CS20_A8
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Website Link: https://wmcleish.github.io/CS20_A8/jade_delight.html

Jade Delight

Questions:
- If I had two extra weeks for this project, I would attempt to integrate the website with the google maps API to provide an accurate delivery time. I could also add more styling to both the main page and the order summary.
- The thing I like least about JavaScript is that it is difficult to keep track of and get different variables from the html page. I feel like there are 15 different functions to get elements by names, classes, ids, and they all have slightly different functionality.

Jade_Delight.html:

```html
<!DOCTYPE html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Jade Delight</title>
<link rel="stylesheet" href="styles.css">
</head>

<body>
<script>

function MenuItem(name, cost)
{
    this.name = name;
    this.cost=cost;
}

menuItems = new Array(
    new MenuItem("Chicken Chop Suey", 4.5),
    new MenuItem("Sweet and Sour Pork", 6.25),
    new MenuItem("Shrimp Lo Mein", 6.25),
    new MenuItem("Moo Shi Chicken", 7.5),
    new MenuItem("Fried Rice", 2.85)
);

/*
 * Updates the item price when new quantity is entered as well as
 * the subtotal, tax, and total for the order
 */
```

```javascript
function updateCost(){
    var quantity;
    var subtotal = 0;
    for (i = 0; i < menuItems.length; i++){
        quantity = document.getElementsByName("quan" +
i)[0].value;
        if (parseInt(quantity) != 0){
            itemCost = (parseInt(quantity) *
menuItems[i].cost).toFixed(2)
            document.getElementsByName("cost")[i].value =
itemCost;
            subtotal += parseFloat(itemCost);
        }
    }
    tax = subtotal * 0.0625;
    total = subtotal + tax;
    document.getElementById("subtotal").value =
subtotal.toFixed(2);
    document.getElementById("tax").value = tax.toFixed(2);
    document.getElementById("total").value = total.toFixed(2);
}

/*
 * returns bool if delivery is selected
 */
function isDelivery(){
    return document.getElementsByName("p_or_d")[1].checked;
}
/*
 * Hides and unhides the street and city if delivery or pickup
is selected
 */
function validateDelivery(){
    if (isDelivery()){
        document.getElementsByClassName("userInfo
address")[0].style.display = "table-row";
        document.getElementsByClassName("userInfo
address")[1].style.display = "table-row";
    } else {
        document.getElementsByClassName("userInfo
address")[0].style.display = "none";
        document.getElementsByClassName("userInfo
address")[1].style.display = "none";
    }
}

/*
```

```
 * Validation function that alerts if user tries to submit
anything that is not allowed
 */
function validateSubmission(){
    // first name last name have values
    if (document.getElementsByName("fname")[0].value == "" ||
document.getElementsByName("lname")[0].value == ""){
        alert("First and Last name are required");
        return;
    }
    // Phone number 7-10
    if (document.getElementsByName("phone")[0].value.length != 7
&& document.getElementsByName("phone")[0].value.length != 10){
        alert("Please provide a valid phone number");
        return;
    }
    // pickup time = current + 15, del = 30 (date class)
    var orderTime;
    time = new Date();
    if (isDelivery()){
        time.setMinutes ( time.getMinutes() + 30 );
        orderTime = time.getHours() + ":" + (time.getMinutes());
    } else {
        time.setMinutes ( time.getMinutes() + 15 );
        orderTime = time.getHours() + ":" + (time.getMinutes());
    }
    // Delivery requires street and city
    if (isDelivery()){
        if (document.getElementsByName("street")[0].value == ""
|| document.getElementsByName("city")[0].value == ""){
            alert("Address is required for delivery");
            return;
        }
    }
    // Order needs at least one item
    var count = 0;
    for (i = 0; i < menuItems.length; i++){
