



Sandip Institute of Technology and Research Centre

At & Po – Mahirawani, Trimbak Road, Tal & Dist. – Nashik

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(Approved by-AICTE, New Delhi, & Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University (Formerly Pune University), Pune.

Accredited with “A” grade by NAAC With CGPA Score of 3.11



SANDIP
FOUNDATION



Activity Report

Of

Five Days Workshop

On

“Object Oriented Programming”

(16th October to 20th October 2023)

Organized by

Department of Information Technology

Sandip Institute of Technology

and Research Centre

Name of Program: Five Days Hands on Workshop on “Object Oriented Programming”

Date: 16th October to 20th October 2023

Resource Person: Mr. Hitesh Chajjed (Technical trainer, Smart Infotek, Nashik)

Event Co-ordinator: Prof. Savita Mogare (Asst. Professor, SITRC)

Participants: SE Students (IT Department)

Venue: Seminar Hall (C Building)

Aim:

The aim of this workshop organized for students is to provide the foundations of the practical implementation and usage of Object Oriented Programming. This workshop introduces fundamental concepts & recent advances of Object Oriented Programming which in turn help students to apply it in practice and further load the foundation to a deeper study in this area.

Objectives:

- 1) Apply concepts of object oriented paradigm.
- 2) Design and implement models for real life problems by using object oriented programming.
- 3) Develop object oriented programming skills.

The objective of this workshop is to provide opportunity for students to enrich their knowledge in the area of Object Oriented Programming. This workshop will provide a vibrant opportunity for students in the recruitment phase and to enhance their programming skills. This course is based on hands-on exercises and is focused on developing Programming and Logical skills.

Objective: Day wise

Day 1:	Introduction OOP : Software Evolution, Introduction to Procedural, Modular, Object-Oriented and Generic Programming Techniques, Limitations of Procedural Programming, Need of Object-Oriented Programming, Fundamentals of Object-Oriented Programming: Objects, Classes, Data Members, Methods, Messages, Data Encapsulation, Data Abstraction and Information Hiding, Inheritance, Polymorphism, Static and Dynamic Binding, Message Passing
Day2:	Class: Creating a Class, Visibility/Access Modifiers, Encapsulation, Methods: Adding a Method to Class, Returning a Value, Adding a Method That Takes Parameters, The 'this' Keyword, Method Overloading, Object Creation, Using Object as a Parameters, Returning Object, Array of Objects, Memory Allocation: 'new', Memory Recovery: 'delete', Static Data Members, Static Methods, Forward Declaration, Class as Abstract Data Types (ADTs), Classes as Objects.
Day 3:	Constructors: Introduction, Use of Constructor, Characteristics of Constructors, Types of Constructor, Constructor Overloading, Constructor with Default Arguments, Symbolic Constants, Garbage Collection: Destructors and Finalizers Inheritance: Introduction, Need of Inheritance, Types of Inheritance, Benefits of Inheritance, Cost of Inheritance, Constructors in derived Classes, Method Overriding, Abstract Classes and Interfaces. Polymorphism and Software Reuse: Introduction, Types of Polymorphism (Compile Time and Run Time Polymorphism), Mechanisms for Software Reuse, Efficiency and Polymorphism
Day 4:	exception: Errors, Types of Errors, Exception and its Types, Exception-Handling Fundamentals, Uncaught Exception, Using try and Catch, Multiple Catch Clauses, Nested Try Statements, User Define Exception using Throw. Generics: What are Generics? Introduction to Language Specific Collection Interface: List Interface and Set Interface, Collection Classes: Array List Class and Linked List Class
Day 5:	File Handling: Introduction, Concepts of Stream, Stream Classes, Byte Stream Classes, Character Stream, Classes, Using Stream, and Other Useful I/O Classes, Using the File Class, Input/output Exceptions, Creation of Files, Reading/Writing Character, Reading/Writing Bytes, Handling Primitive Data Types, Concatenating and Buffering Files, Random Access Files. Design Patterns: Introduction, Types of Design Patterns, Adapter, Singleton, Iterator

