



VIGNAN'S NIRULA

INSTITUTE OF TECHNOLOGY & SCIENCE FOR WOMEN

(Approved by AICTE, New Delhi & Affiliated to JNTU Kakinada)
Vignans Avenue, Peda Palakaluru, Guntur - 522009

Department of Information Technology

Course Information

- **Faculty Name:** Dr. V.Pavani
- **Course Name:** Java Programming
- **Class:** II B.Tech II Semester
- **Academic Year:** 2023-2024
- **Activity Name:** Mind Mapping
- **Topic :** Types of Inheritance

Objective of the Activity:

The objective of the Mind Mapping activity was to provide students with a visual and structured learning experience, enabling them to effectively explore and organize the different types of inheritance in Object-Oriented Programming (OOP). Through this activity, students enhanced their ability to connect and differentiate concepts such as single, multiple, multilevel, hierarchical, and hybrid inheritance. The exercise fostered critical thinking, creativity, and a deeper understanding of the relationships between various inheritance types, helping students to grasp the core principles of reusability and the hierarchical structure of classes in OOP.

Pre-Class Preparation:

Students are asked to individually review the concept of inheritance in Java, focusing on how it can be used to create hierarchical relationships between classes and to promote code reuse.

In-Class Mind Mapping:

- Students are divided into small groups, each assigned a different scenario that requires designing a class hierarchy using inheritance.
- Each group creates a mind map, starting with the base class at the center and branching out to derived classes, showing the relationships, shared attributes, and methods.
- Students use the mind map to explore different inheritance strategies, such as single inheritance, multilevel inheritance, and hierarchical inheritance.

Group Discussion and Refinement:

- After the initial mind maps are created, groups discuss and refine their maps based on peer input.
- Each group explains their thought process, the design choices they made, and how inheritance was used to promote code reusability and maintainability.

Assessment Criteria:

- Conceptual clarity-10 M
- Creativity-10 M
- Presentation Skills-10 M

Instructor Feedback: Overall, the class showed a commendable performance in the Mind Mapping activity, with most pairs demonstrating solid conceptual clarity, creativity, and presentation skills. The average marks across the class ranged between 20-21 out of 30, indicating a good understanding of the topic "Types of Inheritance."

Images / Screenshot of the practice

Mind Mapping Activity	Screenshot of the practice
<p>Activity on Mind Map on the Topic Types of Inheritance by 12NN1A1236</p>	
<p>Activity on Mind Map on the Topic Types of Inheritance by 12NN1A12C8</p>	

Benefits of practice: As an instructor, I found that the Mind Mapping activity:

1. **Enhances Conceptual Understanding:** It allows students to visually break down and connect complex topics, such as types of inheritance, which leads to a deeper comprehension of the subject matter.
2. **Fosters Creativity:** By encouraging students to represent their ideas through mind maps, it stimulates creative thinking and helps them explore different perspectives and real-world applications of inheritance in OOP.
3. **Promotes Collaborative Learning:** The pair-based format of the activity helps students share and refine their ideas, improving teamwork skills and enhancing their ability to communicate technical concepts effectively.