        count += document.getElementsByName("quan" +
i)[0].value;
    }
    if (count == 0){
        alert("Select at least one item");
        return;
    }
    alert("Thank you for your order!")
```

```javascript
    var win = window.open("", "Order Summary",
"toolbar=no,location=no,directories=no,status=no,menubar=no,scro
llbars=yes,resizable=yes,width=780,height=300");
    newWindowString = "<style>body {background-color:
#00A36C;font-family: 'Courier New', Courier,
monospace;}</style><h1>Order Summary:</h1>";
    // Item names, quantities and their pricecs
    for (i = 0; i < menuItems.length; i++){
        quantity = (document.getElementsByName("quan" +
i)[0].value);
        if (quantity > 0){
            itemCost =
(document.getElementsByName("cost")[i].value);
            newWindowString += ("<strong>" + menuItems[i].name +
"</strong> * " + quantity + ": $" + itemCost + "<br>");
        }
    }
    // Totals, tax, ready time
    newWindowString += ("<br><strong>Subtotal:</strong> $" +
subtotal.value + "<br>");
    newWindowString += ("<strong>Tax:</strong> $" +
tax.toFixed(2) + "<br>");
    newWindowString += ("<strong>Total:</strong> $" +
total.toFixed(2) + "<br>");

    newWindowString += ("Your order will be ready by: " +
orderTime);

    win.document.body.innerHTML = newWindowString;
}

function makeSelect(name, minRange, maxRange)
{
    var t= "";
    t = "<select name='" + name + "' size='1' >";
    for (j=minRange; j<=maxRange; j++)
       t += "<option>" + j + "</option>";
    t+= "</select>";
    return t;
}

function td(content, className="")
{
    return "<td class = '" + className + "'>" + content +
"</td>";
}
```

```html
</script>

<h1>Jade Delight</h1>
<form>

<p class="userInfo"><label>First Name:</label> <input
type="text"  name='fname' /></p>
<p class="userInfo"><label>Last Name*:</label>  <input
type="text"  name='lname' /></p>
<p class="userInfo address"><label>Street*:</label> <input
type="text" name='street' /></p>
<p class="userInfo address"><label>City*:</label> <input
type="text" name='city' /></p>
<p class="userInfo"><label>Phone*:</label> <input type="text"
name='phone' /></p>
<p>
    <input type="radio"  name="p_or_d" value = "pickup"
checked="checked" />Pickup
    <input type="radio"  name='p_or_d' value = 'delivery' />
    Delivery
</p>

<table border="0" cellpadding="3">
  <tr>
    <th>Select Item</th>
    <th>Item Name</th>
    <th>Cost Each</th>
    <th>Total Cost</th>
  </tr>
<script>

  var s = "";
  for (i=0; i< menuItems.length; i++)
  {
      s += "<tr>";
      s += td(makeSelect("quan" + i, 0, 10),"selectQuantity");
      s += td(menuItems[i].name, "itemName");
      s += td("$" +menuItems[i].cost.toFixed(2), "cost");
      s += td("$<input type='text' name='cost'/>", "totalCost");
      s+= "</tr>";
  }
  document.writeln(s);
</script>
</table>
<p class="subtotal totalSection"><label>Subtotal:</label>
   $ <input type="text"  name='subtotal' id="subtotal" />
</p>
```

```html
<p class="tax totalSection"><label>Mass tax 6.25%:</label>
  $ <input type="text"  name='tax' id="tax" />
</p>
<p class="total totalSection"><label>Total:</label> $ <input
type="text"  name='total' id="total" />
</p>

<input type = "button" value = "Submit Order"/>

<script>

document.getElementsByTagName("tbody")[0].addEventListener("chan
ge", updateCost);

document.getElementsByName("p_or_d")[0].addEventListener("change
", validateDelivery);

document.getElementsByName("p_or_d")[1].addEventListener("change
", validateDelivery);

document.querySelector("input[type='button']").addEventListener(
"click", validateSubmission);
</script>

</form>
</body>
</html>
```

Styles.css:
```css
.userInfo address {
    display: none;
}

body {
    background-color: #00A36C;
    font-family: 'Courier New', Courier, monospace;
}

form  { display: table;      }
p     { display: table-row;  }
label { display: table-cell; }
input { display: table-cell; }
```