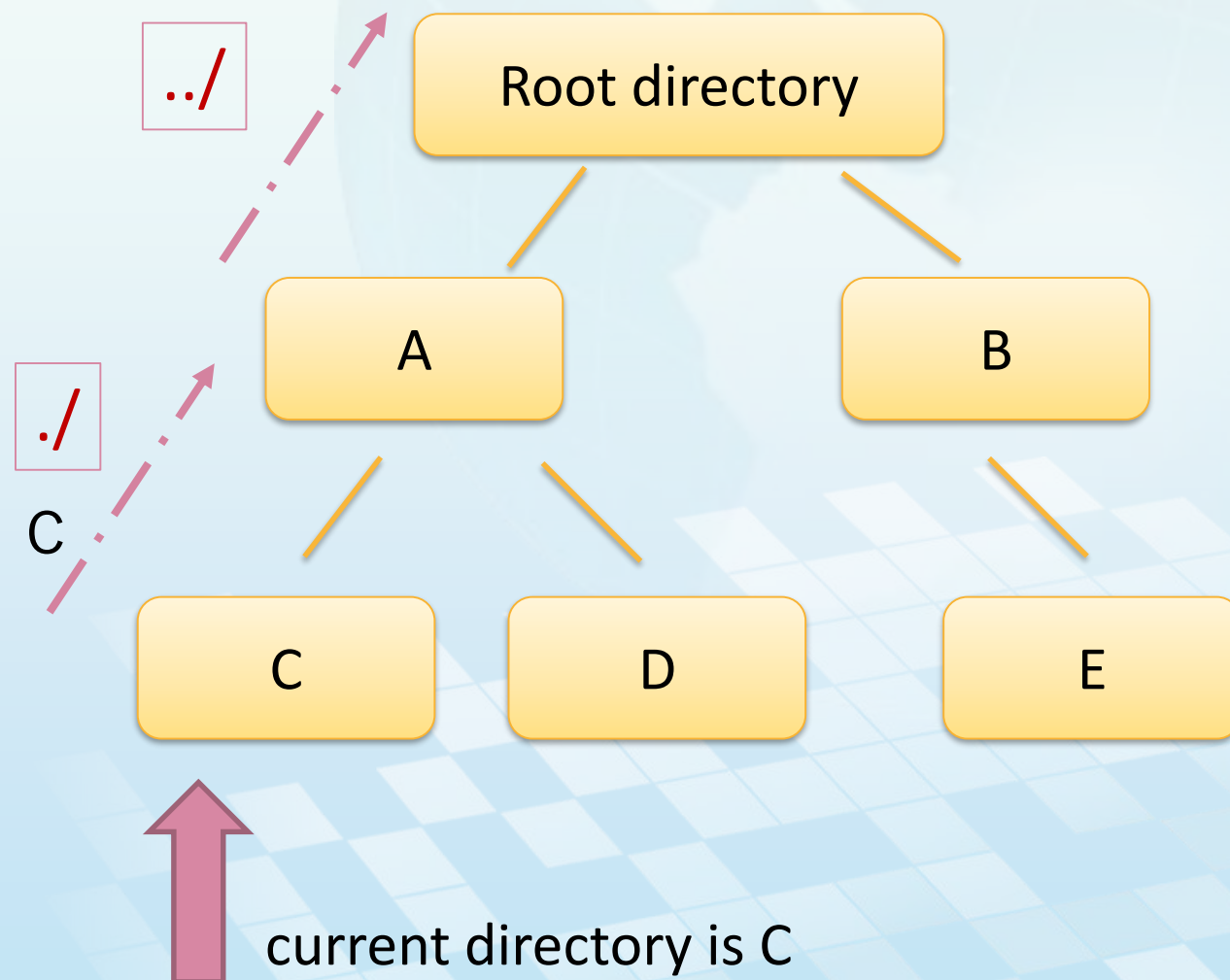
`The Kyoto College of Graduate Studies for Informatics.`

