# Department of Computing

**CS344: Web Engineering**

**Class: BESE – 4AB**

# Lab 6: ColorMap

**Date: 27th October, 2015**

# Time: 10:00 AM - 01:00 PM & 02:00 PM – 05:00

# Instructor: Fahad Ahmed Satti

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# Lab 6: ColorMap

**Introduction**

JavaScript is a high level, dynamic, untyped, and interpreted programming language. It has been standardized in the ECMAScript language specification. Alongside HTML and CSS, it is one of the three essential technologies of World Wide Web content production; the majority of websites employ it and it is supported by all modern web browsers without plug-ins. JavaScript is prototype-based with first-class functions, making it a multi-paradigm language, supporting object-oriented, imperative, and functional programming styles. It has an API for working with text, arrays, dates and regular expressions, but does not include any I/O, such as networking, storage or graphics facilities, relying for these upon the host environment in which it is embedded.

**Objectives**

* Understand and use different aspects of JavaScript and its communication with HTML & DOM
* To analyze how attributes affect the appearance of various HTML elements
* Use a Version Control System (VCS) to manage solutions.

**Tools/Software Requirement**

* Students should implement their solutions using HTML5, CSS3, and vanilla JavaScript.
* Besides LMS, Students must also use GitHub and upload their complete solutions and a description document on it.

**Description**

Using vanilla javascript ajax you read a Color Map with the name of the color and its value.

This map is shown in 2 scrollable lists, one with color name and its value and the other with color Hex value and its name.

Each element will show the name of the color in bold and possible display the color along with the color value in a small eclipse.

On scroll the 2 lists are inversely kept in sync.

When one is up the other is down (and the other way around) and as the user scrolls one the other scrolls proportionally in the other direction. If a user clicks on one color in any of the lists, the other list also moves into focus the same color in the other list.

**Pitfalls**

* Any exceptions or errors leading to non-execution of submitted code.
* Failure to upload the solution to GitHub or not sharing the public repo link on LMS.
* Using any framework or programming language not mentioned above.
* Failure to explain the submission, during viva.

**Lab Task 1**

Using vanilla javascript ajax you read a Color Map with the name of the color and its value.

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**Client:** html + js + CSS

**Hint:** Use Javascript Dom Manipulation to dynamically build your elements.

JSON.parse() can parse a valid text of JSON into JSON objects.

**Deliverables**

Convert your files to a zip folder and name it as given below and upload the zip folder to LMS.

Name – Registration No. – Section

This lab is graded. Min marks: 0. Max marks: 10.