

Net-Centric Computing

jQuery

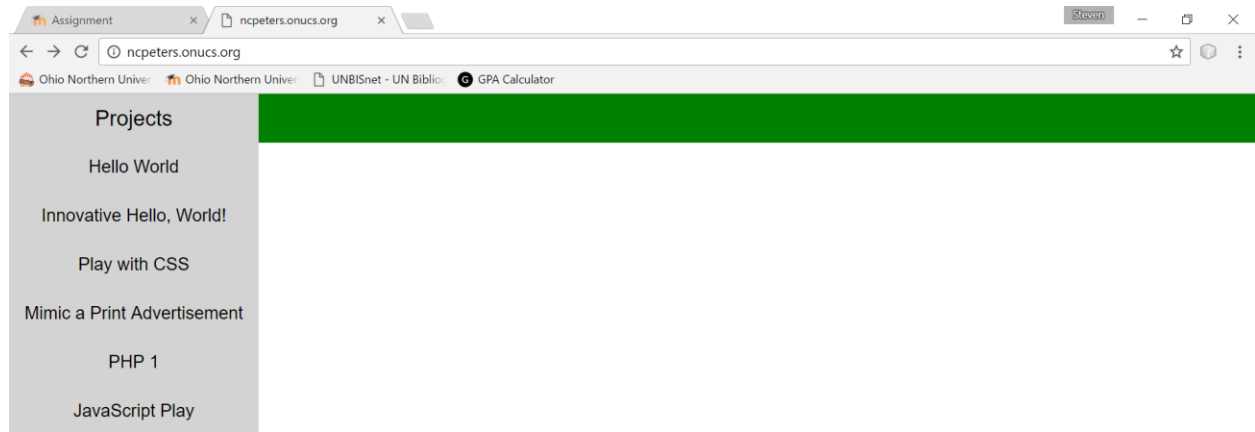
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Prof. Retterer

I was instructed to study the jQuery tutorial at w3Schools. Design and implement a front page for your course website that uses jQuery in meaningful and professional way. Submit a paper with the usual characteristics that describes your experience with this assignment. So, as instructed, I spent a few hours prior to starting the assignment reading through the full tutorial at w3schools, as well as reading forum posts on random “stuff” that I thought could be interesting, such as if the mouseover event just fired when the mouse was over the selected element, or if it fired if it was over the element or any of its child elements.

I decided I wanted a purely function front page of my website, which meant no gimmicky aspects of it. Looking back, this also makes for a very boring homepage. However, there isn't much to include on this page anyway, so I just included links to all my previous projects in a navbar. However, the navbar was made in such a way that it would be exceedingly simple to add more drop down menus, more links in the current menu, or both. I did this by using classes to connect my divs and spans to the appropriate jQuery and CSS. I made it so that adding another drop-down menu just involves adding another div with the class “navBarButtons” and another div to hold the links with the class “dropDownMenu” and the links themselves. I used jQuery to not only show and hide the menu when the user mouses over the button and mouses away, but also to change the color so the user can more easily tell they are moused over the menu buttons. I created the links themselves using the anchor tag in html, but instead of putting text inside the anchor tag, I put a div with the text I wanted inside the div. This is allowed with HTML 5, and is

the most elegant solution I could find without adding JavaScript to each div. This method uses just HTML and CSS, which makes it more lightweight and easier to understand. I made the link divs have the “menuLinks” class, so any new links will have the same styling and jQuery applied to them.



In reflection, I am very satisfied with how the website turns out. It doesn't look great, but it is very functional, and I went through great lengths to make sure that adding more drop-down menus is easy. As for jQuery, it is the language I never knew I wanted as far as web design is concerned. It takes everything I loved about JavaScript and adds more functionality. I didn't get to use it a lot in my homepage, but for a website with greater needs than mine it could be a gamechanger. My mom asked me to help her rewrite the homepage of our church this summer, and jQuery will allow me to improve on many of the pre-HTML 5 elements of the website, like the navbar and the visual feedback of the user interface.

HTML/jQuery

```
<!DOCTYPE html>
<!--
To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates
and open the template in the editor.
-->
<html>
  <head>
    <meta charset="UTF-8">
    <link rel="stylesheet" type="text/css" href="main.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></scri
pt>
    <script>
      $(document).ready(function(){
        $(".navBarButtons").on({
          mouseover: function(){
            $(this).css("background-color", "lightgray");
            $(".dropDownMenu").show();
          },
          mouseout: function(){
            $(this).css("background-color", "green");
            $(".dropDownMenu").hide();
          }
        });

        $(".menuLinks").on({
          mouseover: function(){
            $(this).css("background-color", "gray");
          },
          mouseout: function(){
            $(this).css("background-color", "lightgray");
          }
        });
      });
    </script>
    <title></title>
  </head>
  <body>
    <div id="navBar">
      <div class="navBarButtons">
        <span class="navBarText">Projects</span>
        <div class="dropDownMenu">
          <a href="HelloWorld/index.php">
            <div class="menuLinks">
              <span class="navBarText">Hello World</span>
            </div>
          </a>
          <a href="FancyHelloWorld/index.php">
            <div class="menuLinks">
              <span class="navBarText">Innovative Hello,
World!</span>
            </div>
          </a>
          <a href="PlayWithCSS/index.php">
            <div class="menuLinks">
```

```

        <span class="navBarText">Play with CSS</span>
    </div>
</a>
<a href="SmithsonianJourneys/index.php">
    <div class="menuLinks">
        <span class="navBarText">Mimic a Print
Advertisement</span>
    </div>
</a>
<a href="PHP1/index.php">
    <div class="menuLinks">
        <span class="navBarText">PHP 1</span>
    </div>
</a>
<a href="JavaScriptPlay/index.php">
    <div class="menuLinks">
        <span class="navBarText">JavaScript Play</span>
    </div>
</a>
</div>
</div>
</div>
</body>
</html>

```

CSS

```
/*
To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates
and open the template in the editor.
*/
/*
    Created on : May 10, 2017, 7:55:34 AM
    Author      : Steven Peters
*/

html, body {
    width: 100%;
    height: 100%;
    padding: 0px;
    margin: 0px;
}

#navBar {
    left: 0px;
    width: 100%;
    height: 50px;
    background-color: green;
}

.navBarButtons {
    height: 50px;
    width: 20%;
    text-align: center;
    font-size: 22px;
    font-weight: 500;
}

.navBarText {
    display: inline-block;
    vertical-align: middle;
    line-height: 50px;
    font-family: sans-serif;
    color: black;
}

.dropDownMenu {
    background-color: lightgrey;
    display: none;
}

.menuLinks {
    height: 50px;
    font-size: 18px;
    font-weight: normal;
}
```