Active Learning method: Mind Mapping with images

FEATURES OF OOPS

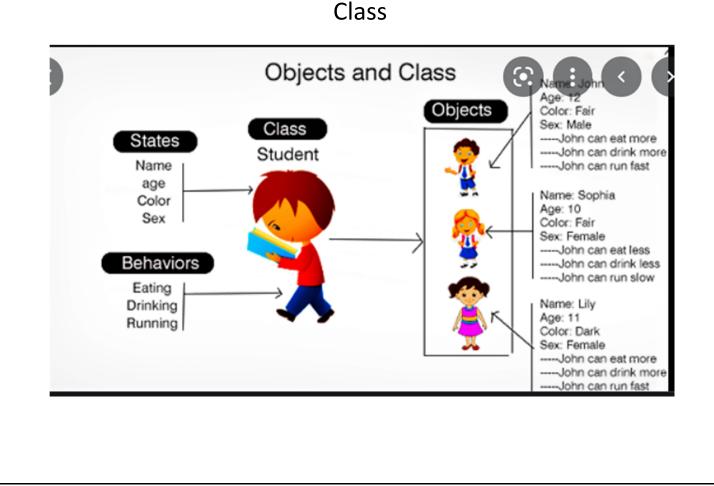
DEPARTMENT OF INFORMATION TECHNOLOGY::VRSEC REPORT ON A CTIVE LEARNING METHOD 20IT3308– OBJECT ORIENTED PROGRAMMING A.Y.2023-24

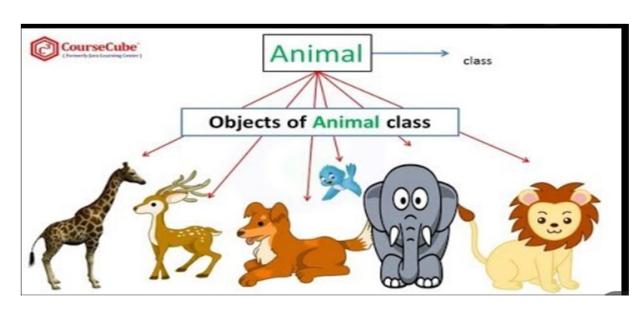
Name of the Topics: Cross Word Puzzle. Target Audience: Students of II/IV B.Tech III rd Semester Sec A Date of activityconducted: 02-08- 2023

No.ofstudentsparticipated:64

Name of the Faculty: T.Lakshmi Surekha ,Assistant Professor Objective of the activity:

- Understand the concepts of Object Oriented Programming.
- To prepare the students for short answer questions.
- To make the students attain good marks in exam. To make the students think logically





<u>Class</u>: The building block of C++ that leads to Object-Oriented programming is a Class. It is a user-defined data type, which holds its own data members and member functions, which can be accessed and used by creating an instance of that class. A class is like a blueprint for an object

Object: An Object is an identifiable entity with some characteristics and behaviour. An Object is an instance of a Class. When a class is defined, no memory is allocated but when it is instantiated (i.e. an object is created) memory is allocated.

Encapsulation

Binding (or wrapping) code and data together into a single unit are known as encapsulation.



Data Abstraction means hiding the background details and provide only essential details.

Polymorphism

<u>Polymorphism</u>: The word polymorphism means having many forms. In simple words, we can define polymorphism as the ability of a message to be displayed in more than one form

What is polymorphism?

It is used to one object behaving as multiple forms. Or polymorphism means one name many forms.

Real Time Example:

1. A person behaves as an employee in the office, that the same person behaves as a father in the house, that the same person behaves as a customer in the shopping malls.



Description: a person is one object. It behaves as an employee in office as well as the father in the house. So the concept is here one name many forms.

