CSCI 1320
Creating Modern Web Applications
Lecture 7: JavaScript/DOM LAB
Lab Assignment

• Create a **triangle teacher** geared at middle-high school students
  • Teaching tool
• Input 3 numbers representing the lengths of the sides
  • Error checking as appropriate
• Display:
  • The corresponding 3 angles
    • [https://www.mathsisfun.com/algebra/trig-solving-triangles.html](https://www.mathsisfun.com/algebra/trig-solving-triangles.html)
  • Area and perimeter of the triangle
  • Whether the triangle is
    • Equilateral, Isosceles, Scalene, or Not a Triangle
    • Acute, Right, or Obtuse
• Do this all using html and JavaScript (no server)
Mechanics

• Work in teams (ideally 2-4)
• Try to get it working in class
  • Display on the screen if possible
• Check off in class
  • Use your i-Clicker
• Post your working page
  • Mail to spr+17lab02@cs.brown.edu
    • Do this by the end of the week
Team Organization

• Create a general plan (working together)

• Define interfaces
  • Ids of input and output fields

• Split into teams
  • One doing the design and html for the page
  • One doing the JavaScript for triangle computations
  • One doing other JavaScript for the page
Objectives

- Designers
  - Create an easy-to-use teaching/learning tool
  - Simple and elegant

- Concentrators
  - Keep the code simple
  - Beware of floating point computations (might be inexact)
Next Time

• Requirements and Specifications

• Prelab 3: Choose a technology module