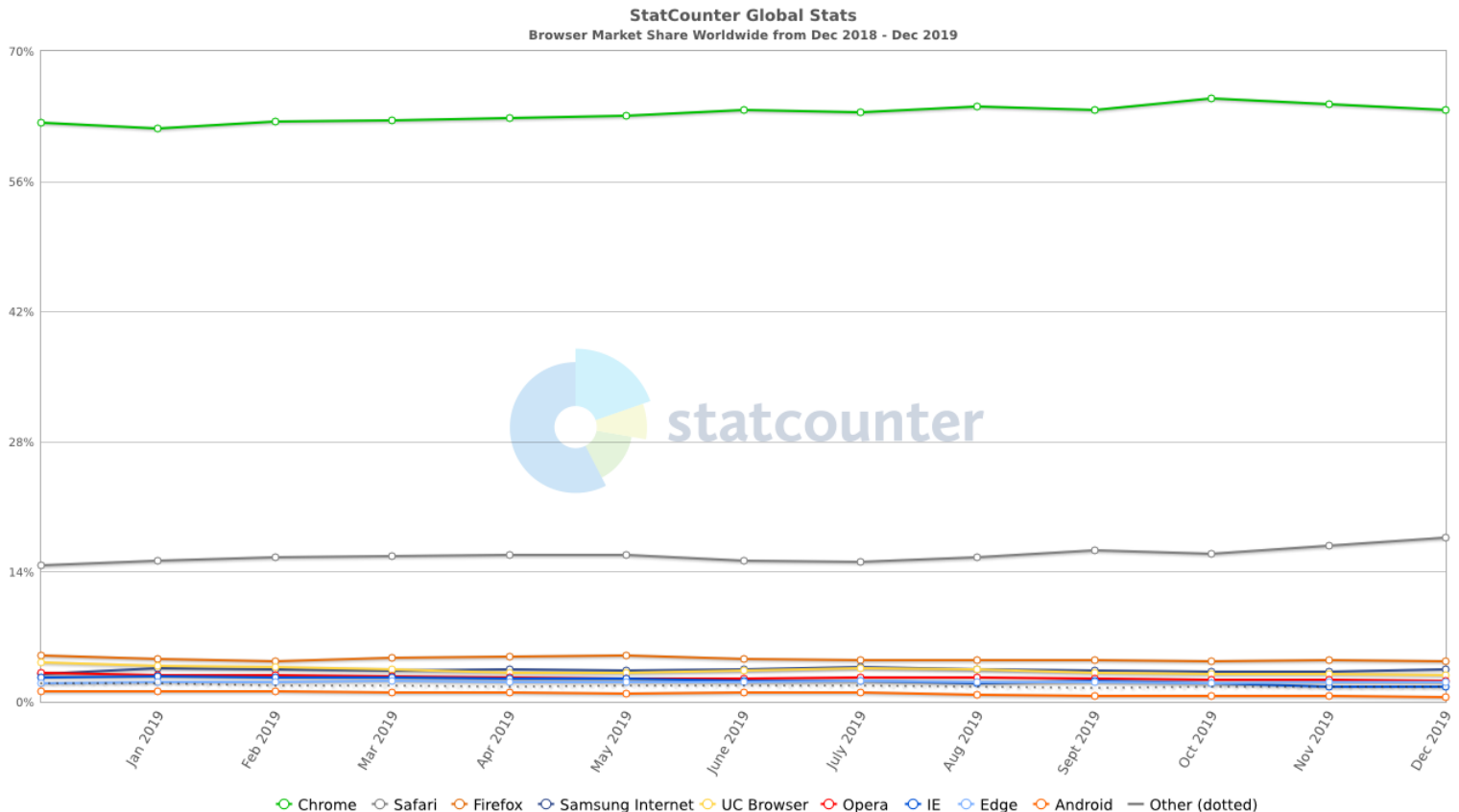


Tools

1. Notepad++ or Visual Studio Code (preferably)
 - a. Throughout this course we will be using VS Code or Notepad++ to code our pages. Both are already installed in bliss labs. Refer to these links to download them on your laptops:
 - i. <https://notepad-plus-plus.org/downloads/>
 - ii. <https://code.visualstudio.com/download>
2. Web browsers. A web browser (commonly referred to as a browser) is a software application for retrieving, presenting and traversing information resources on the World Wide Web.
 - a. The most common web browsers are the following: Google Chrome, Firefox, Microsoft Edge, Internet Explorer, Safari and Opera.
 - b. Below is a graph that shows usage percentage of each browser. (Source: StatCounter)



- c. As we can see, the usage is distributed mainly over 3 web browsers: Chrome (63.32%), Safari (17.68%), Firefox (4.39%). This is very important when you test your code, it should run on all these browsers.