Link to Email

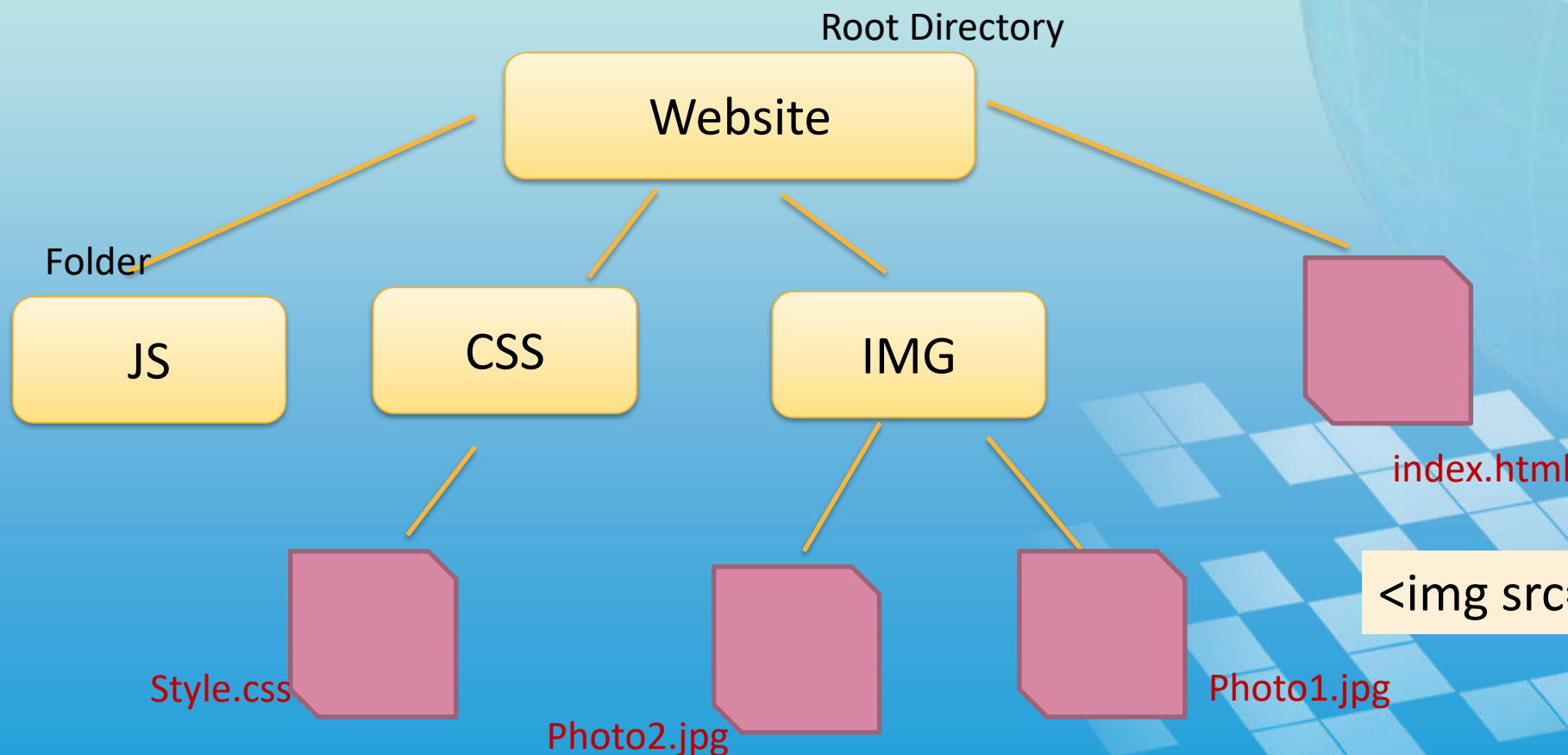
- `<p>a_pariyar@kcg.ac.jp
</p>`

Directory

- Root directory
 - Parent directory
 - Subdirectory
 - Current directory
- If the current directory is c
 - D From C to D Folder
 - ./A from C to A Folder
 - ../B from C to B Folder
 - ../B/E from C to E Folder



▼ website	5 items	Folder	Tue 10 Jun 2014 1
css	0 items	Folder	Tue 10 Jun 2014 1
img	0 items	Folder	Tue 10 Jun 2014 1
js	0 items	Folder	Tue 10 Jun 2014 1
— index.html	0 bytes	Text	Tue 10 Jun 2014 1



In index.html
To access photos
in image folder
you have to go
the image folder.

```

