MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (the **"MOU")** is entered into on 7th day of January

2022 (the **"Effective Date"**), by and between:

Sorting Hat Technologies Private Limited, a private company incorporated under the provisions of the Companies Act, 2013 bearing CIN U72200KA2015PTC082063 and having its registered office at Maruti Infotech Centre, 3rd Floor, A-Block, Domlur, Koramangala Inner Ring Road, Bangalore- 560 071, Karnataka, India (hereinafter referred to as **"CodeChef",** which expression shall, unless repugnant to the meaning or context thereof, be deemed to include its legal representatives and permitted assigns) of the **FIRST PART;**

AND

Dr. K.N. Modi Institute of Engineering and Technology, with its campus at, Kapda Mill Modinagar Ghaziabad U.P 201204 , (hereinafter referred to as "**College**", which expression shall, unless repugnant to the meaning or context thereof, be deemed to include its legal representatives and permitted assigns**) of the SECOND PART;**

The CodeChef and the College shall thereafter, as the context may require, individually be referred to as a "**Party**" and collectively be referred to as the "**Parties".**

WHEREAS:

i. The College is engaged in education to students across various domains.
ii. The Parties wish to enter into a collaboration wherein CodeChef shall provide one-year free access to its platform, to the students and faculty of the College.
iii. The College has represented and warranted to CodeChef that it has relevant authority, permit and licenses to fulfill its obligations under this MoU and based on the said representation and warranties, CodeChef has agreed to enter into this MoU with the College on a non-exclusive basis and the Parties have agreed to fulfill their obligations under this MoU.

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein, the Parties agree as follows

1. The College shall enroll approximately 100 students with CodeChef.
    a. The College shall share the student details in a timely basis and in one-go by sending CodeChef a spreadsheet containing student's account creation details such as - Name, Roll number (optional), email id, college name (preferred way of referring the college), and preferred pattern for creating their usernames on CodeChef.

b. For those students whose accounts are already on CodeChef, the college shall share their existing CodeChef usernames as well in the spreadsheet.

c. By using the information in the spreadsheet, CodeChef shall create bulk accounts/profiles of students and share the same with the college.

2. CodeChef shall conduct an Orientation session for faculty and students of the College on a time mutually decided by both the parties.

3. The College shall review the program curriculum shared by CodeChef and map it to its existing semester/curriculum.

    a. The program curriculum is stated under Annexure 2 to this MOU.

    b. In case of changes, CodeChef and College shall discuss and finalize the same before commencement of the program.

    c. CodeChef shall organize meeting(s) with the faculty of the College to understand the curriculum in depth, and select problems per topic.

4. Periodic practice sessions & Assessment-based tests (for grading) shall be created by CodeChef for the students and shared regularly with the College. The program structure is stated under Annexure 1 to this MOU.

5. Monthly report shall be sent to the College about the students' overall performance on CodeChef.

6. CodeChef has no liability whatsoever other than that of providing access to the platform for one year and creating practice & assessment-based tests.

7. College and CodeChef agree that the information shared during the term of this MoU is confidential in nature and shall not disclose it with any third-party without prior written consent.

8. College hereby agrees to indemnify and save harmless CodeChef including, where applicable, its affiliates, directors, officers, employees and agents (each such party being an "Indemnified Party") harmless from and against and agree to be liable for any and all losses, claims, actions, suits, proceedings, damages, liabilities or expenses of whatever nature or kind, incurred by the Indemnified Party that arises out of:

    a) breach of any of its obligations, covenants or representations and warranties under this Agreement; or
    b) Violation of any applicable laws; or
    c) Infringement of any third-party intellectual property rights;

9. This MoU shall be valid for a period of one year from Effective Date.

10. This MoU may be terminated at any time by either Party upon fifteen (15) days written notice to the other party.

11. This MoU shall be governed by the laws of India. The courts of India shall have exclusive jurisdiction.

12. In the event that the Parties desire to change, add, or otherwise modify any terms, they shall do so in writing to be signed by both parties.

