G M INSTITUTE OF TECHNOLOGY

Davangere, Karnataka.

DEPT. OF ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Cordially Invite you for the

Inaugural Function of

TWO DAY FDP
on
(23rd and 24th November 2022)

OBJECT ORIENTED PROGRAMMING WITH JAVA
LABORATORY- 21CSL35

23rd November at 9:30 AM

Chief Guest:

Dr. Shreedhara K.S.
Chairperson and Professor,
Dept. of CS&E, UBDTCE, Davangere

Dr. Nirmala C R
Professor & Head,
Dept. of CS&E, BIET, Davangere

Presided By:

Dr. Y Vijaya Kumar
Principal,
GMIT, Davangere

Asha K & Kavyashree B L Coordinators, Dept. of AI&ML GMIT, Davangere	**Keerthi Prasad G** Head, Dept. of AI&ML GMIT, Davangere

Venue : CIVIL Seminar Hall, GMIT

9. Aim: Introduce java Collections. Program: Write a program to perform string operations using ArrayList. Write functions for the following a. Append - add at end b. Insert — add at particular index c. Search d. List all string starts with given letter.

10. Aim: Exception handling in java, introduction to throwable class, throw, throws, finally. Program: Write a Java program to read two integers a and b. Compute a/b and print, when b is not zero. Raise an exception when b is equal to zero.

11. Aim: Introduce File operations in java. Program: Write a java program that reads a file name from the user, displays information about whether the file exists, whether the file is readable, or writable, the type of file and the length of the file in bytes.

12. Aim: Introduce java Applet, awt, swings. Programs: Develop an applet that displays a simple message in center of the screen. Develop a simple calculator using Swings.

Eligible Participants :

Faculty Members of Engineering, BCA, MCA.&Diploma

Note: Bring your own laptop

* Laboratory materials are provided for every participants

Two Day FDP on
OBJECT ORIENTED PROGRAMMING WITH JAVA LABORATORY- 21CSL35

Name of the participant:..

....

Dept:..

Organization:..

Address:..

Mobile:..

E-mail:...

For Registration Contact:- **Rangaswamy H,** Dept.of AI&ML, Mob:8197505151,
Emaill-D: rangaswamyh@gmit.ac.in
Akshatha A M S, Dept. of AI & ML - Mob:8296840319,
Email-ID: akshathaams@gmit.ac.in
Free Registration
Registration link : https://forms.gle/xb9r1NsYYaPTsS7z7
For out station participants
Food and Accommodation will be available for Rs.250/ day

Patron:
Sri G M. Lingaraju, Chairman, GMIT.

Administrator:
Sri Y U Subhashchandra

Organising Chair:
Dr. Y. Vijaya Kumar, Principal, GMIT.

Convener:
Keerthi Prasad G, Head, Dept. of AI & ML, GMIT.

Co-Ordinator:
Asha K, Dept. of AI & ML, GMIT.
Kavyashree B L, Dept. of AI & ML, GMIT.

Resource Persons:
Karthik M N, Developer & Academic Head,
Sookshmas e Learning pvt. Ltd., Bangalore
Keerthi Prasad G, Head, Dept. of AI & ML, GMIT.
Asha K, Dept. of AI & ML, GMIT.

Organizing Committee - AI & ML, GMIT:
Rangaswamy H,   MukthaPujar,   Akshatha A M S.

