

Web-Based Application Design and Development (ITIS 3135)

Activity #7: Utilizing separation of concern

The goal of this activity is to utilize separation of concern.

Part 0: Download the starting code

1. From Canvas, download yours solved Activity 5 files i.e. **.html, *.js and *.css*.
2. Rename them to ***Lastname-Activity7.html*** , ***.css*** and ***.js***. Change the name of the *.js and .css* files in the html *head* element to match your new filename. Verify the URL.

Part 1: Apply Separation of concerns

1. Your files currently contain embedded code, specifically there is embedded JavaScript (JS) in the HTML file. (e.g. `onclick="showNum(4)"`)
2. Make the calculator function accurately without any embedded JS code.
3. Check out the Week5-JS-Demo to see how you can call JS event handlers like “onclick” from the JS file. Then remove the JS event handlers (e.g. `onclick="showNum(4)"`) from the HTML file of activity 7, and call it from the JS page. You will have to do corresponding changes in the HTML file as well.
4. Hint: here is how you can implement `showNum()` in the JS file

```
window.onload = function () {  
    document.getElementById("btn4").onclick = showNum;  
    /*btn4 is the id of the button that has a value of 4*/  
}
```

```
function showNum() {  
    document.frmCalc.txtNumber.value += this.value;  
}
```

5. For a binary operator, you must click on the buttons in the following order (e.g. addition):
 - a. Hit a number button
 - b. Hit the ‘+’ button
 - c. Hit a number button
 - d. Hit the ‘*Calculate*’ button
6. For a unary operator, you must click the buttons in the following order (e.g. decrement):
 - a. Hit the number button
 - b. Hit the ‘—’ button
7. All operators must work.
8. Validate any HTML CSS and/or JavaScript errors.

Part 2: Upload files to your Exercise folder

1. Verify that your final webpage is accessible by going to <https://webpages.uncc.edu/yourUsername/Exercise/Lastname-Activity7.html>

Part 3: Turn in your activity

1. Log in to Canvas.
2. Go to the Activity #7 Submission link on the Canvas page. Upload the **.html**, **.css** and **.js** files to the submission page.
3. In the “Comments” textbox on Canvas provide the URL of your html file on the web server. You must provide the correct URL to get credit