The Parties agree to the terms and conditions set forth above as demonstrated by their signatures as follows:

Signature		Dr. DEEPANKAR SHARMA
Name	Tony Mathew	Dr.DEEPANKAR SHARMA
Title	Authorized Signatory	Coordinator IQAC
	For, **CodeChef**	For, **College**

Annexure 1

Program Structure (mapped to the college semester)

Week Count	Tasks
Week 0	**Orientation**
Week 1	**Practice Link (6 hand-picked coding problems)**
Week 2	**Week 1 Assignment Link (3 hand-picked coding problems)** **Week 2 Practice Link (6 hand-picked coding problems)** **Live Doubt-Solving Session**
Week 3	**Week 2 Assignment Link (3 hand-picked coding problems)** **Week 3 Practice Link (6 hand-picked coding problems)**
Week 4	**Week 3 Assignment Link (3 hand-picked coding problems)** **Week 4 Practice Link (6 hand-picked coding problems)** **Live Doubt-Solving Session**
Week 4	**Rated Contest (global) participation** **Report**
Week 5 - Week 7	**Assignment Link of Previous Week (3 hand-picked coding problems)** **Practice Link for the current Week (6 hand-picked coding problems)** **Live Doubt-Solving Session (Week 6)**
Week 7	**Rated Contest (global) participation** **Report**
Week 8 - Week 10	**Assignment Link of Previous Week (3 hand-picked coding problems)** **Practice Link for the current Week (6 hand-picked coding problems)** **Live Doubt-Solving Session (Weeks 8 & 10)**
Week 10	**Rated Contest (global) participation** **Consolidated Report**

Annexure 2

CodeChef Program - At A Glance

Note:

- The topics per week can be rearranged based on the academic curriculum and semester plan.
- From 2nd year onwards, the program will always start with Beginner's Course, and once completed, will progress to Intermediate and then to Advanced levels (in strict order).

Year 1 (Semesters 1 and 2) - Foundation (Non-DSA) Program

- Problems which make the students use various constructs of the programming language (like loops, if-else, operators, variables, etc.) will be shared as part of the foundation syllabus.
- Students will be forced to think of the ways in which each construct can be used differently for each problem, and by doing so, they develop an understanding for the power of each programming construct and become very comfortable with the basic tools that the language gives them.
- This fluency which comes with practicing writing code is critical for future semesters when the students learn about more advanced algorithms and data structures built on top of these constructs.

Year 2 and Year 3 - Indicative Beginners DSA-Focussed Program

Week 1	Basics of Programming, Time Complexity
Week 2	Arrays and Strings I
Week 3	Arrays and Strings II
Week 4	Sorting I
Week 5	Sorting II
Week 6	Binary Search
Week 7	Stacks, Queues
Week 8	BSTs, STLs - I
Week 9	BSTs, STLs - II
Week 10	Greedy Algorithms

Year 3 Intermediate DSA-Focussed (for Colleges with existing programming culture)

Week 1	Basic Number Theory, Asymptotic Analysis
Week 2	Recursion and Dynamic Programming I
Week 3	Dynamic Programming II
Week 4	Dynamic Programming III
Week 5	Graphs I - Introduction to Trees, BFS, DFS
Week 6	Graphs II - LCA and more BFS, DFS
Week 7	Tree DP
Week 8	Graphs III - Shortest Paths
Week 9	Graphs IV - More Shortest Paths
Week 10	Graphs V - DSU, MSTs

Year 4 (Semesters 7 and 8) - Advanced DSA-Focussed Program (for colleges with advanced programming culture)

Week 1	Advanced Graphs I - DAGs and SCCs
Week 2	Advanced Graphs II - Network Flows
Week 3	Advanced Graphs III - More Network Flows
Week 4	Square Root Decomposition
Week 5	Segment Trees I
Week 6	Segment Trees II
Week 7	Advanced Number Theory
Week 8	Advanced Dynamic Programming I
Week 9	Advanced Dynamic Programming II
Week 10	Advanced Dynamic Programming III