**TEAM 4 - CC04**

**Team Details :**

Mentors & Moderator :

* Bieky Mahato (M) - biekymahato@gmail.com
* Deeksha Madan (M) - deekshaamadan@gmail.com
* Dhiren Sambyal (M) - dhirensambyal@gmail.com
* Md Saklen (M) - mdsaklen55@gmail.com
* Tannu Kumari (Md) - tannuchoudhary10@gmail.com

Participants:

* Ishita Singh - ishitas0301@gmail.com
* Jyoti Chaudhary - jyotikrjc@gmail.com
* Kamakshi Trivedi - kamakshitrivedi149@gmail.com
* Kashika Jain - kashikajain3101@gmail.com
* Kishori Thapa - kishori18kosi@gmail.com
* Koena Das - koena.kt.das@gmail.com
* Lahari Murali - laharimurali112@gmail.com
* Lucky Panjwani - panjwanilucky78@gmail.com
* Manvi Gupta - manviguptag@gmail.com
* Meghna Vyas - vyasmeghna3@gmail.com
* Nishu Rai - nishurai091020@gmail.com

**Project Domain**: CAREER

**Project**: *Building a career management system using file handling to handle the various skills inorder to reach your goals :*

* *Student record (Resume, Report Cards, LOR’S)*
* *Targets (Courses taken, Internships, Achievements, Paper publishing)*
* *Links (Linkedin, Portfolio, Github, Stackoverflow etc)*
* *Giving Reminders and Deadlines(Various tasks and exams you wish to participate and other important memos)*

Learning Plan and Milestones:

**Week 1:**

* Analysing the experience of the Mentees in coding in C++ and general programming.
* Working on **Basics of Problem-Solving** including flowcharts and pseudocode.
* Helping Mentees set up a C++ environment on their end and making them solve basic programming questions for a warm-up. This will help the Mentors get a better understanding of the participants’ coding style and their level of understanding.
* Assignments: Questions on general programming to be solved at the end of Week 1

**Week 2:**

* Participant Check-in: reviewing doubts from Week 1
* Learning Content:

Programming Fundamentals:

* Data-types
* Operators
* Conditionals
* Loops
* Assignments: Questions on Programming Fundamentals, pattern-making, loops

**Week 3:**

* Participant Check-in: reviewing doubts from Week 2
* Learning Content:
* Functions
* Arrays in C++
* 2D Arrays
* Sorting and Searching
* Assignments: Questions on Functions, arrays (1D and 2D), sorting and searching questions, practice questions from online platforms.

**Week 4:**

* Participant Check-in: reviewing doubts from Week 3
* Learning Content:
* Character Arrays
* Strings
* Pointers
* Assignments: Questions on character arrays, strings, pointers.

**Week 5:**

* Participant Check-in: reviewing doubts from Week 4
* Learning Content:
* Introduction to Object Oriented Programming & its Properties
* Classes and Objects
* Constructors and Destructors
* Assignments: Quiz on OOP concepts. Questions on creating classes and declaring objects of those classes.

**Week 6:**

* Participant Check-in: reviewing doubts from Week 5
* Learning Content:
* Introduction to File Handling in C++
* File Opening and Closing
* Sequential I/O with files (get(), put(), getline() functions)
* read() and write() functions
* Reading and writing class objects onto a file
* Assignments: Questions on file handling like opening files and writing in them, etc

**Week 7:**

* Participant Check-in: reviewing doubts from Week 6
* Learning Content:

Basic Operations on Binary Files:

* Searching for a record
* Appending a record
* Inserting Data in sorted file
* Deleting record from file
* Modifying Data
* Assignments: Questions to implement searching and appending data in files using read() and write functions

**Building the Final Project**

**Week 8 - 10:**

* Describing the project to the mentees and making them understand the basic workflow in creating a project like this.
* Allotting tasks to mentees to build specific functions for the project and helping them along the way.
* Reviewing work done by mentees and guiding them if any improvements can be made.
* Combining all the functions to assemble the project
* **Project submission**