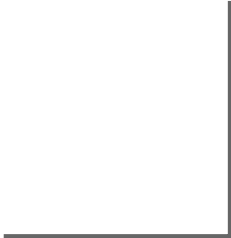




# LAB 02

## Bootstrap & jQuery

CS3240



# Overview

- **15 minutes** - Introduction on Bootstrap and jQuery
- **1 hour** - Lab practice
- **20 minutes** - Tips and tricks



# Bootstrap

# Bootstrap

- Free front-end framework for faster and easier web development
- Includes HTML, CSS based design templates, and JavaScript plugins
- Ability to easily create responsive designs

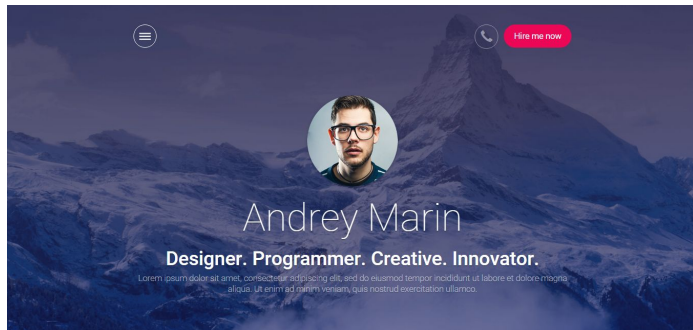
# Why Bootstrap?

- Relatively easy to use (basic knowledge about HTML and CSS)
- Responsive CSS adjusts to phones, tablets, and desktops
- Mobile-first approach
- Compatible with all modern browsers
  - (Chrome, Firefox, Internet Explorer, Safari, and Opera)

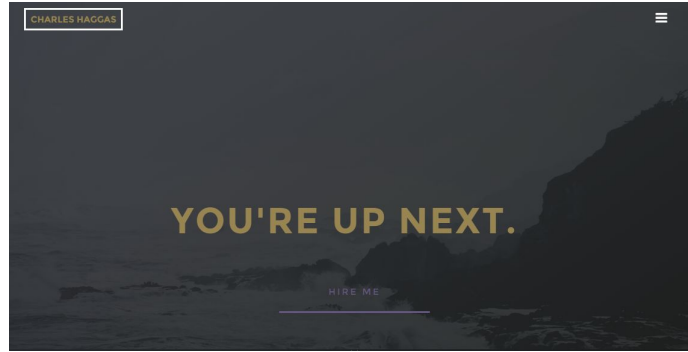
# Websites that used Bootstrap



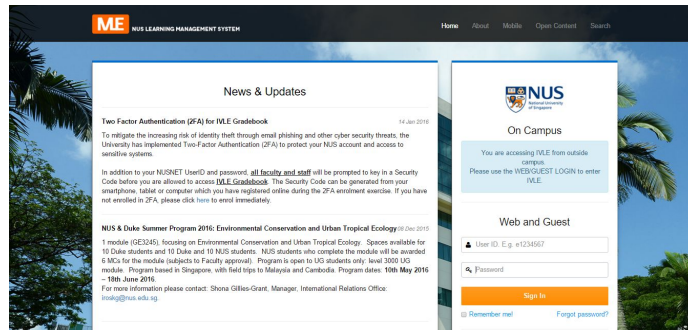
<https://mintvine.com/>



<http://izee.ro/market/mywall/one/>



<http://charleshaggas.com/>



<https://ivle.nus.edu.sg/default.aspx>



# jQuery

much easier to use JavaScript on your website



# jQuery

- "Write less, do more" JavaScript library
- Easier to use JavaScript on your website
- Simplifies a lot of the complicated things from JavaScript
- Plugins for almost any task out there
- jQuery will run exactly the same in all major browsers



# jQuery VS Javascript

// find all paragraphs with the class "summary" in the article with ID "first"

## jQuery

```
var n = $("article#first p.summary");
```

## Javascript

```
var n = document.querySelectorAll  
("article#first p.summary");
```

# jQuery VS Javascript

// add more contents to a div with the id "container"

## jQuery

```
$("#container").append("<p>more  
content</p>");
```

## Javascript

```
document.getElementById("container").  
innerHTML += "<p>more content</p>";
```

# jQuery VS Javascript

// add more contents to a div with the id "container"