Advisory Committee:
Dr. Sunil Kumar B S,
Prof. & Head, Dept. of Information Science & Engg., GMIT, Dvg.
Dr. Sanjay Pande M B,
Prof. & Head, Dept. of Computer Science & Engg., GMIT, Dvg.
Dr. Praveen J, Prof. & Head,
Dept. of Electronics and Communication Engineering., GMIT, Dvg.
Dr. Shreedhara K.S,
Chairperson and Professor, Dept. of Studies in CS&E, UBDTCE, Dvg.
Dr. Nirmala C R, Prof. & Head,
Dept. of Computer Science & Engg., BIET, Dvg.
Dr. Poornima B, Prof. & Head,
Dept. of Information Science & Engg., BIET, Dvg.
Dr. Mouneshachari.S, Prof. & Head,
Dept. of Computer Science & Engg., JIT, Dvg.
Dr. Parameshwarappa C M, Head,
Dept. of Computer Science & Engg., STJIT, Ranebennur.
Dr. S G Makanur,
Head, Dept. of Information Science & Engg., STJIT, Ranebennur.
Dr. Poral Nagaraj,
Head, Dept. of Computer Science & Engg., SJMIT, Chitradurga.

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2 DAY
FACULTY DEVELOPMENT PROGRAMME
OBJECT ORIENTED PROGRAMMING WITH JAVA LABORATORY
23rd & 24th November 2022

Venue:
Online Computer Center Lab,
2nd Floor, 302, Dept. of AI&ML, GMIT, Davanagere.

In collaboration with IQAC-GMIT,

Organised By:
DEPT. OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
GM INSTITUTE OF TECHNOLOGY
P.B. NO. 4, P.B. ROAD, DAVANGERE-577006.
Phone: +91 8192233345/233377
Visit us at : https://www.gmit.ac.in

ABOUT THE INSTITUTION

To face the global challenges with the confidence that comes from knowledge, Srishyla Educational Trust ®, Bheemasamudra established GM Institute of Technology, Davangere in the year 2001-02 and is affiliated to VTU Belagavi and approved by AICTE New Delhi. The institution has been awarded ISO 9001:2015 Certificate for implementing the quality education, accredited with NAAC B++ grade. Today, GMIT has all facilities, amenities and a dedicated team of highly qualified faculty to mould students become global professionals. The institution has attained good reputation in short span of time and has emerged to be a leading engineering institution in Central Karnataka.

THE INSTITUTION OFFERS 4 YEARS FULL TIME B.E UNDER GRADUATE DEGREE COURSES IN

- ☑ Artificial Intelligence & Machine Learning,
- ☑ Electronics & Communication Engineering,
- ☑ Electrical & Electronics Engineering
- ☑ Computer Science & Engineering
- ☑ Information Science & Engineering,
- ☑ Mechanical Engineering,
- ☑ Civil Engineering,
- ☑ Bio Technology
- ☑ Robotics and Automation

The institution offers 2 years full time Post Graduate Degree course in Masters in Business Administration

This institution also offers Second Shift Diploma courses in:

- ☑ Computer Science Engineering
- ☑ Electrical Engineering
- ☑ Mechanical Engineering
- ☑ Civil Engineering

ABOUT AI & ML DEPARTMENT

GMIT, Davanagere is the first institute in the middle State of Karnataka to introduce a new emerging Engineering Course "Artificial Intelligence and Machine learning" during the academic year 2020-2021 with the intake of 60. Artificial Intelligence(AI) is a new and upcoming program in the area of computer science that is rapidly expanding its boundaries to variety of fields like healthcare, security, entertainment, education, autonomous transportation, intelligent robots, space exploration, speech processing, stock trading and many more. AI & ML are important drivers of digital transformation and have created plenty of job opportunities. There is a huge demand for skilled engineers trained in these technologies. Department of AI & ML in GMIT is structured for excelling in teaching learning methodology with personalised grooming sessions and live projects. The department has well experienced and skilled staff with

ABOUT FDP

This FDP will guide you through Java development and help you build the knowledge and confidence to progress from the basics to become a skilled Java developer. All the key tools that you'll need to solve real-world problems are clearly explained and demonstrated with engaging, practical examples.

