

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

**<Assignment 11-08>**

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# Document Version Control

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# 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 to have the end-user enter 10 integers that will be stored into an ArrayList. Once the user has entered 10 integers, the Main class will remove any duplicates that were entered by the user. This class requires two java APIs: Scanner and ArrayList

## Technical Implementation Components

I created the Main class. The Main class begins by creating a Scanner object and an ArrayList object. Then, we begin to ask the user to enter 10 integers using a for loop. Then, we use our removeDuplicate method to iterate through each element in the ArrayList and determine if the entered integer equals the element, if so, the stored element is deleted. Once this method is complete, we display the distinct integers.

**Properties**

1. None

**Methods**

1. removeDuplicates(ArrayList<Integer> List): this creates a nested for loop with a nested if statement. The first for loop is to ensure that we iterate through each element that isn’t null. The second for loop ensures that when we iterate through the element and it’s not null, we compare it using our nested if statement and if the stored element equals the inputted integer, we use the ArrayList remove method to remove it from the ArrayList.

**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 scanner api

Import java’s ArrayList api

Create instance of the Main class using the first type of constructor

Create scanner object

Create ArrayList object

Tell user to enter 10 integers

Determine if any of the entered numbers are duplicates and remove them

Display the integers that are not duplicates

End