

CSE 154, Autumn 2012
Final Exam ANSWER KEY

1. HTML / CSS Tracing

[3][3][3]

1	<u>22</u>
---	-----------

4 4 4 4	5 5 5 5 5
6 6 6 6 6 6	

2. CSS

With any code problem, there are always several correct solutions. Here is one:

```
body          { text-align: center; font-family: monospace; }
#div          { background-color: yellow; font-weight: bold; }
div span      { float: left; border: 2px solid black; }
.div, #span   { float: right; width: 25%; border: 2px solid black; }
#span         { clear: right; font-style: italic; }
.span         { clear: right; border-top: 2px dashed black; }
```

3. PHP

```
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    if (!isset($_POST["word"]) || !preg_match("/^[a-zA-Z]+$/", $_POST["word"])) {
        header("HTTP/1.1 400 Invalid Request");
        die();
    }

    $badword = strtolower($_POST["word"]);
    $lines = array();
    foreach (file("text.txt", FILE_IGNORE_NEW_LINES) as $line) {
        $badline = FALSE;
        $words = explode(" ", $line);
        foreach ($words as $word) {
            if (strtolower($word) == strtolower($badword)) {
                $badline = TRUE;
            }
        }
        if (!$badline) {
            $lines[] = $line;
        }
    }
    file_put_contents("text.txt", implode("\n", $lines));
}
?>

<form action="" method="post">
    <div>Word to remove:
        <input type="text" name="word" />
        <input type="submit" value="Submit" />
    </div>
</form>

<p>Current file text:</p>
<pre><?= file_get_contents("text.txt") ?></pre>
```

4. JavaScript / JSON

```
window.onload = function() {  
    fetchWord();  
};  
  
function fetchWord() {  
    var part = document.getElementById("part").value;  
    var ajax = new XMLHttpRequest();  
    ajax.onload = wordHasArrived;  
    ajax.open("GET", "word.php?part=" + part, true);  
    ajax.send();  
}  
  
function wordHasArrived() {  
    var json = JSON.parse(this.responseText);  
    document.getElementById("word").innerHTML = json.word + " (" + json.part + ")";  
    document.getElementById("choices").innerHTML = "";  
    for (var i = 0; i < json.choices.length; i++) {  
        var button = document.createElement("button");  
        button.innerHTML = json.choices[i].definition;  
        button.className = json.choices[i].correct ? "correct" : "incorrect";  
        button.onclick = showResult;  
        button.style.display = "block";  
        document.getElementById("choices").appendChild(button);  
    }  
}  
  
function showResult() {  
    alert("You are " + this.className);  
    fetchWord();  
}
```

5. Regular Expressions

a) `/^([0-9]{3}-)?[0-9]{3}-?[0-9]{4}$/`

b) `^[A-Z]{3} ?[0-9]{3}$`

c) `/^[a-zA-Z][a-zA-Z0-9-_{5,17}]$/`