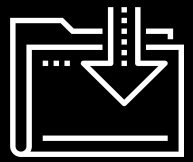
Functional Programming for Data Processing

Data Boot Camp

Lesson 14.2



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Class Objectives

By the end of this lesson, you will be able to:

Apply map and filter to parse data.

Create and use arrow functions to simplify code.

Use `filter()` and arrow functions to manipulate and filter datasets.

Use ES6 JavaScript methods.

Instructor Demonstration

Map Method & Arrow Functions

What is the `map()` method?

`map()` method

A method that:

- Creates a new array containing the results of calling a function for every element array.
- Calls the provided function in order, once for each element in an array.

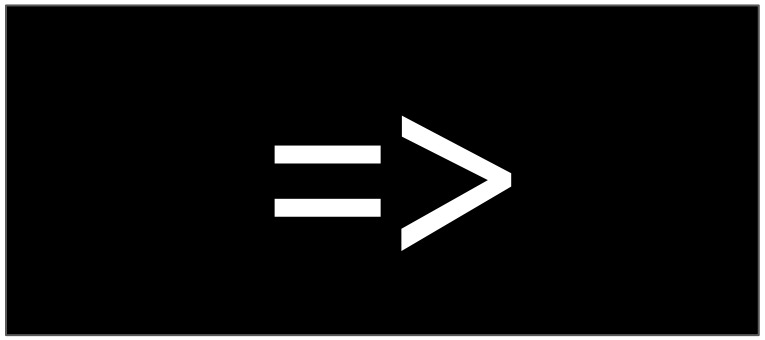
```
.map()
```

What are arrow functions?

Arrow Functions

The arrow function is an alternate way to write functions in JavaScript.

It was introduced in ES6 and allows us to write shorter functions syntax.



Questions?

Activity: Mapping

In this activity, you will create arrays using the `map` function of names with the given heroine dataset.

Suggested Time:

15 minutes

Time’s Up! Let’s Review.

Activity: Mapping with Plotly

In this activity, you will create an array of Greek god search results using the `map` function and Plotly with the data.js dataset.

Suggested Time:

15 minutes

Time’s Up! Let’s Review.

Instructor Demonstration

Filter Method

What is the `filter()` method?

The `filter()` method creates an array with elements that pass a test provided as a function.

Activity: Filtering

In this activity, you will create a custom function using `filter()` to return the players who made the team and count them.

Suggested Time:

15 Minutes

Time’s Up! Let’s Review.

Activity: Filtering with Plotly

In this activity, you will create an array of popular Roman god search results using the `filter` function with the data.js dataset.

Suggested Time:

15 minutes

Time's Up! Let's Review.

Break

Instructor Demonstration

Sorting and Slicing Methods

Activity: Sorting and Slicing

In this activity, you will sort, slice, and reverse the given array.

Suggested Time:

15 minutes

Time’s Up! Let’s Review.

Activity: Sorting and Slicing with Plotly

In this activity, you will sort, slice and reverse the data.js dataset to build a horizontal bar chart of the top 10 Greek god search results.

Suggested Time:

15 minutes

Time’s Up! Let’s Review.

Questions?

The End