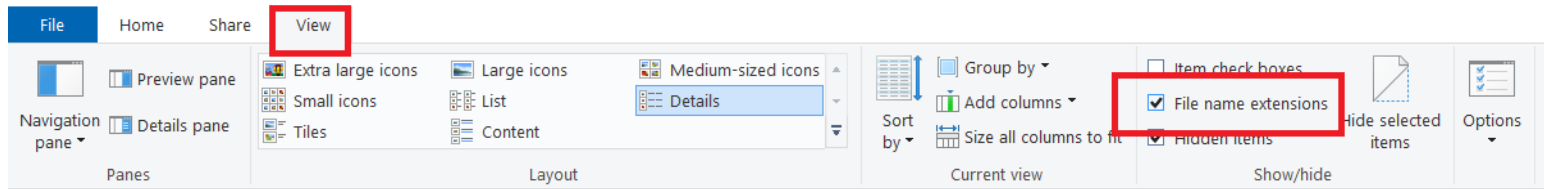
HTML5 Local Website

1. Create a folder "CMPS278" on the desktop. Create another folder "Lab1" inside "CMPS278".
2. Always organize your project:
 - a. Create a folder "images" inside LAB1. Place all images needed inside this folder.

<input type="checkbox"/> Name	Date modified	Type	Size
css	2/4/2014 3:39 PM	File folder	
images	2/4/2014 4:27 PM	File folder	
js	2/5/2014 1:38 AM	File folder	
index.html	2/4/2014 4:29 PM	HTML Document	6 KB

- c. The css folder is for Style Sheet .css files.
- d. The js folder is for JavaScript .js files. (Not needed in Lab 1)
- e. Create "profile.html": Right-click inside the folder – New – Text Document – Rename it to "profile.html"

2. Disable the "Hide extensions for known file types" to be able to modify the file extension to ".html".



4. Fill up profile.html with HTML5 minimal code as follows. Use notepad++ to do so (right click on index.html/edit with your preferred text editor).

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Title of the document</title>
</head>

