



CHARUSAT
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY



Faculty of Technology and Engineering

Department of Computer Science & Engineering

Date: 06/08/2024

Innovation in Pedagogy

Academic Year	:	2024-25	Semester	:	3
Course code	:	CSE203	Course name	:	Data Structure and Algorithms

- **Title of pedagogy**

Fun-based learning: "Tower of Hanoi"

- **Objective**

- To evaluate the performance of the students by game playing with the time constraints.
- To make students aware of the importance of algorithm analysis.
- To help students to understand the necessity of time & space complexity analysis of any approach before implementing it practically.

Learning by Doing: Tower of Hanoi



Convener:
Dr. Amit Thakkar
Head, CSE, CSPIT

Coordinators:
Ms. Vidisha Pradhan,
Ms. Avani Khokhariya
Assistant Professor,
CSE, CSPIT, CHARUSAT

TIME & VENUE:
06/08/2024
2:20 PM - 4:20 PM
ROOM NO. 506

Organized By Department of Computer Science & Engineering



- **Description**

Tower of Hanoi is a mathematical puzzle where we have three rods and n disks. The objective of the puzzle is to move the entire stack to another rod, obeying the following simple rules:

1. Only one disk can be moved at a time.
2. Each move consists of taking the upper disk from one of the stacks and placing it on top of another stack i.e. a disk can only be moved if it is the uppermost disk on a stack.
3. No disk may be placed on top of a smaller disk.

Fun based learning gaming competition for this puzzle was organized for 3rd semester CSE students. The focus of the game was to motivate the students to understand the importance of algorithms analysis in development of any application.

Game was divided into 4 rounds.

Round 1:

Students were voluntarily asked to participate in the game. Total 18 students had participated in 1st round. Total 4 discs were provided to students to move it from source rod to destination rod. Those who completed the task in minimum time were shortlisted for the next round.

Round 2:

Out of 18 students, 8 were selected for round 2. Same number of discs were given to participants but this time they were asked to complete the task in-group of 2 and three rods were placed distinct to one another. Total 4 teams had participated. Those who completed the task in minimum time were shortlisted for the next round.

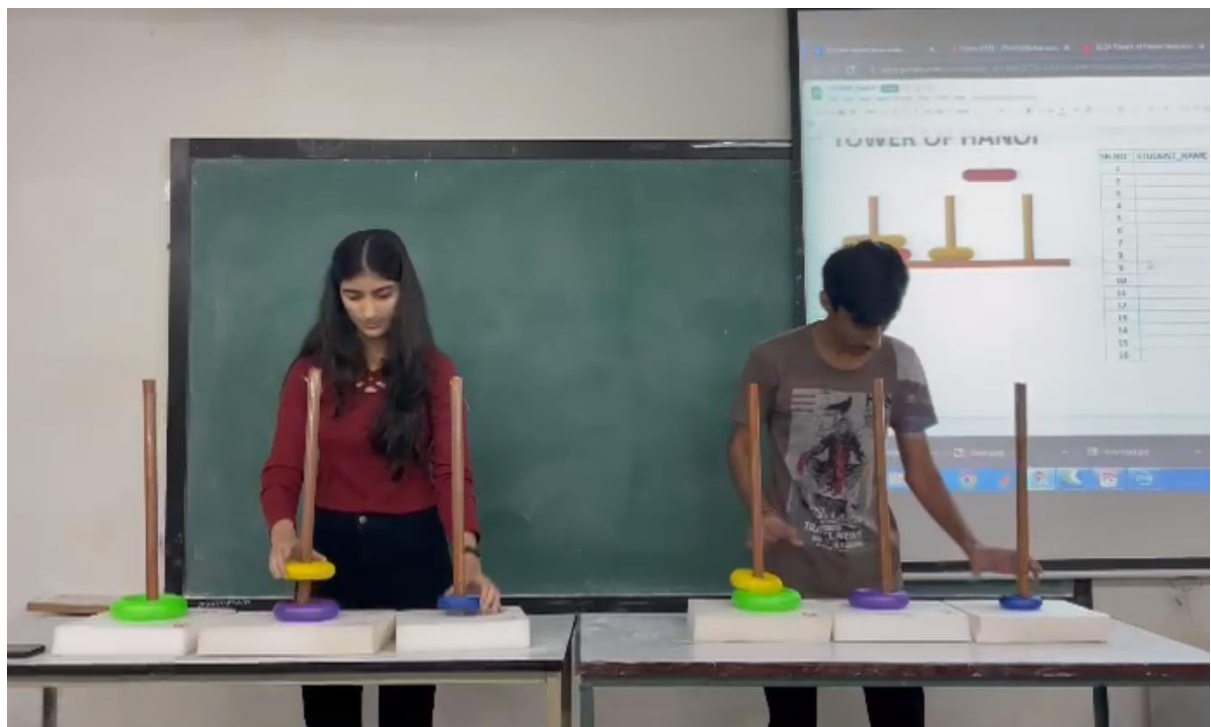
Round 3:

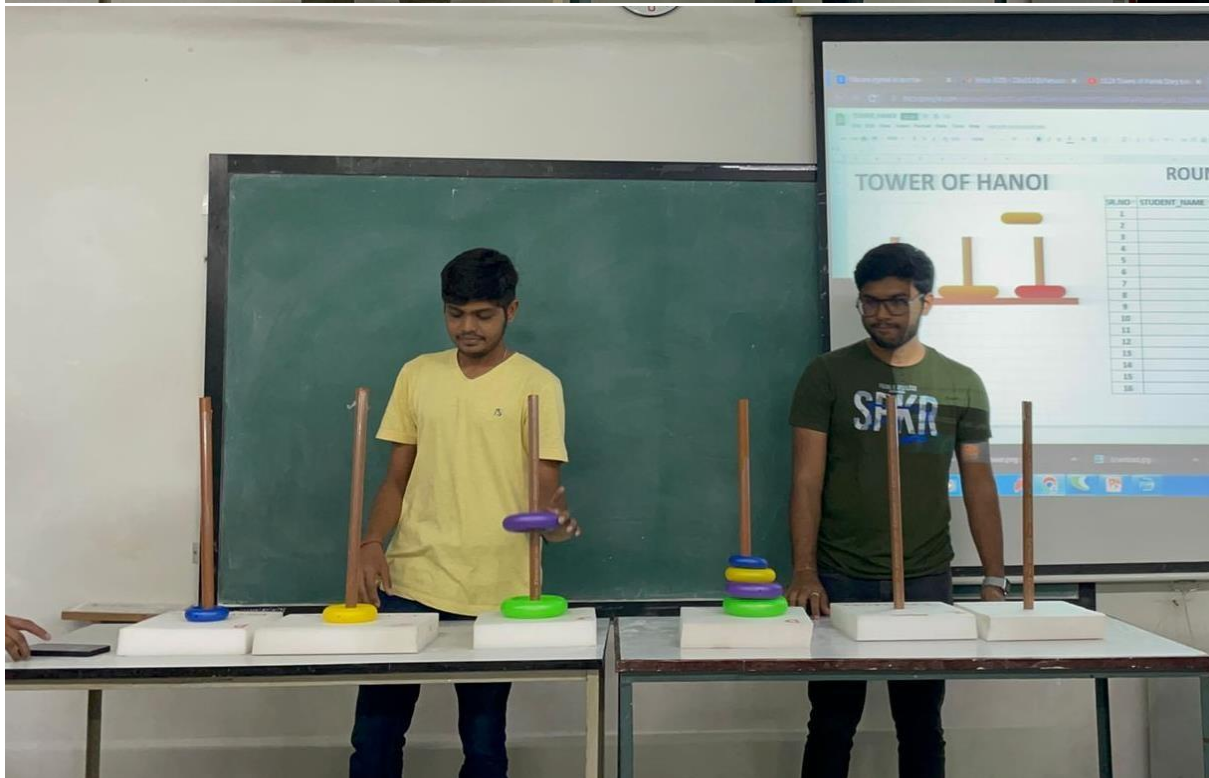
Out of 4 student teams, 2 teams were selected for round 3. A total of 5 discs were provided to students to move it from the source rod to the destination rod.

