Week 11 jQuery

2017, Fall
Web Application Programming
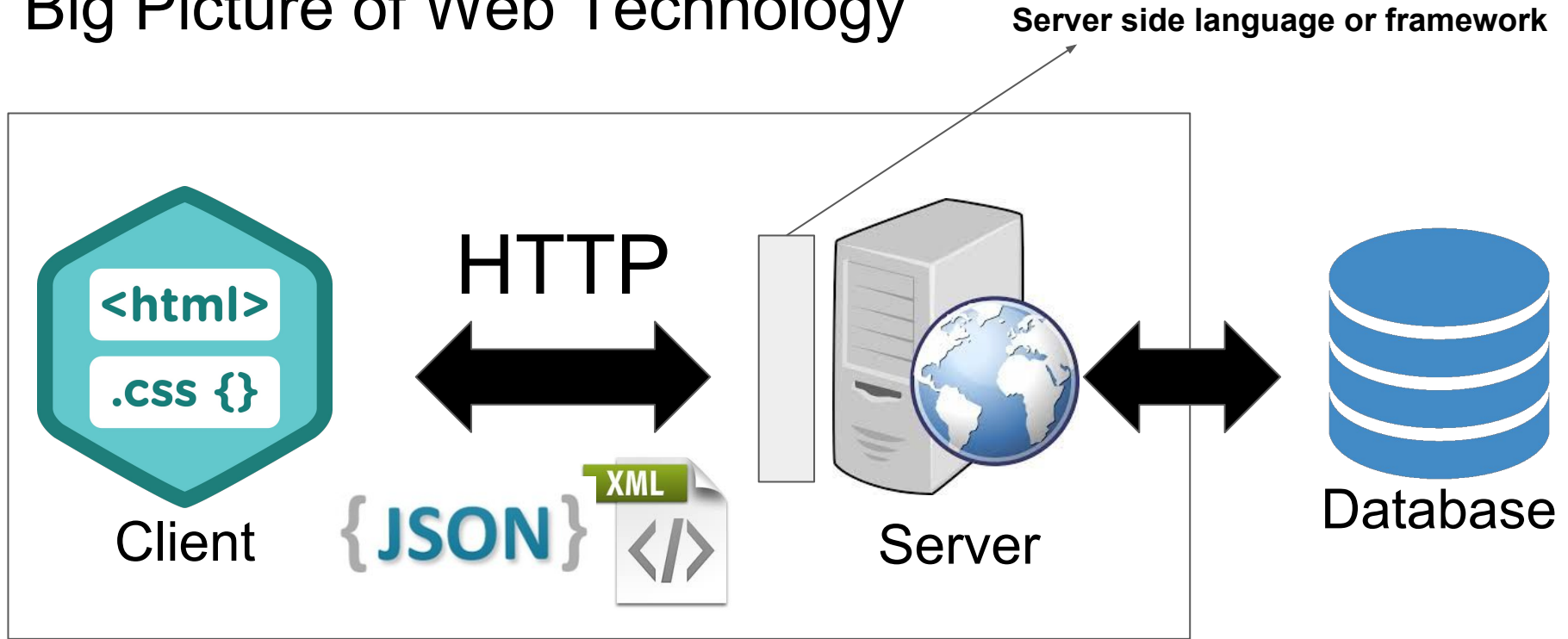Pusan National University
Hyung-Gyu Ryoo, Hyemi Jeong

Contents

- Introduction
- Assignment-5 Review
- JQuery Basic
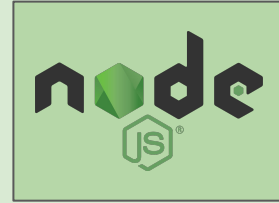- JQuery Practice