What you will learn

- ♦ Write clean, well-commented Java code that's easy to maintain
- ♦ Debug logical errors and handle exceptions in your Java programs
- ♦ Implement object-oriented and functional programming paradigms
- ♦ Method overloading, Constructor overloading and overriding
- ♦ Abstraction and Usage of packages
- ♦ Abstract classes, Abstract methods and Interface
- ♦ Threads and multithreads
- ♦ File Operations
- ♦ Java Applet, AWT, Swings

FDP OUTLINE:

OBJECT ORIENTED PROGRAMMING WITH JAVA LABORATORY

PART A — List of problems for which student should develop program and execute in the Laboratory

1. Aim: Introduce the java fundamentals, data types, operators in java Program: Write a java program that prints all real solutions to the quadratic equation $ax2+bx+c=0$. Read in a, b, c and use the quadratic formula.

2. Aim: Demonstrating creation of java classes, objects, constructors, declaration and initialization of variables. Program: Create a Java class called Student with the following details as variables within it. USN Name Branch Phone Write a Java program to create n Student objects and print the USN, Name, Branch, and Phone of these objects with suitable headings.

3. Aim: Discuss the various Decision-making statements, loop constructs in java Program: A. Write a program to check prim number B.Write a program for Arithmetic calculator using switch case menu

4. Aim: Demonstrate the core object-oriented concept of Inheritance, polymorphism Design a super class called Staff with details as StaffId, Name, Phone, Salary. Extend this class by writing three subclasses namely Teaching (domain, publications), Technical (skills), and Contract (period). Write a Java program to read and display at least 3 staff objects of all three categories.

5. Aim: Introduce concepts of method overloading, constructoro verloading, overriding. Program: Write a java program demonstrating Method overloading and Constructor overloading.

6. Aim: Introduce the concept of Abstraction, packages. Program: Develop a java application to implement currency converter (Dollar to INR, EURO to INR, Yen to INR and vice versa), distance converter (meter to KM, miles to KM and vice versa), time converter (hours to minutes, seconds and vice versa) using packages.

7. Aim: Introduction to abstract classes, abstract methods, and Interface in java Program: Write a program to generate the resume. Create 2 Java classes Teacher (data: personal information, qualification, experience, achievements) and Student (data: personal information, result, discipline) which implements the java interface Resume with the method biodata().

8. Aim: Demonstrate creation of threads using Thread class and Runnable interface, multithreaded programming. Program: Write a Java program that implements a multi-thread application that has three threads. First thread generates a random integer for every 1 second; second thread computes the square of the number and prints; third thread will print the value of cube of the number.

Srishyla Educational Trust (R), Bheemasamudra

GM INSTITUTE OF TECHNOLOGY

(Affiliated To VTU Belagavi, Approved By AICTE, New Delhi & Govt. of Karnataka)
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Department of Artificial Intelligence and Machine Learning

Report

Department of Artificial Intelligence and Machine Learning had organized 2 day Faculty Development Programme on "Object Oriented Programming with Java Laboratory- 21CSL35" at GMIT, Davangere on 23rd and 24th of November-2022.