```

HTML: Images



Tag: Images

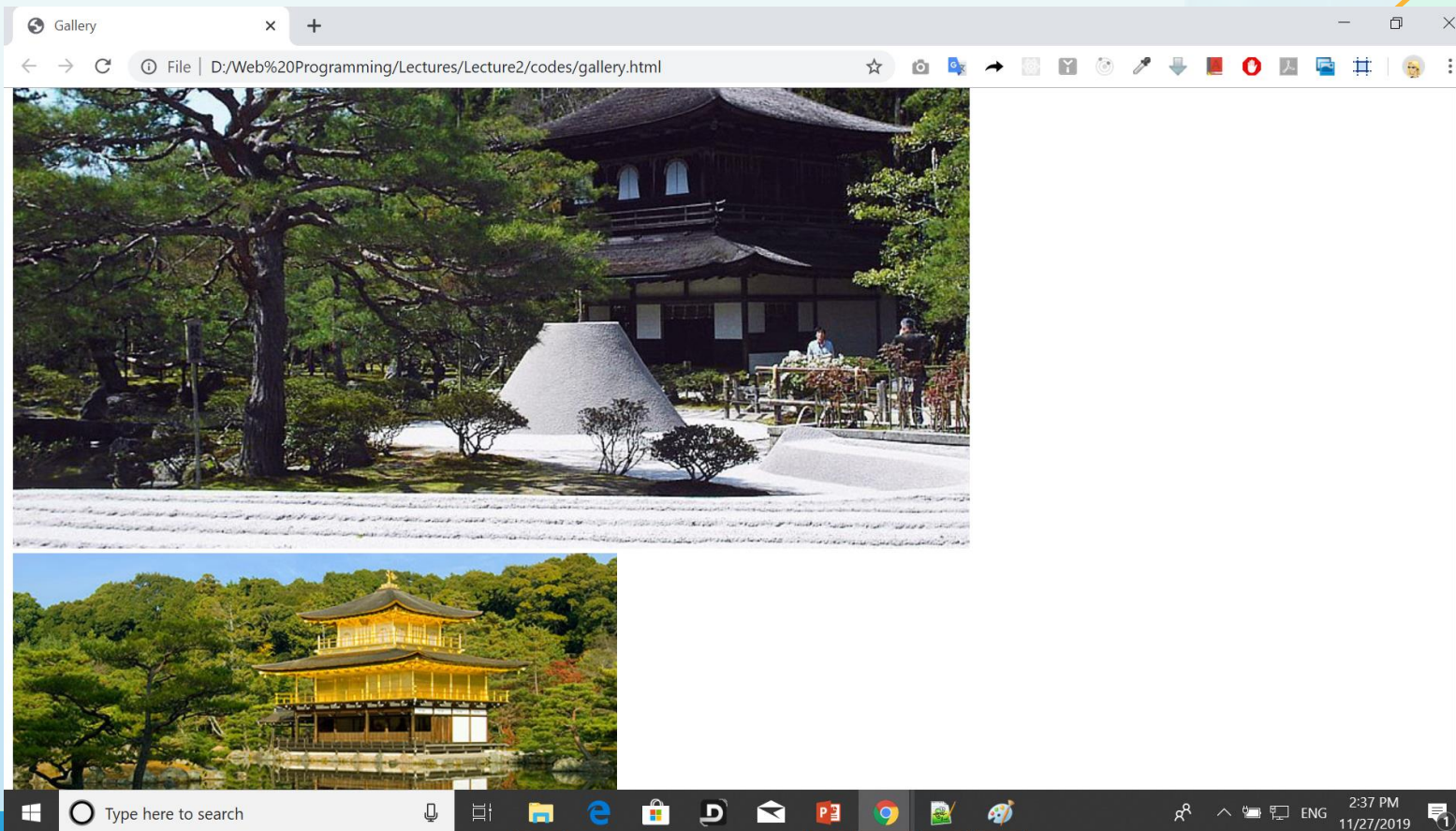
- ``
- Or you can write this way ``
- Add some pictures to your html files.
- Create a new folder “img” under your project folder
- Download jpeg files from the internet and copy to your “img” folder

