Code Review

Best practices, common errors, optimal solutions, and clean code.

Week 3

Agenda

01 GitHub Repo

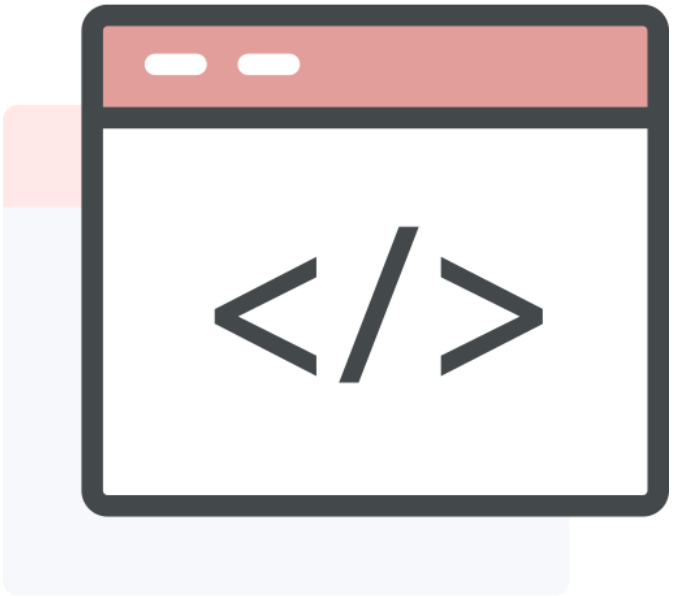
02 Project Structure

03 Tasks Review

04 Questions

GitHub Repo

Project Structure



Code Review

01

```java
public class FirstTask {

    public static void main(String[] args) {
        findSpecificNumberInArrayAndPrintPositions(new int[]{1, 2, 3, 4, 5, 6, 7, 8, 9}, 9);
    }

    static  void findSpecificNumberInArrayAndPrintPositions(int[] numbers, int number) {
        for (int i = 0; i < numbers.length; i++) {
            if (numbers[i] == number) {
                if (i < 5) {
                    continue;
                } else {
                    System.out.println(i);
                    break;
                }
            }
        }
    }
}
```

02

```
// in txt file
public class Main {
    public static void main(String[] args) {

        Scanner in=new Scanner (System.in);
        int n=in.nextInt();
        int a[]=new int[n];

        for(int i=0;i<a.length;i++){
            a[i]= in.nextInt();
        }

        int number =in.nextInt();

        for(int i=0;i<n;i++){
            if(a[i]==number){
                if(i+1<5){
                    continue;
                }
                else{
                    System.out.println(number+" "+(i+1));

                    break;
                }
            }
        }

    }
}
```

03

```
for(int i =0; i < arr.length; i++) {
    if(arr[i] == target && i > 4){
        position = i;
        break;
    } else {
        continue;
    }
}
```

04

```
int position = -1; // Position of the first occurrence

    for (int i = 0; i < numbers.length; i++) {
        if (numbers[i] == target) {
            position = i;
            break;
        }
    }

    if (position < 5) {
        position = -1; // Reset position if it's less than 5
        for (int i = 5; i < numbers.length; i++) {
            if (numbers[i] == target) {
                position = i;
                break;
            }
        }
    }
```

06

```
for (int i = 0; i < 5; i++){
  for(int j = 5; j < arr.length; j++){
      if(arr[i] == arr[j]){
          System.out.println("number: " +  arr[i] + " Position of 1st occurrence: " + j);
          flag++;
      }
  }
}
```

07

```java
public class First_Occurrence {

    public static void main(String[] args) {

        int []myarr={1,2,3,4,5,1,2,3,4,5,1,2,3,4,5};
        System.out.println(first_occurrence(myarr,4));

    }

    static int first_occurrence(int []arr,int element) {
        int temp = -1;
        for(int i=0;i<arr.length;i++) {
            if ((arr[i]==element) && i>=5)
            {
                temp=i;
                break;
            }
        }
        return temp;
    }

}
```

08

```java
static int frsirtOccuranceArray( int[] arr , int find){

        int postion=0;

        for ( int i=0;i<arr.length;++i) {

            if(arr[i]==find && i>5){

                postion= i+1;
                break;

            }else if (arr[i]==find && i<5){
                postion= i+1;
                continue;

            }

        }
      return postion;
  }
```

09

```java
public class Main {
    public static void main(String[] args) {

        findNumberOccurrence(1);

    }

    public static void findNumberOccurrence(int x) {
        int[] array = {1, 5, 6, 7, 9, 3, 1, 2};   // x is number to search for

        int position;                             //Declare position

        for (int i = 0; i <= array.length; i++) {

            if (array[i] != x) {
                System.out.println("Number not found in the array");
                break;
            } else if (array[i] == x) {
                position = i;
                if (position < 5) {
                    System.out.println("Skip the first occurrence for     number:" + x);
                }

                // If the position of the first occurrence is less than 5, skip it and continue searching
                for (i = 5; i < array.length; i++) {
                    if (array[i] == x) {
                        position = i;

                        System.out.println("the occurrence for number: " + x + " is at position:" + position);
                    }               }
                break;           //Found the first occurrence, exit loop
            }
        }
    }


}
```

10

```
public static float avg(int sum, int length)
{
    float avg = ((float) sum/ (float) length);
    return avg;
}
```

11

```java
public class SecondTask {

    public static void main(String[] args) {
        int[] numbers = new int[]{1,2,3,4,1,12,54};
        int sum = Arrays.stream(numbers).sum();
        int average = sum / numbers.length;

        System.out.println("Sum: " + sum);
        System.out.println("Average: " + average);
    }

}
```

12

```java
public class SUM_AVERAGE {

    public static void main(String[] args) {
        int []myarr={1,2,3,4,5,1,2,3,4,5,1,2,3,4,5};
        sum_average(myarr);

    }

    static void sum_average(int [] arr)
    {
        int sum=0;
        double avg=0;

        for (int i=0;i<arr.length;i++)
        {
            sum+=arr[i];
        }
        avg=(double)sum/ arr.length;
        System.out.println("sum= "+ sum +" & average= "+avg);
    }
}
```

13

```java
public static double avg(long summ, int sizeOfArr){
    return summ / sizeOfArr;
}
```

14

```java
public class Arrayoperation {

    public static void main(String[] args) {
        int[] numbers = {5, 10, 15, 20, 25};

        int sum = calculateSum(numbers);
        double average = calculateAverage(numbers);

        System.out.println("Sum of elements: " + sum);
        System.out.println("Average of elements: " + average);
    }
}
```

Q&A

Thank You