Program was inaugurated by President Dr. Y Vijaya Kumar, Principal, GMIT, Davangere on 23rd November 2022 at 9:30 AM in the Civil seminar hall by watering the plant. Followed by the Convener Keerthi Prasad G, Asst. Professor & Head, Dept. of. AI&ML. The highlight of program was the Resource person Mr. Krathik M N, Full Stack Developer and Trainer, Sookshmas, Bangalore.
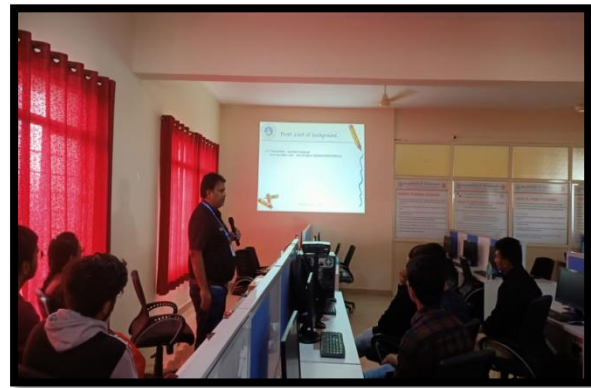
Program chief guests Dr. Shreedhara K.S. HOD, Dept. CS&E, UBDTCE, Davangere and Dr. Nirmala C.R. HoD, Dept. of CS & E, BIET, Davangere made the FDP the most valuable by their inspiring and informative speech regarding JAVA technology.
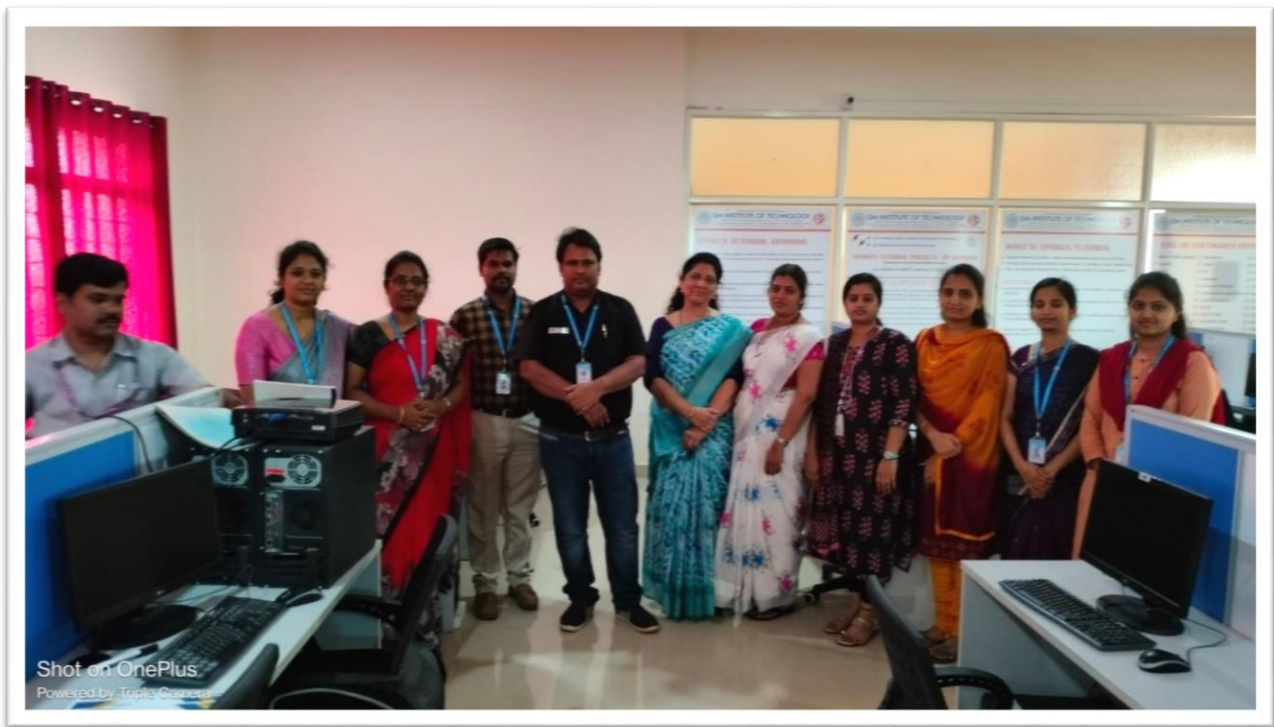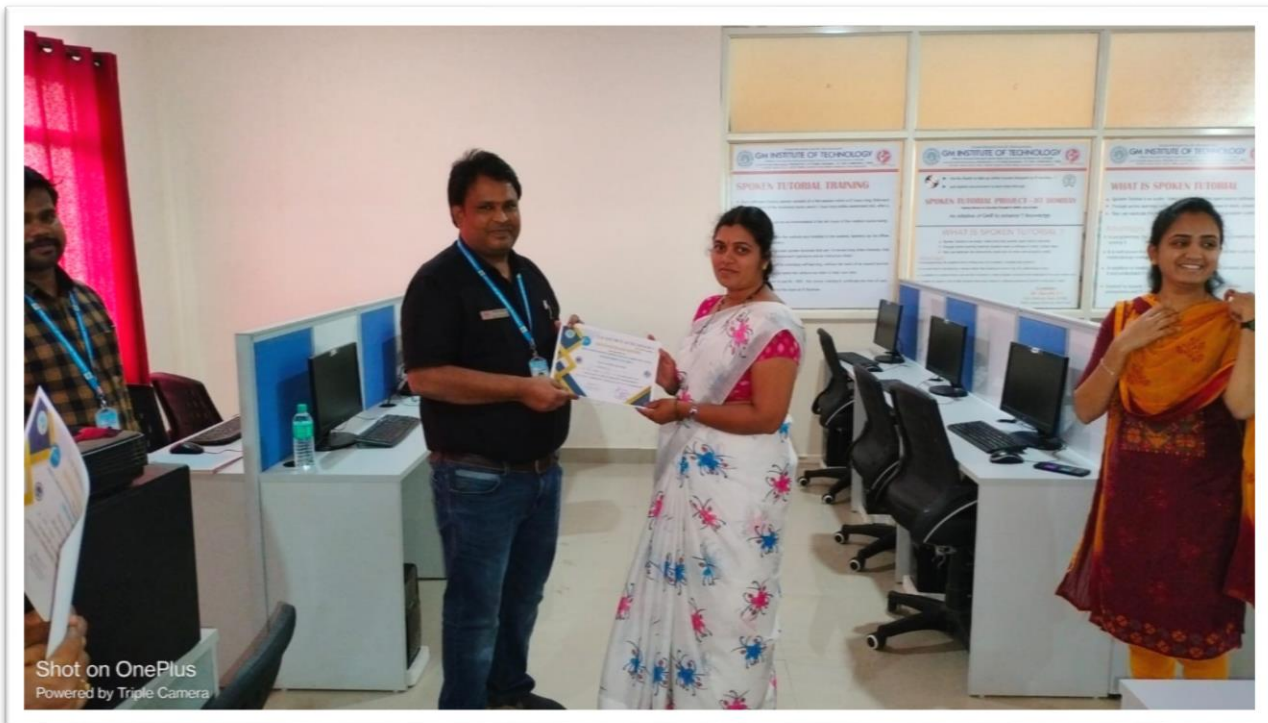