Tag: Images

Save it as gallery.html

- ``
- ``

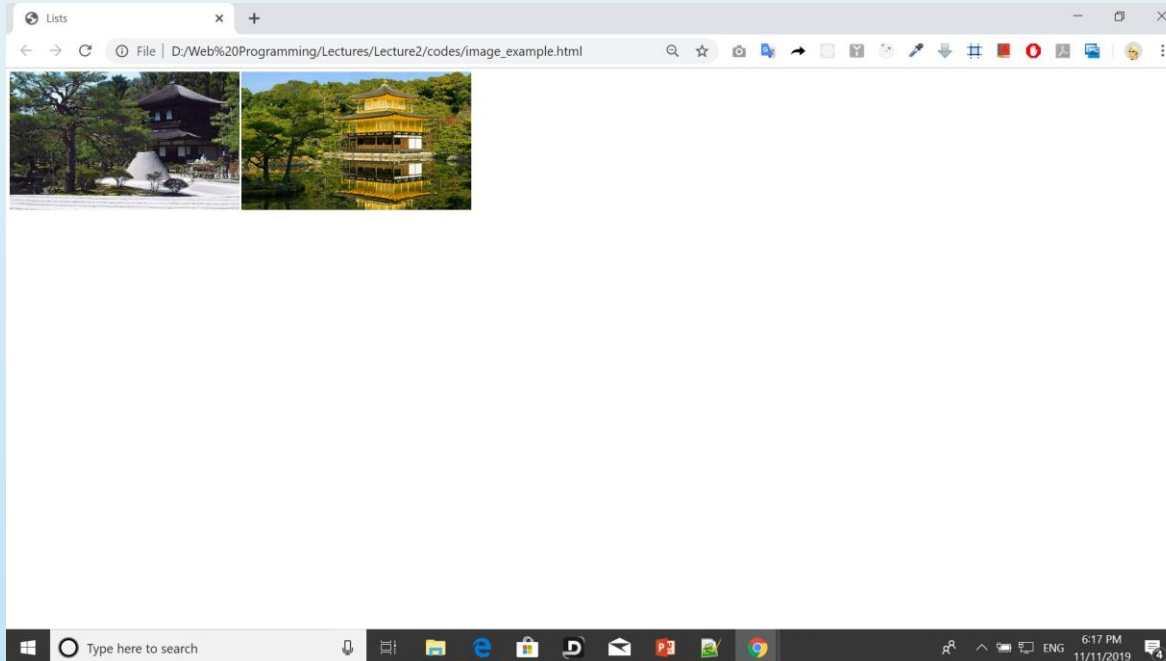
Try it by yourself.
You can use your
own pictures.



Tag: Images

[edit gallery.html](#)

- ``
- ``



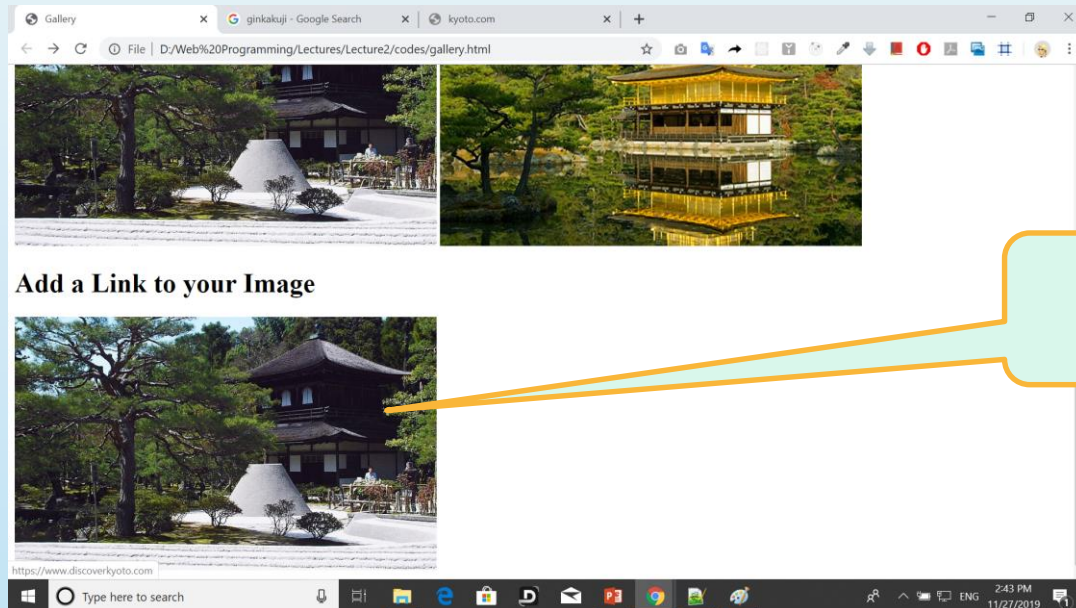
Alt is “alternative description of the photo”

Try it by yourself.
You can use your
own pictures.