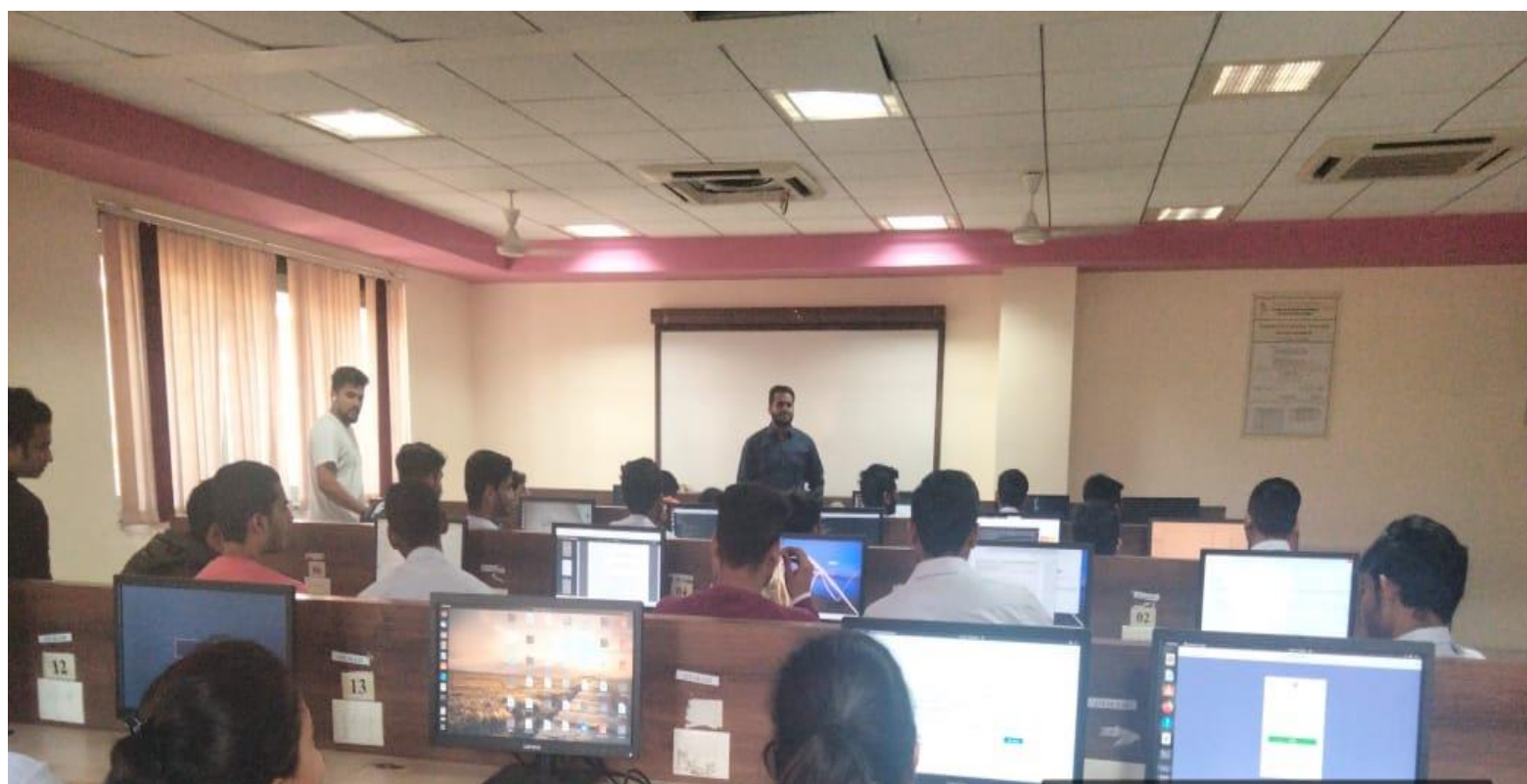