Big Picture of Web Technology

Server side language or framework
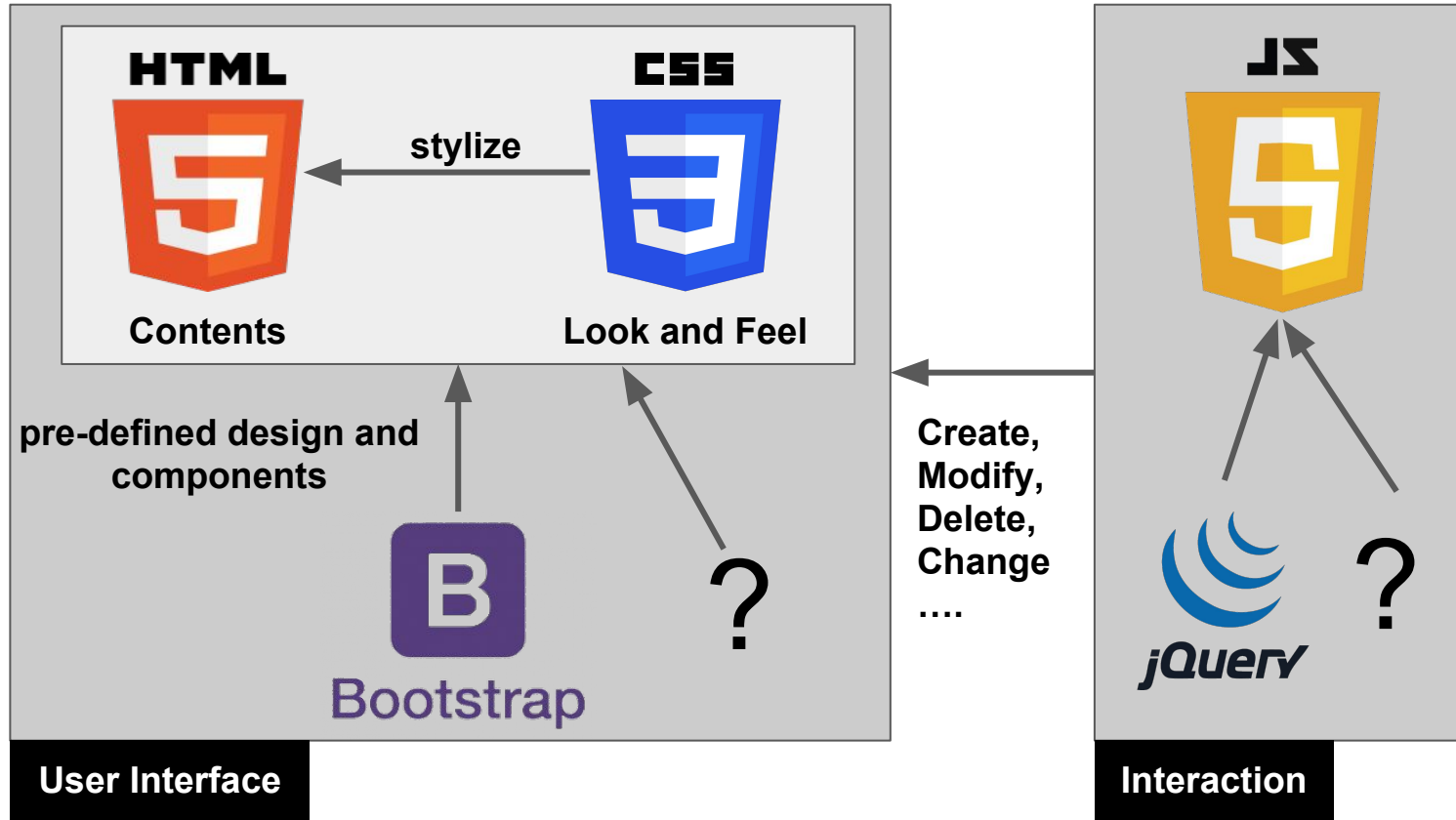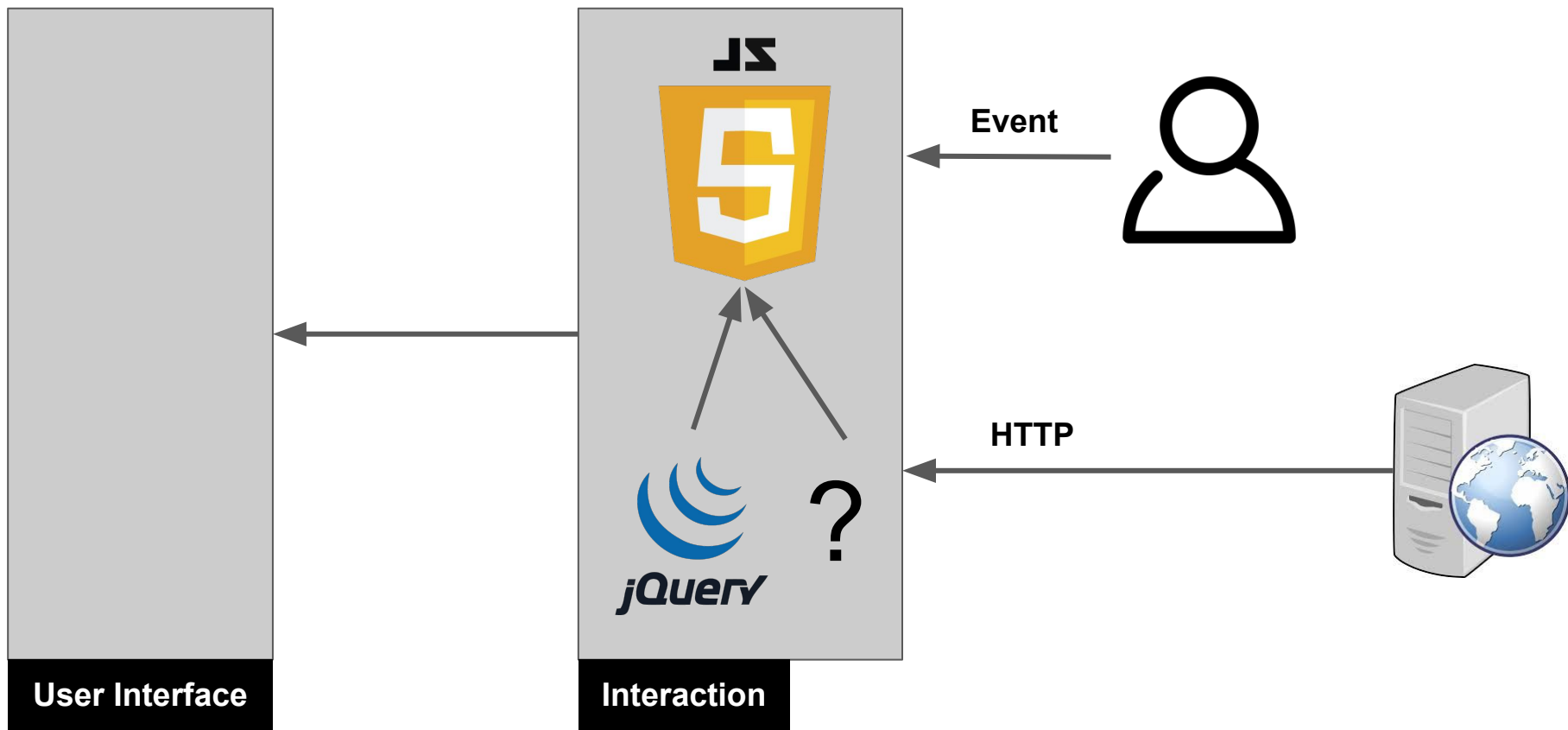

