RAMCO INSTITUTE OF TECHNOLOGY

Rajapalayam

Department of Computer Science and Engineering

Academic Year: 2020 - 2021 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. Computer Science and Engineering

Course Code & Title: CS8494 & Sofware Engineering

Name of the Faculty member: Dr.I.Gethzi Ahila Poornima, AP/CSE

Date & Venue: 10.04.2021 & Online Mode

Innovative Practice: Minute Paper

Topic: Object-Oriented Design Concept

Type of Learning:

Active Learning

Learning Objectives:

O1: To make the students to remember the Object Oriented Paradigm.

Description:

Minute paper is a short writing activity within the classroom in which students generate answers in response to questions asked by the teacher regarding the concepts taught in class or previously studied concepts which would be useful to concept which they are going to be taught in the class. These questions stimulate a student to reflect on the lesson taught and learned and provides feedback regarding their understanding which helps the teachers to plan ahead for the next class. Its major advantage is that it provides rapid feedback on whether the instructor's main idea and what the students perceived as the main idea are the same.

Uses of Minute Paper:

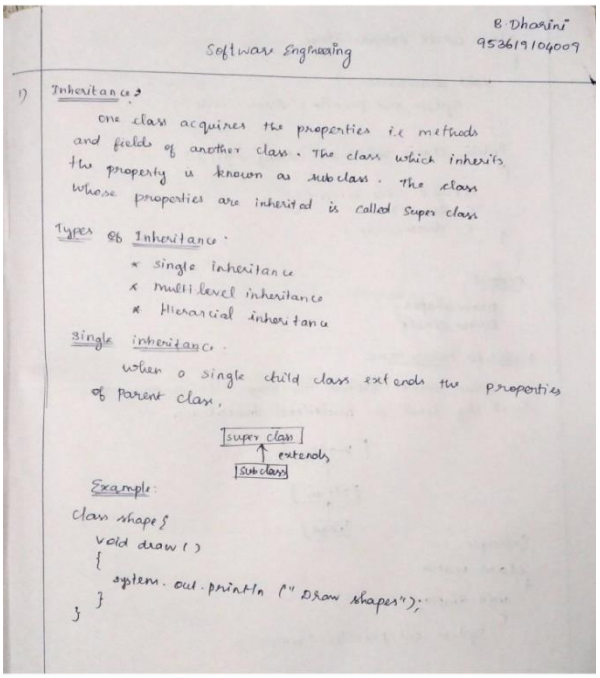
- This activity provides a conceptual bridge between successive class periods.
- Improve the quality of class discussion by having students write briefly about a concept or issue before they begin discussing it.

Justification for chosen the topic:

Object oriented concept is basic and an important topic which needs to learn object oriented design in software engineering. Since the OO paradigm is widely used in the modern software engineering process, it is important for the students to be clear in OO paradigm. This activity makes the students to get a comprehensive knowledge in this Object oriented concepts.

Implementation of Minute Paper:

At the end of the class, students were asked to write about the topic discussed in the class. The students expressed the understood content and the content which were not clear in that particular topic. The students also write about the specific topic which is needed to be discussed or clarified in the further classes. This activity shows whether the students can able to understand the specific topic and their involvement the particular class.



B. Dharini
953619104009

Software Engineering

1) Inheritance:

one class acquires the properties i.e methods and fields of another class. The class which inherits the property is known as subclass. The class whose properties are inherited is called super class

Types of Inheritance:

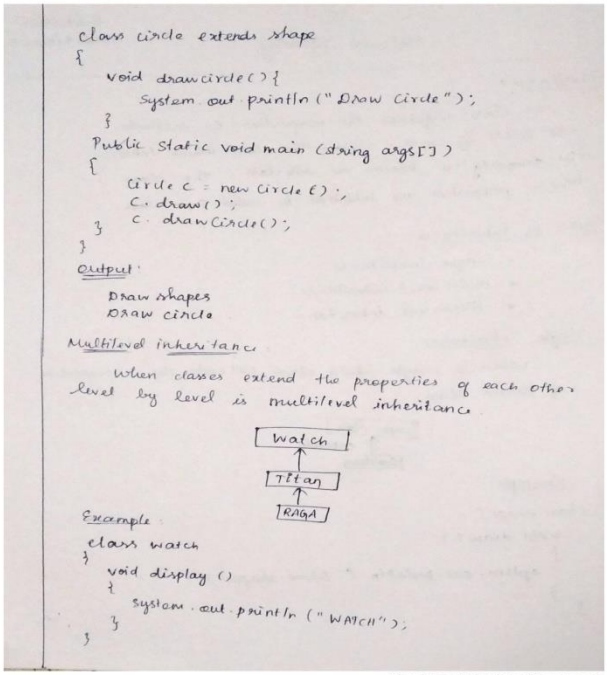
* single inheritance
* multilevel inheritance
* Hierarcial inheritance

Single inheritance:

when a single child class extends the properties of parent class.

