

**<22/SP-COP-2800-72035> Java Advanced**

**<Assignment 12-03>**

Document Version: 0.1

Version Date: July 1, 2022

Created By: David Duron

# Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Rationale |
| 0.1 | 2022 JUL 1 | David Duron | Submit Assignment |

# Document Purpose

The purpose of this document is to define the Main class and discuss how to implement and use it.

# Technical Specifications

## Purpose of Technical Implementation

The purpose of the Main class is create an array with 100 elements (99, including zero), the end-user is then prompted to enter the element of which to view the value. If the element is null or unoccupied, the user will receive “Out of bounds” message and the program will end. This class requires one entire library: util

## Technical Implementation Components

I created the Main class. The Main class begins by creating a Scanner object and an array object using the getArray() method, a method that we created that will display each element and value until 100 elements have been occupied. Then, the user is prompted to enter the element of which he/she wishes to view the value of. Using a try catch method, the user-entered element will be checked to determine if the value is occupied of unoccupied. If occupied, the user will see the value of the chosen element. If unoccupied, the user will receive an error message and the program will end.

**Properties**

1. None

**Methods**

1. getArray(): creates array with 100 elements (99, including 0), then a for loop is created where we fill each element with a random number. Then we println the element number and the value.

**Constructors**

The developer can create an instance of the Main class one way.

1. public static void main(String[] args)

## Technical Implementation Pseudocode

Import java’s entire util library;

Create scanner object

Create array variable using the getArray() method

Display message for user to enter which element of array to view

Determine if valid or not

If valid, display the value of the array element

If invalid, display error message

End