(a) Inauguration

(b) Day1: Presentation from Resource person

(b) Day2: Presentation from Resource person (d) Day2: Presentation from Resource person

(e) Participants

(f) Certificate Distribution

On this occasion, Dr. Shreedhara K.S. shared a few words about the history of OOP's with Java. Dr. Nirmala C.R. gave presentation on the application and importance of OOP's with Java. Dr. Y. Vijay Kumar then spoke briefly about "4.0" technology. In this event a total 22 members were present.

(g) Certificate Distribution

(h) Remuneration to Resource person

G M INSTITUTE OF TECHNOLOGY

P. B. Road, Davangere.

CERTIFICATE OF PARTICIPATION

Two Day FDP on

OBJECT ORIENTED PROGRAMMING WITH JAVA LABORATORY- 21CSL35

DEPARTMENT OF AIML

This is to certify that Mr/Ms

Rangaswamy . H.

of __AIML__ Dept, _____GMIT_____ has participated in the

Two Day FDP on OBJECT ORIENTED PROGRAMMING

WITH JAVA LABORATORY- 21CSL35 from 23rd to 24th November 2022

KEERTHI PRASAD G
HOD, Dept. of AI & ML

,Dr. Y VIJAYA KUMAR
Principal, GMIT
PRINCIPAL
GM Institute of Technology
Davangere - 577 006.