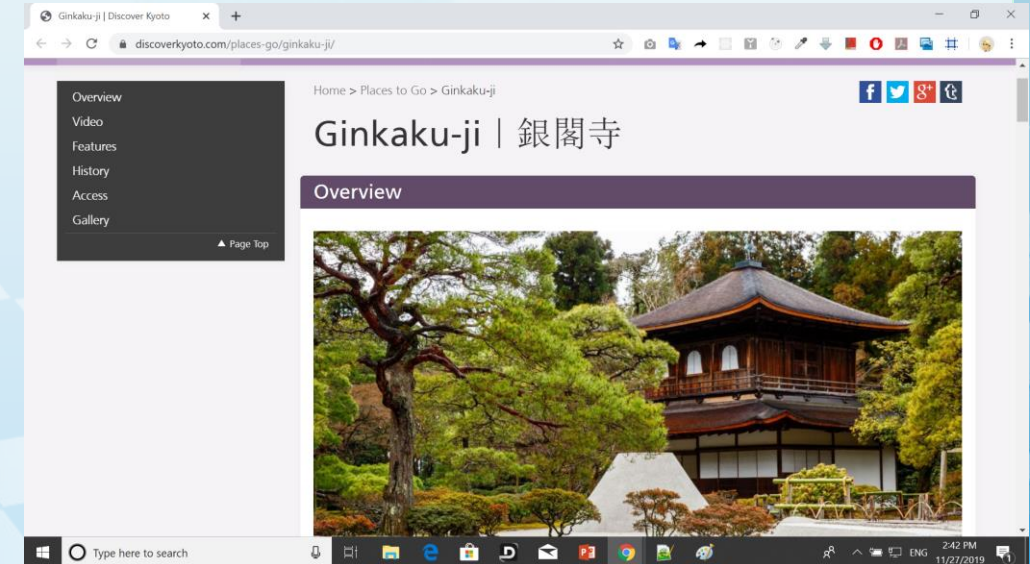
Add a link to image

edit gallery.html

```
<a href="https://www.discoverkyoto.com/">  
      
</a>
```



click



Where to place images in your code?



There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.



There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.



Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.

Where to place images in your code?

Before Paragraph Tag

```

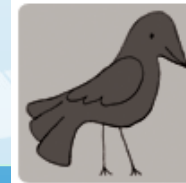
```

```
<p>
```

Ginkaku-ji Temple ("The Silver Pavilion") is on everyone's checklist of sights to see while in Kyoto, both foreigners and Japanese alike. We understand why: it's about as beautiful as any temple in the city. But, if you visit between 10am and 4pm, especially on a weekend or holiday, it is almost impossible to enjoy the place.

```
</p>
```

[edit gallery.html](#)



There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.

Where to place images in your code?

Inside Paragraph Tag

```
<p>  
  
Ginkaku-ji Temple ("The Silver Pavilion") is on everyone's checklist of sights to see  
while in Kyoto, both foreigners and Japanese alike. We understand why: it's about as  
beautiful as any temple in the city. But, if you visit between 10am and 4pm, especially  
on a weekend or holiday, it is almost impossible to enjoy the place.  
</p>
```

[edit gallery.html](#)



There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.

Try Putting Image in the middle of Paragraph ?

There are around 10,000 living species of birds that inhabit different ecosystems from the Arctic to the Antarctic.



Many species undertake long distance annual migrations, and many more perform shorter irregular journeys.

Homework

- Create a Project Folder
- Create a Profile Page (index.html) using following HTML tags: `<p><h1><i><address> `
``
- Add a link to image
- Make a nested lists
- Use Subheadings `<h2> <h3>` where necessary

Introduction to GitHub

Introduction to GitHub

- Open the GitHub website in the browser.
<https://github.com/>
- Sign up. Use your real name (professional) for username, fill in the info etc.

▪

Create repositories

- Click add button
- Choose add repository
- Choose MIT License
- Write the name for your repository
 - Use WebProgrammingKCGI_Lessons as the name
 - (We are going to set other repository for project)
- Set it in public mode to create your own website.
- Upload you project folder to the repository
- Refer here for the tutorial

<https://pages.github.com/>
<https://www.youtube.com/watch?v=AFdogZFyN0c>

Please tell me your github page. Your page url must be something like this (once you have done the registration) : <https://github.com/<your username>>

Send at following link

<https://drive.google.com/open?id=1YvMwMm5tSL00VrUcaGGRObuj3v8IEpHjpQb0AGwWMF8>