## jQuery

```
var $el = $('.bye');  
  
$('body').css('background', '#ccc');
```

## Javascript

```
var $el = document.querySelector('.bye');  
  
Function changeBackground(color) {  
    Document.body.style.background = color;  
}  
  
Onload="changeBackground ('red');
```

# References

<http://www.w3schools.com/jquery/>

<http://www.w3schools.com/bootstrap/default.asp>

# Tips and Tricks

# Content Delivery Network (CDN)

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js"></script>
```

## Benefits

- File is most likely cached into user's browser, faster load time
- Served from the server closest to them
- Reduces bandwidth for your own server

## Problems

- New request to access the resource on another server
- File may not be cached
- Internet connection is required

# Bootstrap CDN

The folks over at [MaxCDN](#) graciously provide CDN support for Bootstrap's CSS and JavaScript. Just use these [Bootstrap CDN](#) links.

```
<!-- Latest compiled and minified CSS -->
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"
integrity="sha384-1q8mTJOASx8j1Au+a5WDVnPi2lkFfwwEAa8hDDdjZlpLegxhjVME1fgjWPGmkzs7" crossorigin="anonymous">

<!-- Optional theme -->
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap-theme.min.css"
integrity="sha384-fLW2N01lMqjakBkx3l/M9EahuwPsfENvV63J5ezn3uZzapT0u7EYsXMjQV+0En5r" crossorigin="anonymous">

