

# COURSE ASSIGNMENTS



## INTERMEDIATE JAVASCRIPT

Online Short Course

MODULE

3

ITERATORS

# ASSIGNMENT 3.1



## INSTRUCTIONS

### (BE SMART - SAVE TIME: READ THESE VERY CAREFULLY!)

Make sure that you read and fully understood the assignment before completing it. Make sure you submit your assignment to the Assignment Page.

By submitting your assignment, you agree to the following plagiarism declaration:

### PLAGIARISM AND COPYING:

#### What is plagiarism?

Plagiarism is the use of other people's work without acknowledging the original work. Plagiarism is stealing somebody's intellectual property. It is pretending that someone else's work is your own. Committing plagiarism is unacceptable to Damelin, and will result in serious consequences for any person who is found guilty of plagiarism.

#### How is plagiarism committed?

1. Cutting and pasting from electronic sources or copying from books, magazines, journals, etc. content, diagrams, tables, phrases and quotations in one's own document.
2. Copying from the work of another student.
3. Allowing a fellow student to copy your work.
4. Using too many direct quotations.
5. Rewriting someone else's ideas in your own words (paraphrasing) without referencing the source.

#### How can you avoid plagiarism?

- If you use any secondary sources from books or the internet while completing your assignments, you need to reference the original source, otherwise, you will be accused of plagiarism and disciplinary action will be taken against you by the College.
- Carefully and accurately acknowledge the source that you used to obtain information and ideas from. As you read, write down the details of the sources. Supply a list of references at the end of your essay, report or assignment.
- You may talk to other people to help you work through the assignment, as long as the work you submit will be your own work and not an assignment completed for you by another person, or one that you have copied from the learning material.
- You are not allowed to copy verbatim (word-for-word) from the learning material and submit this as your own work. You are not allowed to use the same examples that have been used in the learning material and submit this as your own work.

# ASSIGNMENT 3.1

## GUIDELINES

1. There is one task in this assignment.
2. Once you have completed your assignment, save your application folder as a zip file and submit it to the Assignments page on the LMS.
3. You are required to do research in order to complete these tasks.

## GRADING PERCENTAGE

10% of final mark.

## INTRODUCTION

Let's say you are planning to build a platform that will help teachers manage their classes. To do that, one of the main requirements is being able to handle the students' data. For example, you will need to be able to retrieve all students' names, able to filter students by age, favourite subjects, etc.

Given a list of students, use the concepts we explored in this module to create the following functions which would be used in your platform.

## TASK 1

A function called `printEmails` which will log the email of each student.

## TASK 2

A function called `printFavouriteSubjects` which will log the favourite subject for the students.

## TASK 3

A function called `getStudentByCity` that returns the first student that has a hometown with the city passed as argument.

### Example:

```
getStudentByCity('Cape Town')
{
  name: 'Kaya',
  email: 'kaya@email.com',
  age: 16,
  favouriteSubjects: ['Mathematics', 'Physical Science', 'I.T.'],
  plannedCareer: 'Software Developer',
  hobbies: ['Bodybuilding', 'Soccer'],
  hometown: {
    city: 'Cape Town',
    province: 'Western Cape'
  }
}
```

**TASK 4**

A function called `getAllHobbies` that returns an array of all the unique values, this is, the values should not be repeated.

**TASK 5**

A function called `hasPlannedCareer` which returns true or false if any of the students has the career passed as argument.

```
hasPlannedCareer('Accountant')
```

```
    true
```

```
hasPlannedCareer('Pilot')
```

```
    false
```

**TASK 6**

A function called `getStudentByName` which returns the student that has the name passed as argument.

```
getStudentByName('Kaya')
```

```
{
  name: 'Kaya',
  email: 'kaya@email.com',
  age: 16,
  favouriteSubjects: ['Mathematics', 'Physical Science', 'I.T.'],
  plannedCareer: 'Software Developer',
  hobbies: ['Bodybuilding', 'Soccer'],
  hometown: {
    city: 'Cape Town',
    province: 'Western Cape'
  }
}
```

**Good luck!**