Type of polymorphism

- Compile time polymorphism / Static polymorphism
- Run time polymorphism / Dynamic polymorphism

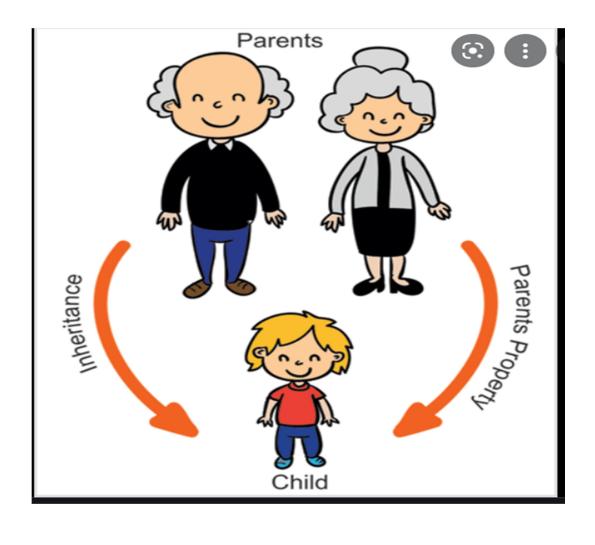
Inheritance

Inheritance:

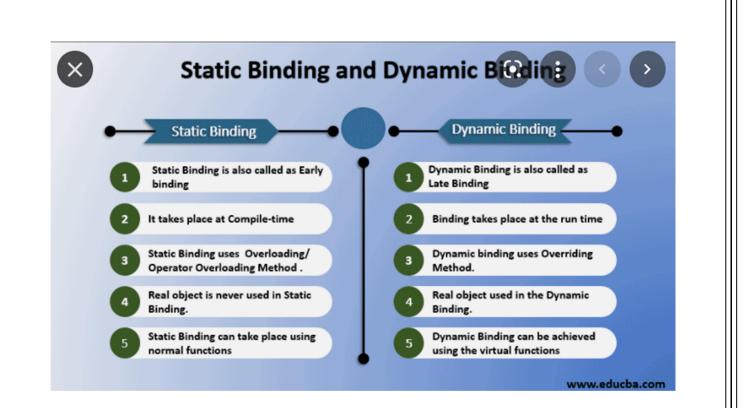
The ability to inherit the properties of one class to another, or inherit the properties from a base class to an inherited class is known as the concept of Inheritance.

With the help of inheritance, we can use the data members and member functions of a class to another.

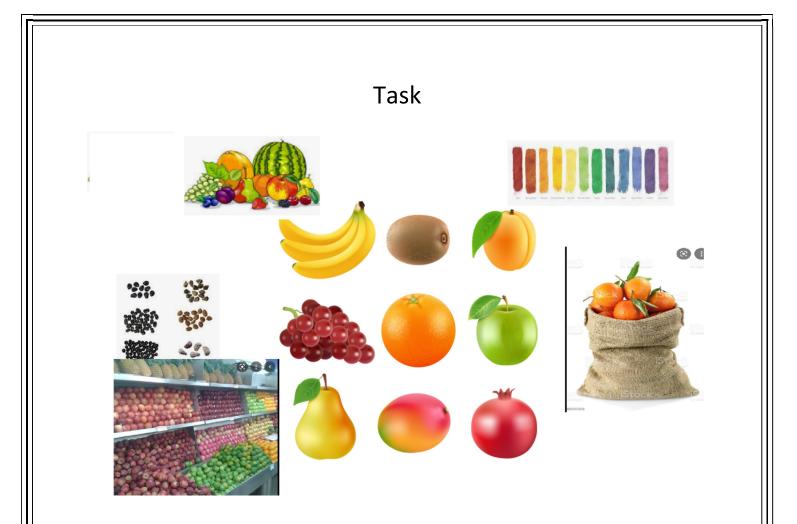
- It enables a class to acquire or get the properties from another class
- It makes code reusable
- It makes easier to add new features or methods to a class
- It provides an overriding feature which allows a child class to have a specific implementation of a method defined in the parent class



Dynamic Binding Dynamic Binding: Dynamic Binding which is also known as Late binding or run-time binding, is a process of executing the part of the code at runtime. **Static Biding** SUPPOSE YOU ARE A CHEF AND YOU HAVE A RESTRAURANT EVERYDAY YOU COOK THE DISHES WHICH ARE IN YOUR MENU CARD SO YOU KNOW, HOW TO MAKE THOSE DISHES. ONE DAY, YOU PARTICIPATE IN A COMPETITION LIKE MASTERCHEE MasterChef NOW HERE YOU HAVE TO THINK ... MAKE NEW DISHES... THIS IS SIMILAR TO LATE BINDING Dyanamic binding







Identify the class name ,objects,data members and member functions