<!-- Latest compiled and minified JavaScript -->
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js" integrity="sha384-
0mSbJDEHialfmUBBQP6A4Qrprq5OVfW37PRR3j5ELQxss1yVq0tnepnHVP9aJ7xS" crossorigin="anonymous"></script>
```

Copy

# Bootstrap Templates

Start Bootstrap

Themes ▾

Blog

Resources ▾

Help

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## Start Bootstrap

### Free Bootstrap Themes & Templates

Created and Maintained by David Miller at Blackrock Digital



Fork



Star

5,257



Follow @SBootstrap



Tweet

🔍 Browse Themes & Templates

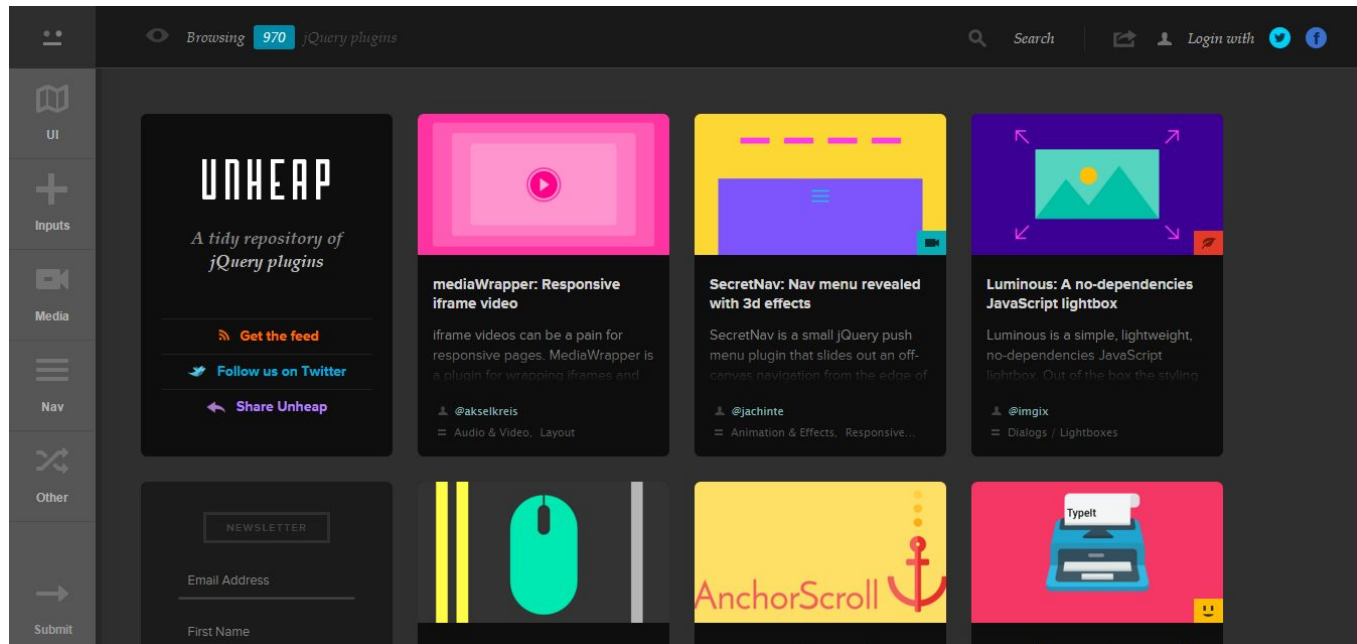
{wrap}bootstrap



<http://startbootstrap.com/>



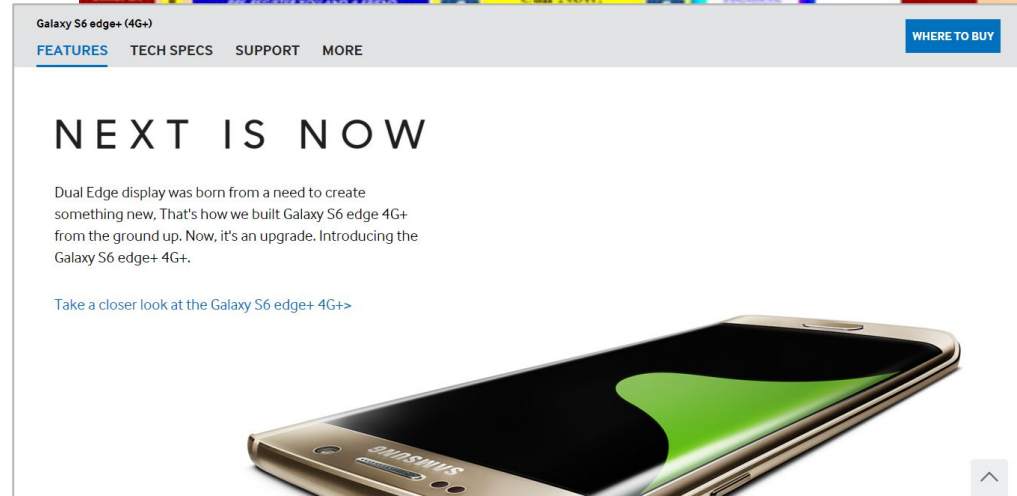
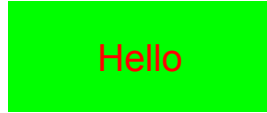
# UNHEAP - jQuery Plugins



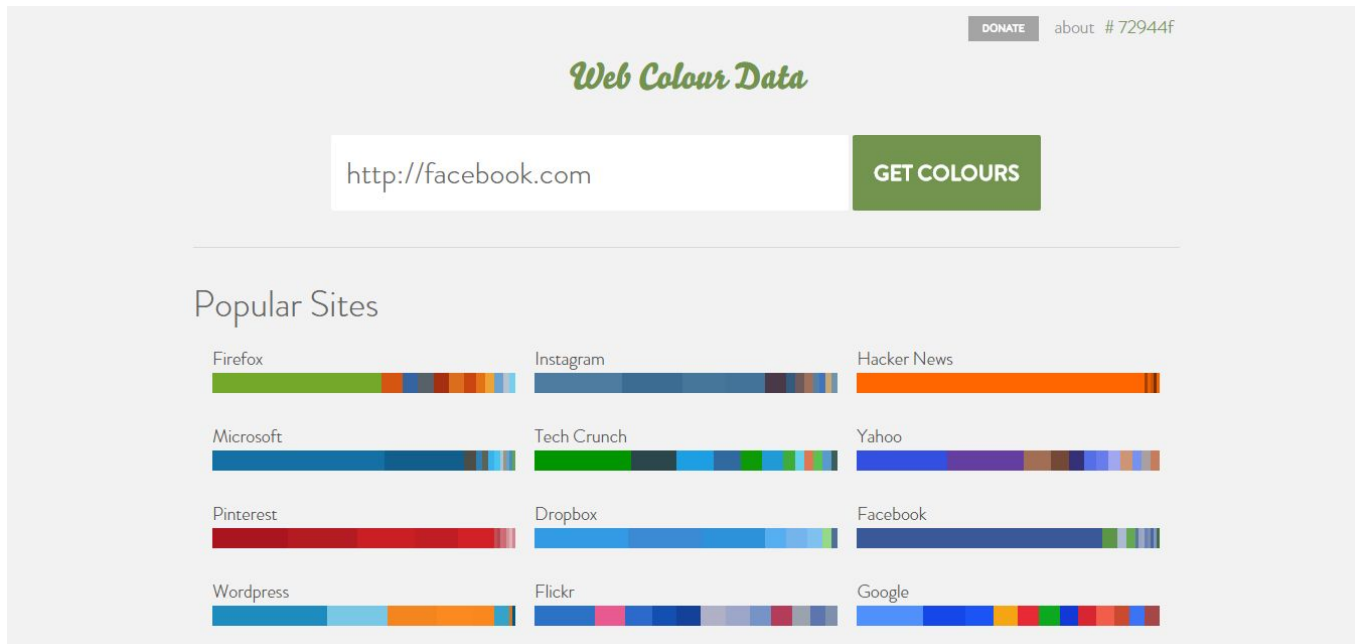
<http://www.unheap.com/>

# Colors

1. Contrast
2. Limit your colour choices (theme)