Example:

```
class shape{
  void draw()
  {
    system.out.println("Draw shapes");
  }
}
```



```
class circle extends shape
{
   void drawcircle(){
      System.out.println("Draw Circle");
   }
  Public static void main (String args[])
  {
     Circle c = new Circle();
     c.draw();
     c.drawCircle();
  }
}
```

Output:

Draw shapes
Draw circle

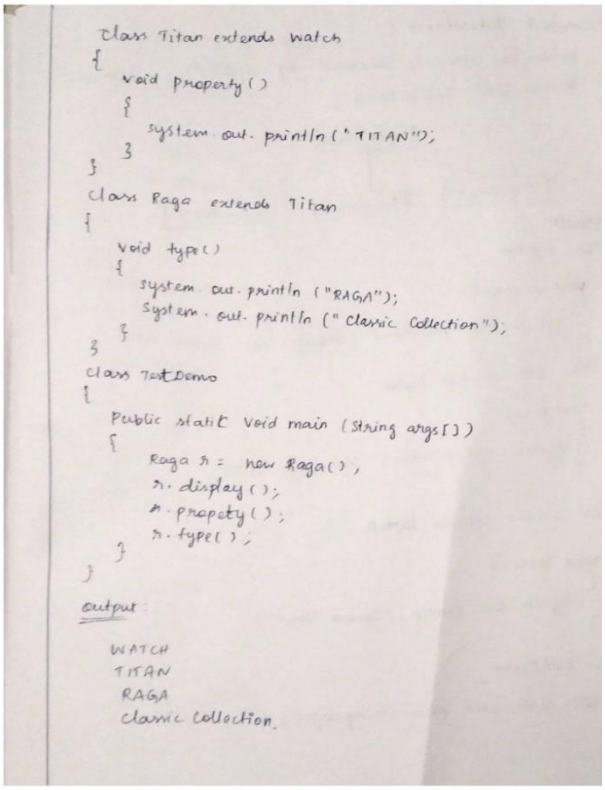
Multilevel inheritance:

when classes extend the properties of each other level by level is multilevel inheritance.

Example:

```
class watch
{
  void display()
  {
    System.out.println("WATCH");
  }
}
```

Scanned by TapScanner

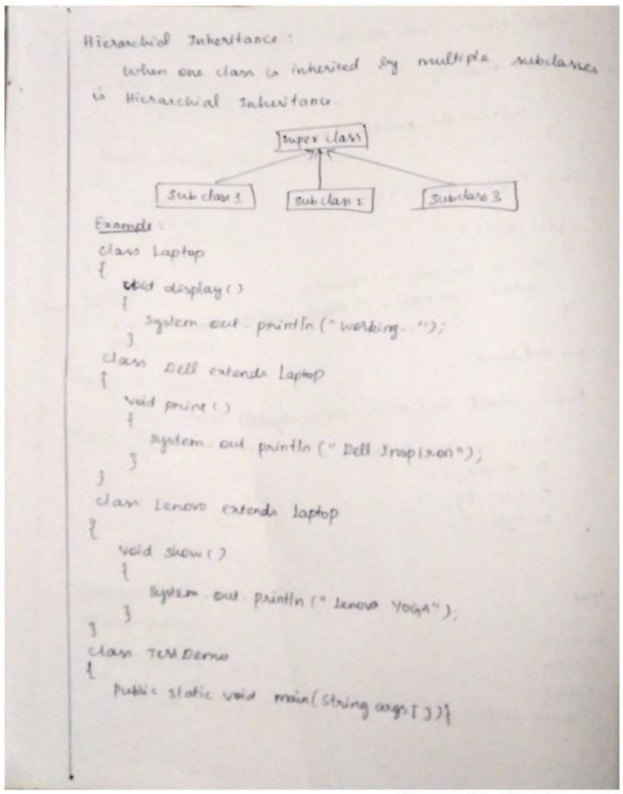


```
class Titan extends watch
{
   void property()
   {
     system.out.println("TITAN");
   }
}
class Raga extends Titan
{
   void type()
   {
     System.out.println("RAGA");
     System.out.println("Classic Collection");
   }
}
class TestDemo
{
   Public static void main (String args[])
   {
      Raga r = new Raga();
      r.display();
      r.property();
      r.type();
   }
}
```

Output:

WATCH
TITAN
RAGA
Classic Collection

Scanned by TapScanner



Hierarchical Inheritance:

when one class is inherited by multiple subclasses is Hierarchial Inheritance

Example:

```
class Laptop
{
   void display()
   {
     System.out.println("working...");
   }
class Dell extends Laptop
{
   void print()
   {
     System.out.println("Dell Inspiron");
   }
}
class Lenovo extends laptop
{
   void show()
   {
     System.out.println("Lenovo YOGA");
   }
}
class TestDemo
{
   Public static void main(String args[])}
```

Scanned by TapScanner

Outcomes:

- Use of minute papers in the classroom increases attentiveness in the class and also improves the student's skill of writing and critical analysis of the topics.
- This activity reflects the understanding and involvement of the students in the particular topic.

Relevance to POs

Objective	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Outcome	2	2	3	1								

Reflective Report:

Identified Problems

- Few students hesitated to present the concepts doubting about their correctness in that concept.

Initiatives to address the problems

- Make the students to know the importance of sharing their views and activeness in the class room.

Post-implementation

- Students actively participated in this activity.
- From this activity, the understanding levels of the students were identified and the concept was then explained in detail in the class.

Faculty In-charge **HOD-CSE**

Dr. I.Gethzi Ahila Poornima, AP/CSE Dr.K.Vijayalakshmi