

CS/INFO 3300 / INFO 5100

Homework 1

Due 11:59pm Monday January 29

Goals: Review Javascript types and data structures; JSON.

Your work should be in the form of an HTML file called `index.html` with one `<p>` element per problem. Wrap any Javascript code for each problem in a `<script>` element. For example:

```
<p id="p0">Problem 0: We use the var statement to declare a
variable and set it to a value.
<script>
var x = 100;
</script>
</p>
```

Create a zip archive containing this file and upload it to CMS.

1. Identify which of the following are valid Javascript types (i.e. can be returned as output from the `typeof()` function). For each valid type provide an example using `console.log(typeof( ... ))`. (30 pts)

boolean double float function int list map number object  
regex string tuple undefined unicode

2. Each of the following expressions contains improper JSON: calling `JSON.parse( ... )` will result in an error. For each example, describe the error and provide a fixed version. Use the `JSON.parse` function to demonstrate that it works. Some may contain more than one error. (30 pts)

a. `{ name: "Data-driven web applications" }`

b. `{ /* the next variable is a course number */ "number": 3300 }`

c. `[ { "name": "DDWA", "number": 3300 } { "name": "Java",  
"number": 2110 } { "name": "Python", "number"; 1110 }`

3. Write a JSON expression that represents a list. This list should contain at least three objects. Each object should have at least three properties. The value of one

property should be a number, the value of another should be a boolean, and value of a third should be a list of strings. You may define the contents in any way you choose and add additional properties as long as we can easily verify that the required elements are present. (30 pts)

4. Describe, in your own words, the course policy on late and unreadable work outlined in the syllabus, which is linked from the course website. (10 pts)