

CS472 Midterm Exam Review

The final exam will consist of those questions:

1. Multiple Choices(only one correct answer) – 22 questions – 2 points each – 44 points
2. Programming questions – 7 questions
 - a. CSS specificity – 6 points
 - b. Layout – 5 points
 - c. JS Scope – 6 points
 - d. Closure – 4 points
 - e. Asynchronous & Callbacks – 4 points
 - f. HTML + Regex + jQuery – 15points
 - g. JS prototypal inheritance – 7 points
3. SCL question – 1 question – 3 points

Location: L113, L115. Total 94 points

Time: May 13, 10am ~ 12:30am, 2.5 hours (Arrive 10 minutes earlier)

Exam Policy:

There is no tolerance policy for exams. **You will be asked to leave the exam room immediately without a warning** once you do the following things which mean you'll get **NC**.

1. You are caught cheating or trying to cheat such as look around. You have to look straight and focus on your own exam; speak in your own language during exam.
2. Answers should be written with a Pen or Pencil, but if you want to use a pencil please bring your own eraser, sharpener and ruler. You're not allowed to borrow from other students or proctors during exam.
3. All mobile phones should be turned off and submitted along with your luggage at the beginning of the exam.
4. You're not allowed to go to restroom and go out for water.
5. You're not allowed to ask/get extra papers from other students or proctors. All your notes must be written on the exam paper provided. Use the back side if you need to draft.
6. Please write down your answer clearly. If I cannot read your answer, you'll not get credit.

Lecture 01:

1. HTML
2. meta element (charset, favorites icon, keywords, description, etc)
3. Relative URL, Absolute URL
4. Block elements(p, h1~h6, hr, section, article, header, ul, ol, table, etc)
5. Inline element(br, img, a, etc)
6. Comment <!-- -->
7. Character Entities: > <

Lecture 02:

1. Add CSS for a HTML Page (external .css file<link>, internal <style>, inline style attribute)
2. CSS rule syntax (selector, property, value)
3. Selector: HTML element selector(type selector), group selector, class selector, id selector, context selector, attribute selector, TagName.className/#id, pseudo-class, pseudo-element
4. CSS properties for color, font(Size Units), text, list-style-type
5. Style conflict, which rule wins
6. Why internal/embedding style sheet isn't good?

Lecture 03:

1. Box model(content-box, border-box)
2. Dimensions, borders, padding, margin
3. Center block element, center inline element horizontally
4. Details/differences between block elements and inline elements
5. Vertical align
6. float/clear/overflow
7. position: static, relative, absolute, fixed
8. display: inline, block, none, inline-block
9. visibility vs display
10. CSS Reset Code

Lecture 04:

1. HTML Forms
2. input: text,password, radio, checkbox, label, hidden, submit (new features in HTML 5)
3. select, textarea
4. input pattern attribute
5. Regular expression
 - | {} \ * + ? {min, max}
 - [], [a-z], [A-Z0-9]
 - \d

Lecture 05/06:

1. JavaScript
2. Syntax on JavaScript: Boolean, Number, String, Array, Comment, Null/undefined, semicolon, etc
3. Logical operations: ==, ===, "1"+1, "A"-"A"
4. Function declaration vs function expression
5. String, Arrays – basic use
6. Linking to a JavaScript file: script/when does it run?
7. Obtrusive/unobtrusive style – attach event handler, css
8. Common errors
9. Asynchronous & Callbacks: [setTimeout](#), [setInterval](#)

Lecture 07:

1. Scope(Lexical, hoisting)
2. Overloading?
3. Arguments
4. Module Pattern (IIFE) – syntax, what's the problem it solves and how?
5. Closures

Lecture 08:

1. Create object (object literal)
2. call, apply, bind
3. function borrowing/currying
4. revealing module pattern
5. prototypal inheritance: Object.create(), Function Constructor

Lecture 09:

6. jQuery
7. window.onload vs \$(document).ready(), \$(function(){});
8. jQuery selectors
9. context identification
10. loop
11. chaining
12. create new nodes
13. jQuery APIs- val(), addClass, removeClass, other APIs work with HTML form controls
14. The jQuery event object(methods: **preventDefault()** , **stopPropagation()** , **stopImmediatePropagation()**)
15. jQuery and **this**