Round 4:

The team who won the 3rd round had competition with the volunteers of the event.

Photo Evidence











Feedback Analysis Report:

Student ID	Student Name	Learning outcome of the event	Experience of the event
D21CS106	Shivang Dave	Excellent	Excellent
20CS079	Dhyey Shah	Very good	Very Good
20cs015	Dev Desai	Excellent	Excellent
20CS081	Jenil shah	Excellent	Excellent
D21CS107	KEVAL PAUN	Excellent	Excellent
20cs027	Shubhang khemani	Excellent	Excellent
20cs082	Jheel Shah	Excellent	Excellent
20CS008	Suhani Bhatt	Very good	Very Good
20cs074	MANDAR SANGHAVI	Excellent	Excellent
20cs056	Patel sakshi jigneshkumar	Excellent	Excellent
20cs056	PATEL.SAKSHI.JIGNE SHKUMAR	Excellent	Excellent
20CS083	Jiya Shah	Excellent	Excellent
d21cs109	Krish pandya	Excellent	Excellent
20CS012	RonakKumar Chauhan	Excellent	Excellent
20CS065	Kishan Prajapati	Excellent	Excellent
20CS080	Jekeel Shah	Excellent	Excellent
20cs022	Ruhi Kansagara	Very good	Excellent
20cs028	Yash koladiya	Excellent	Excellent
20cs011	Mann Chandarana	Excellent	Excellent
20cs091	Aryan Suthar	Excellent	Excellent
20CS097	Vaibhav thummar	Excellent	Excellent
20cs031	Ditsa Mandani	Excellent	Excellent
20CS092	Pruthuraj Suthar	Excellent	Excellent
20CS063	Hemil Patoliya	Very good	Very Good
20CS029	NISHANT KOTADIA	Very good	Very Good
20CS067	Tanvi Radia	Very good	Excellent
20CS003	Amit Amrutiya	Excellent	Excellent
20CS026	Maharshi Surendrakumar Kevadiya	Excellent	Excellent

20cs069	Rajput Akshaykumarsingh	Very good	Very Good
20CS030	Kalpesh Mahida	Excellent	Very Good
20CS095	Neel Thomas	Very good	Excellent
20CS086	Pranjal Shah	Very good	Excellent
20CS059	Vraj Patel	Excellent	Excellent
20cs009	Vedant Bhatt	Very good	Excellent
20CS035	Jainam Mehta	Excellent	Excellent
20cs089	Sunva Divyarajsinh Nitinkumar	Excellent	Excellent
20cs084	kashyap shah	Very good	Very Good
20cs052	Kishankumar Patel	Excellent	Excellent
20CS076	Akshat Shah	Excellent	Excellent
20CS073	Dhwani Sakhiya	Very good	Very Good
20CS048	DISHA PATEL	Very good	Excellent
20CS046	DARSH PATEL	Very good	Excellent
20CS050	HARSH PATEL	Excellent	Very Good
20cs060	Manan Pathak	Excellent	Excellent
20CS016	Vatsal Ghoghari	Excellent	Excellent
20CS075	Bhargavi Savani	Excellent	Excellent
20CS004	Vrushabh Amrutiya	Excellent	Excellent
20cs062	Shivaraj patil	Very good	Very Good
20cs062	Shivaraj patil	Very good	Very Good
20cs093	Parth Tandel	Excellent	Excellent
20cs049	DRASHTI PATEL	Excellent	Very Good
20CS032	Taufik Mansuri	Very good	Very Good
20CS018	Dev Halvawala	Excellent	Excellent
D21CS111	Yatin Parmar	Excellent	Excellent
20cs041	Khushbu Oza	Excellent	Excellent
20CS101	Shelin Vankawala	Very good	Very Good
20CS085	Meghal Vipulbhai Shah	Excellent	Excellent
20CS100	Naisargi Vadodariya	Excellent	Excellent