

Department of Computer Science and Information Technology

Name				Id	
Course	CSCI390 Web Programming				
Date		Time		Duration	60 minutes
Pages	5	Calculators		Documents	

Exam Instructions:

- **HTML File Creation:**
 - Create an HTML file named as follows: {Your Name}_{Your ID}.html
 - For example: Sami_219-30-123.html
 - Your HTML file should include all necessary HTML structure and elements for the exam.
- **CSS and JavaScript Code:**
 - You have the option to write your CSS and JavaScript code:
 - Inside the HTML file <style> and <script> tags, respectively.
 - Or in separate CSS and JavaScript files linked to the HTML file.
 - Ensure your code is properly structured and commented for clarity.
- **Submission:**
 - After completing the exam, compress the folder containing your files (if there are multiple files).
 - Alternatively, you can directly send the HTML file on Classroom.
- Name your submission file as follows: {Your Full Name}_{Your ID}.zip
- For example: Sami_Albert_219-30-123.zip

Question I: [50 points]

HTML and CSS Part:**Heading Elements:**

- Include an h1 heading where students should write their name and ID.
Set the background color of the h1 heading to **aqua** and align it at the center.
Ensure the text color is black. Upon hovering over the h1 heading, change the background color to **blue-violet** and the text color to white.
- Add an h2 heading with "CSCI390 Midterm Exam" inside it.
- Insert another h2 heading with "Ticket Shop" inside it.

Form Creation:

- Inside the form, add a select element with two options:
 - "Standard" for \$10.
 - "Premium" for \$15.
- Quantity Input:
 - Add a label for quantity and an `<input>` element with the following attributes:
 - Type: number.
 - Minimum value: 1.
 - Make it required.
- Create two `<div>` to contain the options for popcorn and drink.
 - Inside first div, include a label for popcorn and a checkbox input.
 - Also, include another div for the drink label and checkbox input.
 - Ensure that both popcorn and drink are displayed in line using appropriate styling.
- Calculate Button:
 - Add a button element that triggers a function to calculate the total cost when clicked.
- Total Cost Display:
- Insert an input element with the following attributes:
 - Type: text.
 - Make it readonly.
 - Leave it empty for now.
- Discount Message:
 - Create a `<div>` element where the discount message will be displayed.
 - Display the discount message in **red** to make it noticeable.

For form elements and headings, add appropriate margins to align these items in the center of the page.

Your Web page must look like the image below:

Write your name and ID here!

CSCI390 Midterm Exam

Ticket shop

Ticket Type:

Quantity:

Popcorn: ☐ Drink: ☐

On Hover:

Write your name and ID here!

CSCI390 Midterm Exam

Ticket shop

Ticket Type:

Quantity:

Popcorn: ☐ Drink: ☐

Question II: [50 points]

JavaScript Part:

The `calculateTotal()` function is responsible for computing the total cost of the ticket(s) based on user selections.

It retrieves the values of the ticket type, quantity, and additional add-ons (popcorn and drink) from the HTML form.

The function then calculates the total cost by multiplying the ticket price by the quantity and adding the cost of any selected add-ons.

- Standard: 10
- Premium: 15
- Popcorn +5
- Drink +3

If the total cost exceeds \$30, a 20% discount is applied, and the discounted amount is subtracted from the total cost.

If the total cost is between \$20 and \$30 (inclusive), a 10% discount is applied.

Finally, the function updates the HTML elements to display the total cost and any applicable discount message.

Sample Run 1:

Write your name and ID here!

CSCI390 Midterm Exam

Ticket shop

Ticket Type: Standard

Quantity: 3

Popcorn: Drink:

Calculate Total Cost

\$30.40

You've earned a 20% discount!

Write your name and ID here!

CSCI390 Midterm Exam

Ticket shop

Ticket Type: Premium

Quantity: 1

Popcorn: Drink:

Calculate Total Cost

\$18.00

No discount applied.

Sample Run 2: