JAVA WEEK-2

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SECTION: A

CODE SS: -

import java.util.Scanner;

public class TQManager

{

public static void main(String[] args) {

Scanner s\_obj = new Scanner(System.in);

System.out.print("Enter the number of questions: ");

int numquest = s\_obj.nextInt();

TestQuestion[] q\_paper = new TestQuestion[numquest];

int i=0,opt;

String call;

while(i<numquest)

{

System.out.print("\nEnter 1 for Short Answer, 2 for Long Answer, 3 for MCQ: ");

opt=s\_obj.nextInt();

switch(opt){

case 1: q\_paper[i]=new ShortAnswer();

q\_paper[i].readQuestion();

i++;

break;

case 2: q\_paper[i]=new LongAnswer();

q\_paper[i].readQuestion();

i++;

break;

case 3: q\_paper[i]=new MCQ();

q\_paper[i].readQuestion();

i++;

break;

default: System.out.println("Invalid option, choose again");

}

}

System.out.println("\nQuestion Paper:-");

for(int j=0;j<numquest;j++)

{

call=q\_paper[j].toString();

}

}

}

abstract class TestQuestion

{

String question;

abstract void readQuestion();

}

class ShortAnswer extends TestQuestion

{

int numLines;

void readQuestion()

{

numLines=1;

Scanner s\_obj1=new Scanner(System.in);

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

question=s\_obj1.nextLine();

}

public String toString()

{

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

System.out.println("Number of lines - "+numLines);

return "Success";

}

}

class LongAnswer extends TestQuestion

{

int numLines;

void readQuestion()

{

Scanner s\_obj2=new Scanner(System.in);

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

question=s\_obj2.nextLine();

System.out.print("Enter number of lines: ");

numLines=s\_obj2.nextInt();

}

public String toString()

{

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

System.out.println("Number of lines - "+numLines);

return "Success";

}

}

class MCQ extends TestQuestion

{

int numChoices;

String[] choices;

void readQuestion()

{

Scanner s\_obj3=new Scanner(System.in);

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

question=s\_obj3.nextLine();

System.out.print("Enter number of choices: ");

numChoices=s\_obj3.nextInt();

s\_obj3.nextLine(); //as the scanner takes only the integer from the input line but leaves \n

choices = new String[numChoices];

System.out.println("Enter the choices: ");

for(int i=0;i<numChoices;i++)

{

System.out.print("Choice "+(i+1)+":");

choices[i]=s\_obj3.nextLine();

}

}

public String toString()

{

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

System.out.println("Number of choices - "+numChoices);

System.out.println("Choices - ");

for(int i=0;i<numChoices;i++)

{

System.out.println(choices[i]);

}

return "Success";

}

}

OUTPUT SS: -

Text

Description automatically generated