V. Praveen
Signature of Faculty Member

KVA/Ranote
Head of the Department

ASSESSMENT FORM

Batch No	Roll Number	Student Name	Conceptual clarity(10 M)	Creativity (10 M)	Presentation Skills(10 M)	Total (30 M)
1	22NN1A12A8	Singamsetty Srilatha	8	9	7	24
	22NN1A1263	Attuluri Udaya Lakshmi	8	7	6	21
	22NN1A1265	Boyapati Triveni	6	6	8	20
	22NN1A1299	Poliseti Madhavi	8	7	8	23
	22NN1A1262	Anumula Abhinayasri	8	8	9	25
2	22NN1A1274	Jaladi Khyathi Sai Alekhya	7	6	5	18
	22NN1A1279	Kodavatikanti Abhivarshini	5	6	6	17
	22NN1A1292	Nalluri Gowthami	7	7	8	22
	22NN1A1268	Chavali Vasudha	9	8	8	25
3	22NN1A12B3	Thota Sravya Vardhani	7	8	6	21
	22NN1A1286	Marlapati Hema Sai	6	8	6	20
	22NN1A12B8	Vuyyuru Lakshmi Sri Latha	7	8	8	23
	22NN1A12A2	Pulikonda Saranya	6	5	5	16
4	22NN1A12A7	Shaik Anusha	9	8	7	24
	22NN1A12A5	Ravela Rajya Lakshmi	6	7	8	21
	22NN1A1282	Kota Mounika	7	6	6	19
	22NN1A12A9	Somineni Tejaswini	8	7	7	22
5	22NN1A1278	Kanaparthi Anoohya	6	6	8	20
	22NN1A1283	Kunchala Sai Vighnatha	8	8	7	23
	22NN1A1287	Midde Bhuvana	7	8	6	21
	22NN1A1261	Ala Navya Sri	6	6	5	17
6	22NN1A12B2	Thota Naga Sindhu	7	7	8	22
	22NN1A12C0	Yampati Keerthi	8	9	7	24
	22NN1A12B9	Yadala Venkata Jyothi	6	8	6	20
	22NN1A12B4	Thotakura Gnana Prasuna	8	7	6	21
7	22NN1A1290	Mullamuri Jyoshna Kalyani	6	7	6	19
	22NN1A1266	Bysani Naga Venkata Lakshmi Bhanusri	6	5	5	16
	22NN1A12B7	Uppu Devi	7	8	7	22
	22NN1A1269	Dasari Vyshnavi	6	7	5	18
	22NN1A1276	Kakumanu Pavani Venkata Amrutha	8	8	9	25
	22NN1A1264	Bathula Ramya	8	7	8	23
	22NN1A1284	Lankapalli Bhargavi	8	7	6	21

9	22NN1A1291	Prashmitha Mulugu	7	8	8	23
	22NN1A1297	Perni Mythri	6	7	8	21
	22NN1A1275	Jettiboena Hemalatha	8	6	6	20
	22NN1A1289	Moparthy Pallavi	8	7	7	22
	22NN1A12B5	Tumma Venkata Deekshitha	9	8	7	24
10	22NN1A1288	Mohammad Musarrat Nazia	5	6	5	16
	22NN1A1270	Dondapati Rachana	7	8	6	21
	22NN1A1273	Gurrapusala Archana	6	6	7	19
	22NN1A1271	Eluri Vyshnavi	8	8	7	23
11	22NN1A12A3	Pulivarthi Srividya	7	8	7	22
	22NN1A1294	Nidamanuri Kavya	8	7	8	23
	22NN1A1293	Name Vyshnavi	8	6	7	21
	22NN1A12A4	Ramineni Ushma Sri	8	9	7	24
12	22NN1A1296	Pentareddy Divya	6	8	6	20
	22NN1A1277	Kambala Krishna Veni	7	8	7	22
	22NN1A12A1	Potu Anitha	9	8	8	25
	22NN1A1272	Gonuguntla Anusha	7	6	6	19
13	22NN1A1267	Chandarlapati Likitha	8	7	6	21
	22NN1A12B1	Thopuri Deepthi	7	8	8	23
	22NN1A1280	Kolisetty Sathvika	7	7	8	22
	22NN1A12B6	Tummalagodu Sania Anju	7	8	5	20
14	22NN1A12A6	Rishitha Bhavanari	8	9	7	24
	22NN1A1281	Kosanam Durga	8	7	7	22
	22NN1A1295	Panuganti Venkata Siva Jhansi	7	6	8	21
	22NN1A1298	Pinnelli Jahnvi	6	5	6	17
15	22NN1A12A0	Pothabathhula Sireesha	7	6	5	18
	23NN5A1201	Ravi Sri Tulasi	5	8	7	20
	22NN1A12B0	Tata Venkata Naga Sai Prasanna	8	8	7	23
	22NN1A1285	Maddukuri Pooja Naga Sai Lakshmi	8	8	9	25

V. Pavan
Signature of the Faculty