

# CS2613: Programming Languages Laboratory (FR02A)

## Lab #13 – Winter 2024

**Language:** JavaScript (#3)

**# of Tasks:** 2

**Topics:**

- Anonymous Functions
- Filtering

*All tasks are to be completed individually in line with the academic offense guidelines detailed on the syllabus and are **due before the end of the lab period** unless stated otherwise.*

## Task #1

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**Task Style:** Programming

**Submission Method:** Test each function thoroughly and move onto Task #2.

### Description:

Create functions using **arrow notation** that will each take a string (at minimum) and return true or false if the string meets some requirement. Store each in a variable.

1. Only the first letter of the string and the first letter after any space is capital.

Example:

```
function("This is a test") = false  
function("This Is A Test") = true
```

2. Only one space is found in the string.

```
function("This is a test") = false  
function("This is") = true
```

3. The string checks the first token (word) and the second token (word) separated by a space and sees if the first word ends with the same letter the second word begins with.

```
function("Margaret Ryan") = false  
function("Catherine Elaine Guil") = true
```

### Resources:

- [https://www.w3schools.com/js/js\\_strings.asp](https://www.w3schools.com/js/js_strings.asp)
- [https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Functions/Arrow\\_functions](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Functions/Arrow_functions)
- <https://www.geeksforgeeks.org/node-js-split-function/>

## Task #2

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**Task Style:** Programming w/ on-the-spot Grading

**Submission Method:** Raise hand to show completed task to Professor or Teaching Assistant.

**Description:**

Write a filter function yourself. This function should take an array of strings and an array of the functions you have written in Task #1. The function returns an array of strings that pass (return true) each function passed in. Use nested looping to do so.

You may use the array of strings below to test:

```
["Test Test", "This is a test", "This Is A Test", "Catherine Elaine", "Catherine Elaine Guil", "",  
"Does this pass?", "Question Node.js"]
```

When you think you have the filtered list printed using your filter function, raise your hand.