3. More white (“breathing”) space
4. Does it fit?

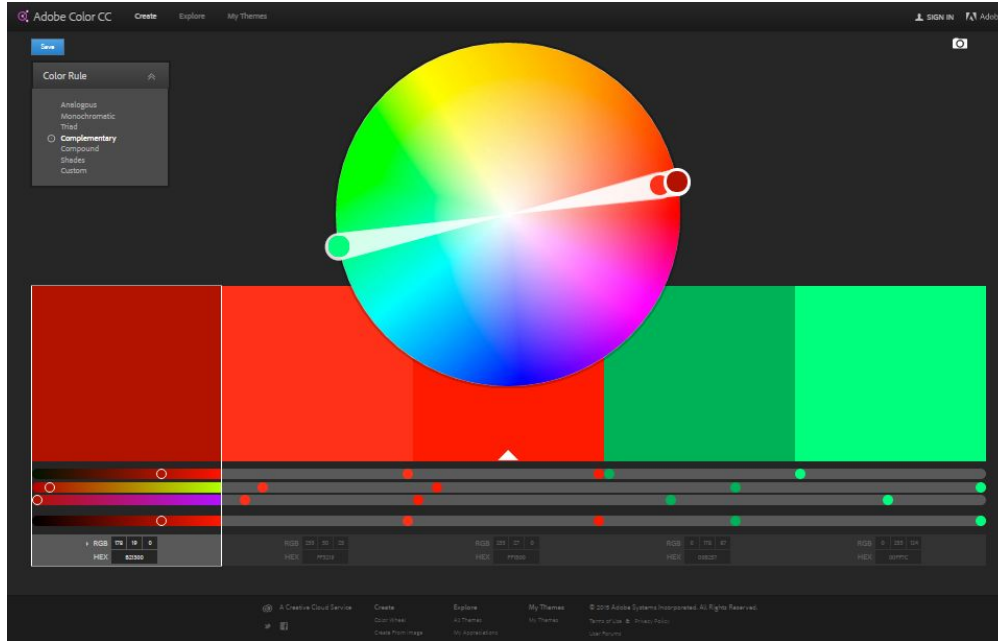


# Web Colour Data



<http://webcolourdata.com/>

# Adobe Color CC



<https://color.adobe.com/>

# Font(s) Selection

- **Best-Practice Font Tips for Effective Website Design and More Readable Content**  
[http://www.mequoda.com/articles/subscription\\_websites/best-practice-font-tips-for-effective-website-design/](http://www.mequoda.com/articles/subscription_websites/best-practice-font-tips-for-effective-website-design/)
- **10 Golden Rules You Should Live By When Combining Fonts: Tips From a Designer**  
<https://designschool.canva.com/blog/combining-fonts-10-must-know-tips-from-a-designer/>
- **Web Design Tips: 7 Common Web Typography Mistakes**  
<http://www.howdesign.com/design-creativity/fonts-typography/web-design-tips-7-common-web-typography-mistakes/>