

Assignment 4

JQuery

Web Technologies

MSIS517L

Due: 02/21/2017

Background

JQuery (<https://jquery.com/>) is a JavaScript library that almost every web developer has in their tool box. JQuery has included many helpful and commonly used functions and code snippets into the library to make web development even easier and cleaner.

A CAPTCHA is a program that protects websites against bots by generating and grading tests that humans can pass but current computer programs cannot. An example of this is to read and type in the content of a picture containing distorted text. Other implementations include identifying objects in sets of pictures, selecting a checkbox saying that you are not a robot, and answering simple math questions. By asking an end user to perform a simple task, this ensures that the action cannot be programmatically taken easily. This adds security, reduces spam, and allows for a more authentic experience. For example, a bot could easily create 100,000,000 users on your website or send you 39,993,223 emails when you ask for feedback, which would be highly undesirable.

Tasks

1. Read about CAPTCHAs
 - a. Official CAPTCHA - <http://www.captcha.net/>
 - b. Google reCAPTCHA - <https://www.google.com/recaptcha/intro/index.html>
2. Modify your website, from development assignment 1, that contained your professional and technical background as well as resume by converting any DOM select elements functions (ie. `document.selectElementsById();`) to JQuery.
3. Read about the JQuery APIs on <http://api.jquery.com/> then modify your site to include, at least, the following JQuery methods.
 - a. `.animate()`
 - b. `.click()`
Suggestion: Replace onclick attribute contents with `.click()`
 - c. `.toggleClass()`
Suggestion: Use to switch something from a header to normal formatting
 - d. `.each()`

e. .html()

Suggestion: On an event such as hover, change the contents of the innerHTML

4. Add a CAPTCHA like mechanism to your site before allowing a user to download your resume using the droppable widget provided in JQueryUI (<http://api.jqueryui.com/droppable/>). The user must drag and drop something before they can download your resume so it cannot be scripted to download.
5. Clean up and format all of your code so that it is more human readable, be sure to use proper indentation and comments in your JavaScript.

Deliverables

1. Your latest site code, including the HTML, CSS, and JavaScript containing JQuery pushed to GitHub.
2. Archive file (zip) of the sites HTML, CSS, and JavaScript so it can be ran offline.

Grading will be based on content, accuracy, thoroughness, and adherence to instructions for credit up to a single homework assignment.

Please submit the assignment deliverable by pushing your latest HTML, CSS, and JQuery code to your GitHub repository and submitting the archive file (zip) to iLearn.