HTTP

Client

JSON XML

Server

Database

Web Technology

Client-side

HTML5 | jQuery
CSS | JS | Bootstrap
AngularJS | React | Sass

Server-side

JSP — Java Server Pages | node JS
Microsoft ASP.net | php
RAILS | spring

HTML

Contents

CSS

stylize

Look and Feel

JS

pre-defined design and components

B

Bootstrap

?

Create, Modify, Delete, Change ….

jQuery

?

User Interface

Interaction

Event

HTTP

User Interface

Interaction

Syllabus

{JSON}

HTML

CSS

B
Bootstrap

JS

jQuery

node.js

How to exchange data?
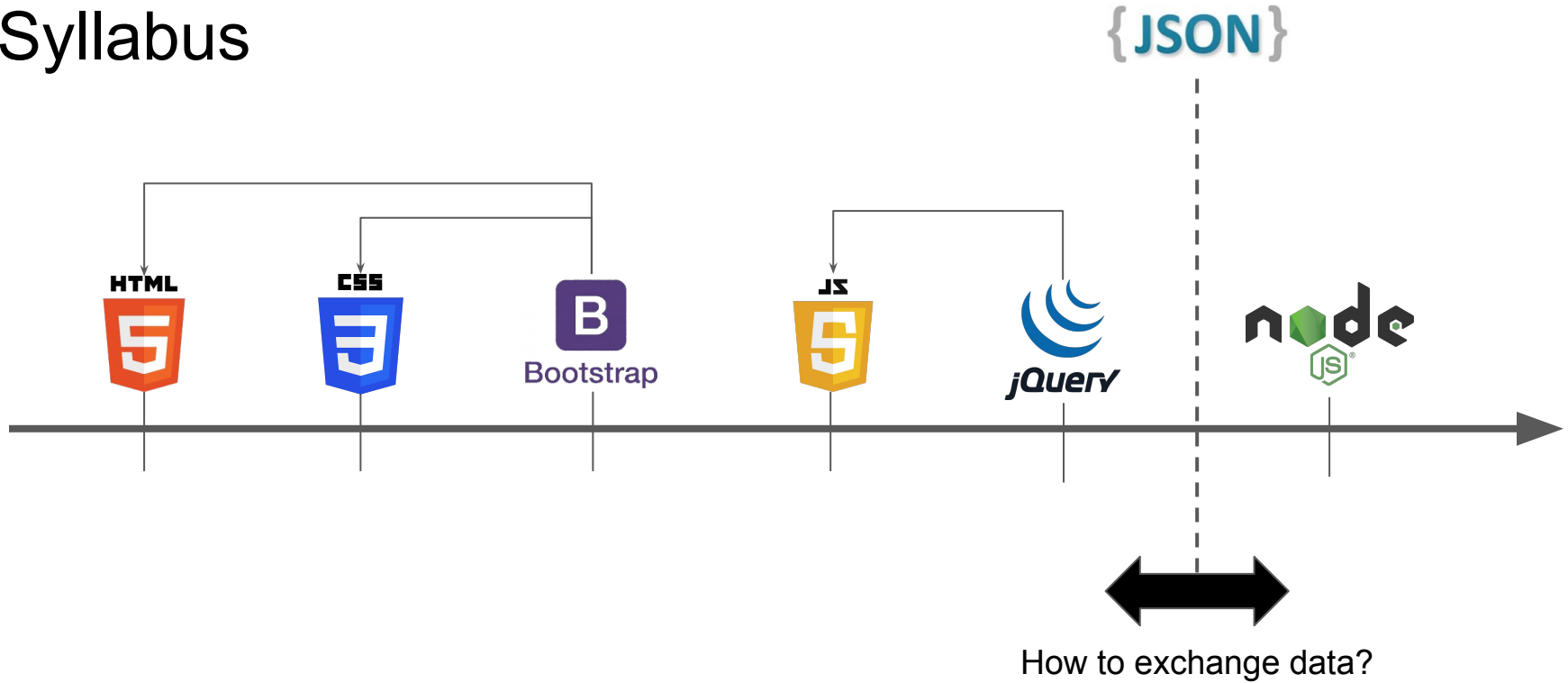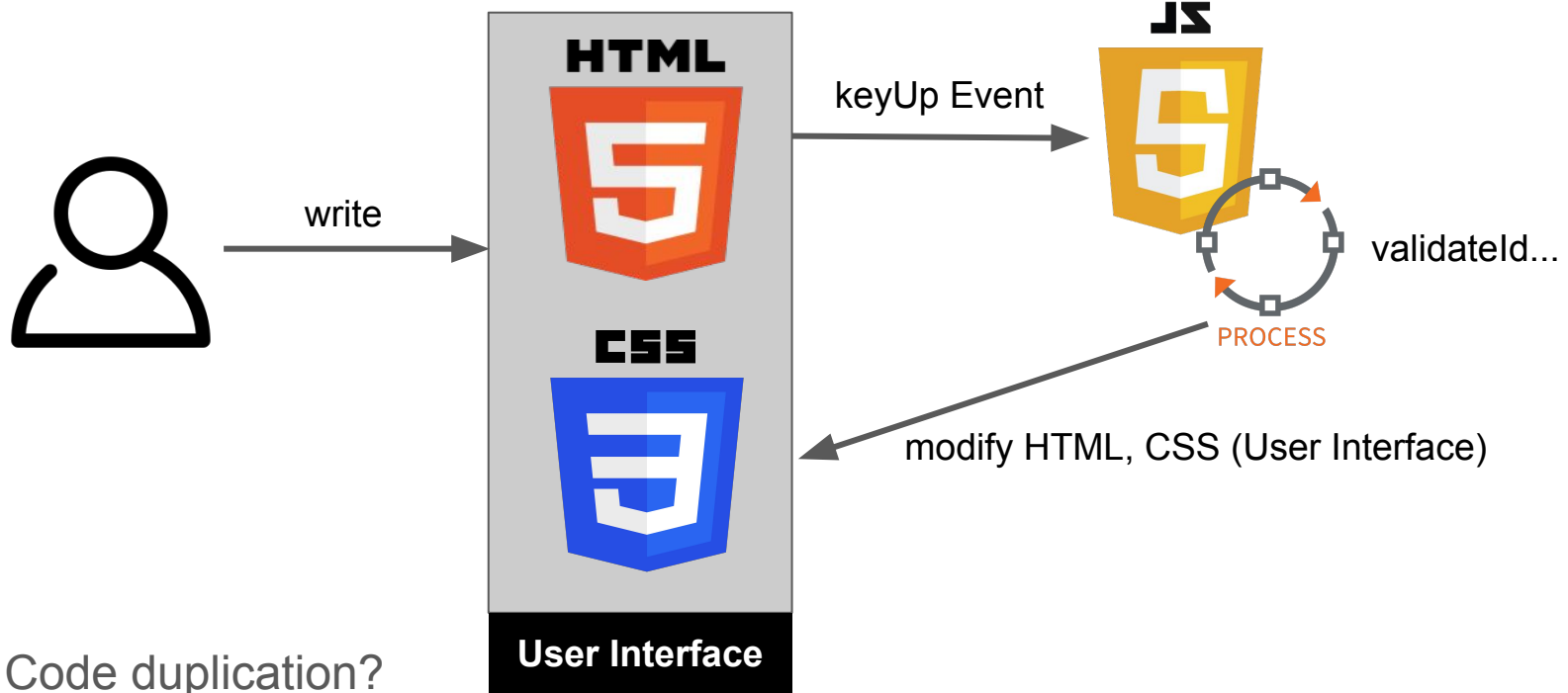
Assignment 5

