Assignment 3 – Add JavaScript for price computation

Lab A & B due: Tuesday, September 27, 2022. 11:59 pm ET
Lab C & D due: Thursday, September 22, 2022. 11:59 pm ET
This is an **individual** assignment.

1 Learning objectives

- Practice your JavaScript skills.
- Create initial dynamic behavior that reacts to user input.

2 Tasks

In this assignment, you will get started with JavaScript; specifically, you will update the cinnamon roll prices based on user selection of glazing and pack sizes.

2.1 Setup

Follow the setup instructions from the previous assignments.

2.2 Price computation

(1) Compute and update the price on the Product Detail page based on user selections.

(2) Add **JavaScript objects** to represent price adaptations based on user selections. They are listed below. You may hard-code these objects.

Glazing *Options*	*Price adaption*
Keep original	+ $ 0.00
Sugar milk	+ $ 0.00
Vanilla milk	+ $ 0.50
Double chocolate	+ $ 1.50

Pack size *Options*	*Price adaption*
1	*1
3	*3
6	*5
12	*10

(3) **Populate the options of your drop-down fields with these objects** (hint: use loops, price adaptation as option value, option name to be displayed). Do not hardcode them into the HTML.

Here is an *example* of how to create a dropdown menu, add an option, update the UI based on the selected value: https://github.com/interactive-structures/teach-pui/tree/main/in-lab-examples/puinote-lab04/select-example

(4) Use a base price for a cinnamon roll of $ 2.49. Compute the price in the following manner: `(basePrice + glazingPrice) * packPrice`.

(5) Let the price update be triggered by the user changing their selections in the drop down. Here is some skeleton code:

product.html

```
<select id="glazingOptions"
        onchange="glazingChange(this)">

  <!-- options populated dynamically -->

</select>
```

price.js

```
function glazingChange(element) {
  // get value of selected glazing option
  const priceChange = element.value;

// add your code to do update the price ...
}
```

(6) Update the price field on the Detail page to show the price of the current user selection.

2.3 Use proper code style

These instructions apply to all homework assignments.

(7) Code-style: Embed your code as an external JavaScript file. Do not add any code in your HTML file(s). Your JS file should be placed into a `js` folder in your assignment solution container folder, e.g., `solution-hw3/js`.

(8) Do NOT use any existing JavaScript libraries for this assignment (though jQuery is acceptable if you want to learn on your own. You are not required to use jQuery). You can use plain JavaScript. Either is fine.

(9) Follow Google's HTML, CSS, and JavaScript Style Guidelines

(10) Cite any external resources you use.

2.4 Valid code

Follow the instructions on valid code from the previous assignments.

3 Submission

(1) **Deploy** your webpage on GitHub. Check that your README shows the correct links.
Check that your code is online (**pushed**) & that your webpage works properly online.

(2) Submit your homework repository to **Gradescope**.
Verify that it was submitted to Gradescope before the deadline!