<body>
Content of the document.....
</body>

</html>
```

Our First Website

1. Decompress "website.zip" inside c:\wamp\www\Lab1
2. You should have 2 folders (css, images), and 5 files (arabic.html, home.html, menu.html, profile.html, tables.html)
 - a. Inside the css folder there should be menu.css, inside images there should be profile_user.jpg
3. Add an h1 tag to "home.html" with the content: "Hello World"
4. Open [home.html](#) you should see a big bold Hello World.
5. Open [arabic.html](#) (this page is in Arabic). We notice that the charset is ASCII which does not support Arabic. Change it to a charset which supports the Arabic language.
6. Create two tables inside tables.html (right click on tables.html, edit with notepad++ / VS code):
 - a. Table 1 should look as follows:

Registered Courses Table 1			
Code	Title	Credits	Description
CMPS 278	Web Programming and Design	3	This course introduces the fundamentals needed to program on the Internet, and the state of the art technologies used in designing and developing rich multi-tiered web based applications. It presents the basics of client-side/server-side web programming and the skills and tools needed to create dynamic Web-based applications. It provides in-depth coverage of various markup languages (XHTML, Dynamic HTML and XML) and their associated cascading style sheets, several client side and server side scripting languages (JavaScript, PHP) in addition to AJAX-enabled rich Internet applications, client-side technologies, web services, Web Servers, and multi-tiered applications using relational database systems
CMPS 277	Database Systems	3	An overview of the nature and purposes of database systems and an introduction to data modeling: entity relationship model, relational model with relational algebra, relational calculus and SQL; integrity constraints; file organization and index files; normalization.
CMPS 213	C/C++programming	1	This course exposes students to the C and C++ programming languages. The course covers basic syntax, defining structures and classes, I/O, pointers, arrays, memory management, references, overloading, templates, the Standard Template Library, inheritance and polymorphism.

Data from: <https://www.aub.edu.lb/registrar/Documents/catalogue/undergraduate19-20/computerscience.pdf>

b. Table 2 should look as follows:

Registered Courses Table 2			
Code	Title	Credits	Description
CMPS 278	Web Programming and Design	3	This course introduces the fundamentals needed to program on the Internet, and the state of the art technologies used in designing and developing rich multi-tiered web based applications. It presents the basics of client-side/server-side web programming and the skills and tools needed to create dynamic Web-based applications. It provides in-depth coverage of various markup languages (XHTML, Dynamic HTML and XML) and their associated cascading style sheets, several client side and server side scripting languages (JavaScript, PHP) in addition to AJAX-enabled rich Internet applications, client-side technologies, web services, Web Servers, and multi-tiered applications using relational database systems
CMPS 277	Database Systems		An overview of the nature and purposes of database systems and an introduction to data modeling: entity relationship model, relational model with relational algebra, relational calculus and SQL; integrity constraints; file organization and index files; normalization.
CMPS 213 - C/C++programming		1	This course exposes students to the C and C++ programming languages. The course covers basic syntax, defining structures and classes, I/O, pointers, arrays, memory management, references, overloading, templates, the Standard Template Library, inheritance and polymorphism.


7. Create menu inside "menu.html". A menu structure is as follows:

- a. A "nav" tag
- b. A "ul" tag inside the "nav" tag
- c. "li" tags inside the "ul" tag, each is an element inside the menu
- d. Each element consists of an anchor (<a>), and a location which is the anchor's "href" attribute, and the content.
- e. Contents are as follows:
 - i. Home
 - ii. News
 - iii. Courses
 - iv. Profile
- f. Locations are as follows (respectively to the above):
 - i. "home.html"
 - ii. "arabic.html"
 - iii. "tables.html"
 - iv. "profile.html"
- g. Your menu should now look like the below:

- [Home](#)
- [News](#)
- [Courses](#)
- [Profile](#)

8. Add the following tag to the head to make the menu look like a real website menu:
`<link href="css/menu.css" rel="stylesheet" type="text/css" />`
 (The above line links our page to a css page, in this case the menu.css which is located inside the css folder)
9. Open [menu.html](#). Did the style change?
10. Add an iframe inside all the pages with the src being menu.html with the following attributes:
 - i. width="500px"
 - ii. height="75px"
 - iii. src="menu.html"
 - iv. You can find more help here:
http://www.w3schools.com/tags/tag_iframe.asp
 - v. Find a list of all html tags is here:
<http://www.w3schools.com/tags/>
11. Open home.html, click on a menu link does it open correctly?
 Add the following line inside menu.html's head (it will force the page to open inside the parent frame): `<base target="_parent" />`
12. Modify the profile.html page to look as follows:





Larry Page Biography

Inventor, Engineer (1973 -)

Internet entrepreneur and computer scientist Larry Page teamed up with grad school buddy Sergey Brin to launch the search engine Google in 1998.

Early Life and Career

Larry Page was born Lawrence Page on March 26, 1973, in East Lansing, Michigan. His father, Carl Page, was a pioneer in computer science and artificial intelligence, and his mother taught computer programming. After earning a Bachelor of Science degree in engineering from the University of Michigan, Page decided to concentrate on computer engineering at Stanford University, where he met Sergey Brin.

Google Begins

As a research project at Stanford University, Page and Brin created a search engine that listed results according to the popularity of the pages, after concluding that the most popular result would often be the most useful. They called the search engine "Google" after the mathematical term "googol," which refers to the No. 1 followed by 100 zeros, to reflect their mission to organize the immense amount of information available on the web.

After raising \$1 million from family, friends and other investors, the pair launched the company in 1998. Google has since become the world's most popular search engine, receiving an average of 5.9 billion searches per day in 2013. Headquartered in the heart of California's Silicon Valley, Google held its initial public offering in August 2004, making Page and Brin billionaires.

The data can be found here: <http://www.biography.com/people/larry-page-12103347>

HTML
p
div
span
a
h1
h2
h3
table
thead
tbody
tr
td

th
strong
br
img
ul
ol
li

HTML reference and help:
http://www.w3schools.com/tags/

13. Zip the Lab1 folder and submit it to Moodle. You are **required** to submit your work by the end of the lab session.