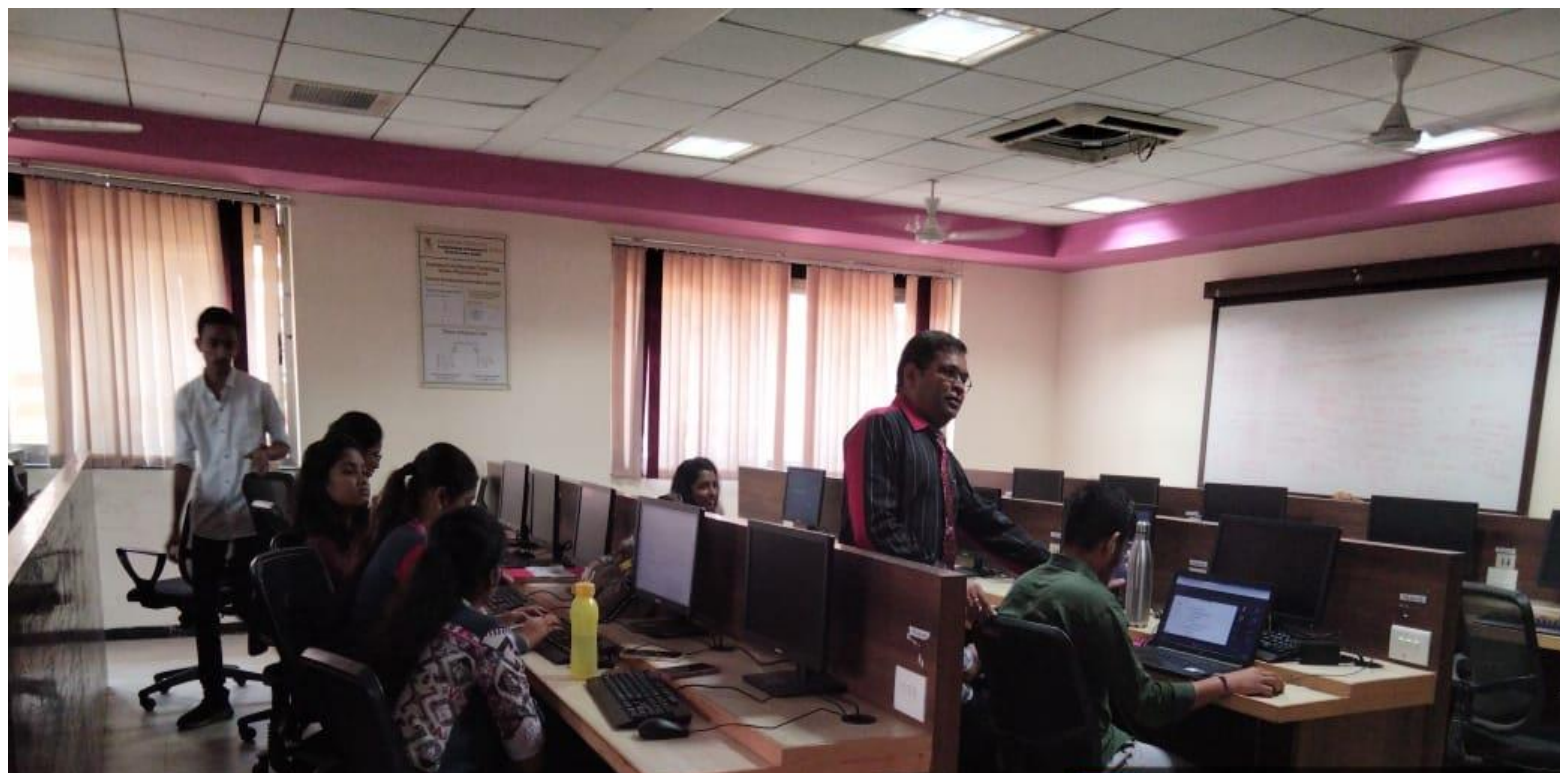
Outcomes:

- 1) Differentiated various programming paradigms and apply basic concepts of OOP.
- 2) Identified classes, objects, methods, and handle object creation, initialization, and destruction to model real-world problems.
- 3) Identified relationship among objects using inheritance and polymorphism.
- 4) Handled different types of exceptions and perform generic programming.
- 5) Used file handling for real world application.
- 6) Applied appropriate design patterns to provide object-oriented solutions.

Feedback from Students:

In this workshop the students were introduced to topics in Object Oriented Programming. All the students really appreciated the contents that were discussed, and they realized that interactions like these can help them improve their learning. Students showed keen interest in attending more workshops like this in future.

Event Photographs:



Summary report of workshop on “Object Oriented Programming”

To introduce fundamental and advanced concepts & recent development in Object Oriented Programming which helps students to apply practically, department of Information Technology Of Sandip Foundation’s Sandip Institute Of Technology & Research Centre has organized a five days technical workshop on “Object Oriented programming” from 16th Oct 2023 To 20th Oct 2023. This workshop was started with felicitation of Mr. Hitesh Chajjed. To attend this, many students from Information Technology department were present.

Student's feedback

Div:- -

Roll No:- 70

Sr. No	Parameter	Please Mark yours choice in block				
		1	2	3	4	5(Excellent)
1	Punctuality					✓
2	Expertise					✓
3	Clariaty of communication					✓
4	Problem Solving ability					✓
5	Co-ordination					✓
6	Understanding by the student					✓
7	Quality of learing material				✓	
8	Value addition from Course				✓	

Suggesation to Value Added Couce: none

Div:- -

Roll No:- 68

Sr. No	Parameter	Please Mark yours choice in block				
		1	2	3	4	5(Excellent)
1	Punctuality				✓	
2	Expertise					✓
3	Clariaty of communication					✓
4	Problem Solving ability					✓
5	Co-ordination				✓	
6	Understanding by the student					✓
7	Quality of learing material				✓	
8	Value addition from Course					✓

Suggesation to Value Added Couce: none

**Sandip Foundation's
Sandip Institute of Technology and
Research Technology, Nashik**

NAAC A Accredited

Certificate of Appreciation


This is to certify that,

Shruti Nathe

has participated and successfully completed Five Days workshop on
“**Object Oriented Programming**” organized by **Department Of
Information Technology, SITRC, Nashik**. The duration of programme
was from 16th OCT 2023 to 20th OCT 2023.




Prof. Abhay Gaidhani
HOD, IT dept., SITRC


Prof. (Dr.) M.M. Patil
Principal, SITRC, Nashik



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Workshop on OOP Basics

Organized by - IT dept.

Date - 16th to 20th oct 2023

Time - 10 am to 5 pm

Venue - C building seminar hall

Date: 10/10/2023

To,
Mr. Hitesh Chajjed
Smart InfoTech, Nashik

Subject – Invitation Letter for Object Oriented Programming Workshop.

Greetings from Sandip Foundation's Sandip Institute of Technology & Research Centre, Nashik.
We are pleased to invite you as an Expert for the workshop on “Object Oriented Programming” proposed on 16th OCT 2023 to 20th OCT 2023. Please accept the invitation and grace the session with your presence.



Thanks, and Regards,
Prof. Abhay Gaidhani
HOD – Information Technology Department
Sandip Institute of Technology and Research Centre,
Mahiravani, Nashik-422 213

Date: 20/10/2023

To,

Mr. Hitesh Chajjed,
Smart infotech, Nashik

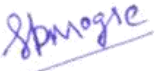
Subject: Letter of Appreciation

Dear Sir,

Thank you very much for delivering an informative and thought provoking lecture as a Guest Speaker on "Five Days Technical Workshop on Object Oriented Programming" held from 16th Oct to 20th Oct 2023 at Department of Information Technology, Sandip Institute of Technology and Research Centre, Nashik. It was really a splendid presentation which exposed students to field practices. All students appreciated and got benefited from your views on the subject. Looking forward for your co-operation for the promotion of professional education in future as well.



Thanks, and Regards,
Prof. Abhay Gaidhani
HOD – Information Technology Department
Sandip Institute of Technology and Research Centre,
Mahiravani, Nashik-422 213



Prof. Savita Mogare
(Event co-ordinator)



Prof. A.R. Gaidhani
(Head, Information Technology)



Dr. M. M. Patil
(Principal, SITRC)