- ID
  - Check duplication : id should not be duplicated with a item of mock_ids array
  - Check lowercase : id must be lowercase
  - Check length of id : id must be of length 5 to 20
  - To implement *validateId(id)* function, instructions are given in the code
- Password
  - Check length of password : password must be of length 8 to 30
- Email
  - Email must be a valid email.
- Message
  - Same implementation with previous lecture

Assignment 5 - Discussion

keyUp Event

write

validateId...

PROCESS

modify HTML, CSS (User Interface)

User Interface

- Code duplication?
- Efficient structure?

jQuery?

- jQuery is a JavaScript Library.
- jQuery greatly simplifies JavaScript programming.
- jQuery is easy to learn.

- Basic syntax is : $(selector).action()
  - A $ sign to define/access jQuery
  - A (selector) to "query (or find)" HTML elements
  - A jQuery action() to be performed on the element(s)

```
$(document).ready(function(){

    // jQuery methods go here...

});
```

jQuery Get Started

- There are several ways to start using jQuery on your web site. You can:
  - Download the jQuery library from jQuery.com
  - Include jQuery from a CDN, like Google

- Downloading jQuery
  - you can download jQuery from jQuery.com.
- jQuery CDN
  - If you don't want to download and host jQuery yourself, you can include it from a CDN (Content Delivery Network).

```
<head>
<script src="jquery-3.2.1.min.js"></script>
</head>
```

```
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js">
</script>
</head>
```

Javascript vs jQuery

- Hide an element with id "textbox"
  - Javascript
    - document.getElementById("textbox").style.display = "none";
  - jQuery
    - $("#textbox").hide();
- Create a <h1> tag with "my text"
  - Javascript
    - var h1 = document.createElement("h1");
    h1.innerHTML = "my text";
    document.getElementByTagName("body")[0].appendChild(h1);
  - jQuery
    - $("body").append($("<h1/>").html("my text");

jQuery Events

Mouse Events	Keyboard Events	Form Events	Document/Window Events
click	keypress	submit	load
dblclick	keydown	change	resize
mouseenter	keyup	focus	scroll
mouseleave		blur	unload

```
$("p").click(function(){
    // action goes here!!
});
```

jQuery Effects

- Use for give "effects" to elements
  - change shape, color, or animate elements

name	description
hide()	make element disappear
show()	make element appear
slideUp()	make element disappear from bottom to top of element
fadeIn()	make element appear slowly
delay()	delayed action during setted period

Target HTML Element using jQuery

- Let's make all of your button elements hide when you click it.
- Add this code inside your document ready function:
- Hint : $("button").hide()
- See 2.jquery_hide.html

15

Practice - Target HTML Element using jQuery

- Let the panel disappear when you click the upper button
- Try to compare between JQuery and Javascript version of previous practice.
- Hint : getElementByID
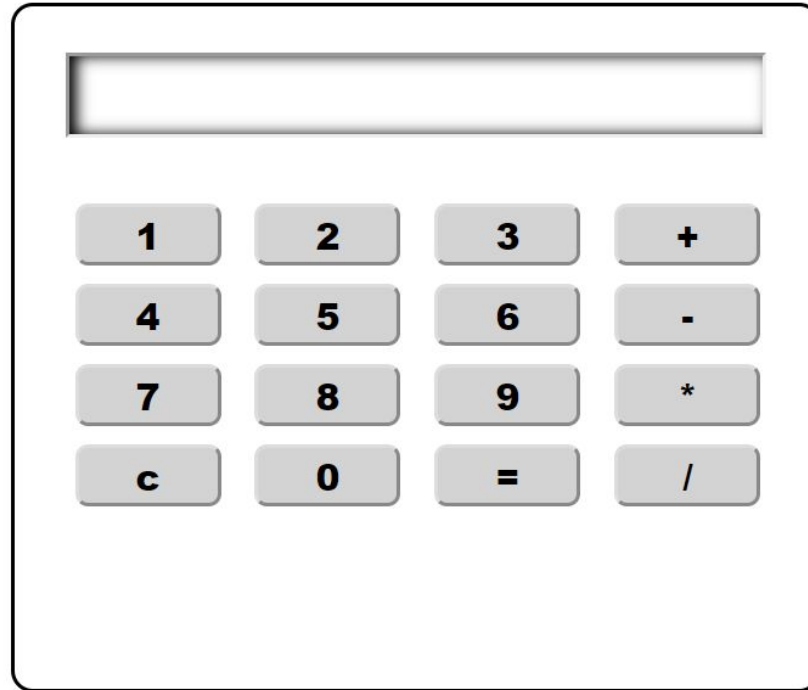
Practice - Target Elements by Class using jQuery

- Use jQuery's .addClass() function to add the classes for style
- $(".selected").addClass("larger");

Target Elements by ID using jQuery

Practice - Handling Event and Effect by jQuery

- How about applying several effects at once?
- Let the panel disappear using slideUp during "800"ms and show up during "800"ms after "800"ms when you click the button at the upper.
- Hint : slideUp, delay, fadeIn

Practice - Re-implement Calculator

NEXT?

- Main keyword : Data
    - XML, JSON
    - Visualization, Data handling