FDP Report on "Coding Skills" for Programmers of CSE and Allied Branches

Dates: 24-07-2022 to 28-07-2022

Venue: Online

Participants: 50 programmers from CSE and allied branches

Speakers: Professor Hari Kiran veg.

Objectives:

- To enhance the knowledge and skills of programmers in the fundamentals of coding.
- To introduce them to popular programming languages and frameworks.
- To teach them data structures and algorithms, which are essential for developing efficient and scalable software.
- To impart object-oriented programming principles, which are used to design and develop complex software systems.
- To provide hands-on experience in web development, which is one of the most in-demand skills in the tech industry.

Course Outline:

- Day 1: Introduction to Coding
- What is coding?
- Different types of programming languages
- Basic programming concepts such as variables, data types, operators, and control flow
- Day 2: Python Programming
- Introduction to the Python programming language

- o Basic Python syntax and concepts
- o Object-oriented programming in Python
- o Python libraries and frameworks
- Day 3: Data Structures and Algorithms
- o Arrays
- o Linked lists
- o Stacks and queues
- o Trees
- o Graphs
- Day 4: Object-Oriented Programming
- o Classes and objects
- o Inheritance
- o Polymorphism
- o Encapsulation
- Day 5: Web Development
- o HTML and CSS
- o JavaScript
- o Django
- o Flask

Teaching Methodology:

The course was delivered through a combination of lectures, discussions, and hands-on exercises. The lectures covered the theoretical concepts of coding, while the discussions and exercises helped the participants to apply the concepts in practice.

Evaluation:

The participants were evaluated on their performance in the hands-on exercises and a final quiz.

Feedback from Participants:

The participants were very satisfied with the course. They found the lectures to be informative and the exercises to be challenging and rewarding. They also appreciated the opportunity to learn from experienced speakers.

Recommendations:

The course was well-organized and informative. However, there are a few recommendations that could be made for future iterations of the course:

- More time could be dedicated to hands-on exercises.
- More advanced topics could be covered, such as machine learning and artificial intelligence.
- The course could be made more interactive by using tools such as coding playgrounds and live coding sessions.

Overall, the five-day staff development program on "Coding Skills" was a success. The participants gained valuable knowledge and skills that will help them to be more effective programmers.