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SRN-PES2UG19CS013

OOAD with JAVA

Hands on assignment-2

Code

import java.util.\*;

abstract class TestQuestion{

String question;

abstract void readQuestion();

abstract void tostring();

}

class ShortAnswer extends TestQuestion

{

int numlines=1;

void readQuestion()

{

//String str1;

Scanner input = new Scanner(System.in);

System.out.print("Enter Question:");

question= input.nextLine();

}

//void toString(String question)

//{

// System.out.println(question);

//}

void tostring()

{

System.out.println("Short Answer Question -"+question);

System.out.println("numlines -"+numlines);

}

}

class LongAnswer extends TestQuestion

{

int numlines;

void readQuestion()

{

Scanner input2 = new Scanner(System.in);

System.out.print("\nEnter Question:");

question= input2.nextLine();

// Scanner input3 = new Scanner(System.in);

System.out.print("\nEnter numlines:");

numlines=input2.nextInt();

}

void tostring()

{

System.out.println("Long Answer Question -"+question);

System.out.println("numlines -"+numlines);

}

}

class MCQ extends TestQuestion

{

int numchoices;

String choices[]=new String[10];

void readQuestion()

{

Scanner input2 = new Scanner(System.in);

System.out.print("\nEnter Question:");

question= input2.nextLine();

System.out.print("\nEnter numchoices:");

numchoices=input2.nextInt();

//String choices[]=new String[numchoices];

for (int i =0; i <numchoices+1;i++){

System.out.print("\nEnter choice:");

choices[i] = input2.nextLine();

}

}

void tostring()

{

System.out.println("MCQ-"+question);

System.out.println("numchoices -"+numchoices);

for (int i = 1; i <numchoices+1;i++){

System.out.println("Choice "+i+"-"+choices[i]);

}

}

}

class TQManager2

{

public static void main(String args[])

{

int numquestions;

int choice;

Scanner input3 = new Scanner(System.in);

System.out.print("\nEnter number of questions:");

numquestions = input3.nextInt();

TestQuestion[] testquestions = new TestQuestion[numquestions];

for (int i = 0; i <numquestions;i++){

System.out.print("\nEnter 1 for shortanswer,2 for longanswer,3 for mcq:");

choice = input3.nextInt();

switch(choice){

case 1:

ShortAnswer obj=new ShortAnswer();

obj.readQuestion();

testquestions[i]=obj;

break;

case 2:

LongAnswer obj2=new LongAnswer();

obj2.readQuestion();

testquestions[i]=obj2;

break;

case 3:

MCQ obj3=new MCQ();

obj3.readQuestion();

testquestions[i]=obj3;

break;

default :

System.out.println("This is not a valid Menu Option! Please Select Another");

break;

}

}

for (int i = 0; i <numquestions;i++){

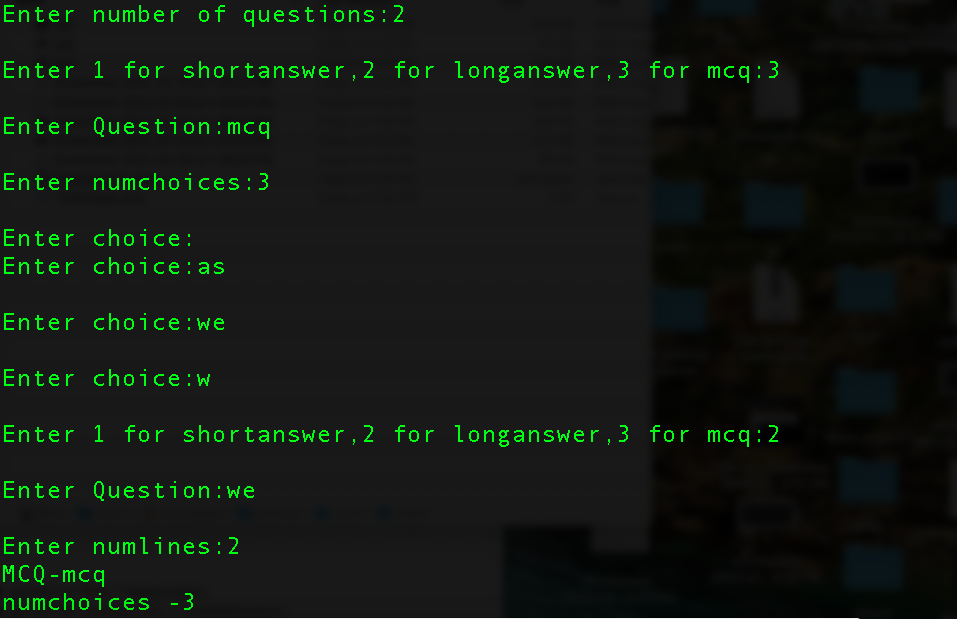
testquestions[i].tostring();

}

}

}

Output



A screenshot of a computer

Description automatically generated with medium confidence