Java

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Screening Test

Completed on : 27-Nov-2024 12:13 PM

#	Question	Response	Marks
1	Have you fully completed your education and prepared to work	Yes	1
2	Have you taken any long term training coure on Java Technologies	Yes	1
3	Have you recently completed your education and training, and there no is major Gap (more then one year after the education)	Yes	1
4	Are you, willing to work on-premises (there is no work from home)	Yes	1
5	Can you write simple Java Programs on your own	Yes	1
6	Are you, available immediately to join us, if we hire you	Yes	1
7	Did you complete any kind of Developer Certification in Java	Yes	1
8	Do you know how to write unit testcases using Junit	Yes	1
9	if we hire you, will you be prepared to stay and work with us at least for two years	Yes	1
10	Will you be flexible any role in Software Engineering	Yes	1
11	Explain about yourself why you are the right candiate for this Job	video response	1

Overall Score : 11/11 (Promoted)

Coding Test

Completed on : 27-Nov-2024 12:18 PM

1. Write a simple EMI calculator Program
Marks Scored : 2

```
public class EMI_Calculator {

  // Method to calculate EMI
  public double calculateEMI(double principal, double annualRateOfInterest, int loanTenure) {
      if (principal < 0) {
          throw new IllegalArgumentException("Principal amount cannot be negative");
      }
      if (annualRateOfInterest < 0) {
          throw new IllegalArgumentException("Interest rate cannot be negative");
      }
      if (loanTenure <= 0) {
          throw new ArithmeticException("Loan tenure cannot be zero or negative");
      }

      // Monthly rate of interest
      double rateOfInterest = annualRateOfInterest / 12 / 100;
      int numberOfInstallments = loanTenure * 12;  // Total number of installments (months)

      // EMI formula
      double emi = (principal * rateOfInterest * Math.pow(1 + rateOfInterest, numberOfInstallments)) /
                   (Math.pow(1 + rateOfInterest, numberOfInstallments) - 1);
      return emi;
  }
}
```

2. write a program to Print the unique words of length at least 8 characters from the given content
Marks Scored : 4

```
import java.util.*;
import java.util.stream.Collectors;

public class WordProcessor {

  public static Set extractUniqueWords(String content) {
      if (content == null || content.isEmpty()) {
          return Collections.emptySet();
      }

      return Arrays.stream(content.split("\\W+")) // Split by non-word characters
              .filter(word -> word.length() >= 8) // Filter words with at least 8 characters
              .map(String::toLowerCase) // Convert to lowercase for uniqueness
              .collect(Collectors.toCollection(LinkedHashSet::new)); // Collect into a LinkedHashSet to maintain order
  }
}
```

3. Sample Implementation of Design Pattern Prototype
Marks Scored : 6

```
// PrototypeDemo.java
class Shape implements Cloneable {
    private String type;
    private int[] dimensions;

    public Shape(String type, int[] dimensions) {
        this.type = type;
        this.dimensions = dimensions;
    }

    public String getType() {
        return type;
    }

    public int[] getDimensions() {
        return dimensions;
    }

    @Override
    protected Shape clone() {
        try {
            Shape clone = (Shape) super.clone();
            clone.dimensions = this.dimensions.clone();
            return clone;
        } catch (CloneNotSupportedException e) {
            return null;
        }
    }
}

public class PrototypeDemo {
    public static void main(String[] args) {
        Shape original = new Shape("Rectangle", new int[]{10, 5});
        Shape cloned = original.clone();
        System.out.println("Original Shape: " + original.getType() + " with dimensions " + java.util.Arrays.toString(original.getDimensions()));
        System.out.println("Cloned Shape: " + cloned.getType() + " with dimensions " + java.util.Arrays.toString(cloned.getDimensions()));
    }
}
```

Overall Score : 12/12 (Promoted)

Interview

Interviewed on : 27-Nov-2024 08:30 AM **Interviewd by : Srinivas Gadepalli**

Interview Summary

Personal	3.33
OOPS	2.0
Java Programming	3.0
Java Technology	3.0
Average interview rating	2.83

Question wise rating:

Personal

what is the Necessity of Job	3
Tell Me About yourself	5
Career Plan	2
Average rating	3.33

OOPS

UML	2
Average rating	2.0

Java Programming

OOPS Implementation	3
Average rating	3.0

Java Technology

JVM	3
Average rating	3.0

Interviewer Remarks:

No Remarks

Interviewer's Feedback:

Interviewer	Decision	Notes
Srinivas Gadepalli	Hire	candidate has good communication .