

## 1 Objective

To build a simulation model for Technology Student's Gymkhana Gym system and suggest improvements/modifications for improving the efficiency of the gym.

## 2 Technology Student's Gymkhana

Technology Student's Gymkhana is the hub of numerous extra-curricular and co-curricular activities in IIT Kharagpur ranging from sports to socio-cultural. The Gymkhana is managed by the students, for the students, under the guidance and active participation of the faculty and staff members.

## 3 Abstract

Gymkhana has a number of sporting amenities, including badminton court, table tennis court, a gym, and many others. The availability of resources is one of the key concerns regarding why people come to this area. Resources are the field and types of equipment. In particular, uncertainty in a good environment is a major threat to each and every organization. One such uncertainty is resource utilization. Proper resource utilization can be extremely beneficial for saving time and the number of users. Like any other organization in a service-oriented environment, a sports or recreation entity must also maximize resource utilization in order to maintain user satisfaction and productivity.

## 4 Problem Statement

To determine how efficiently each resource of the GYM was utilized. So that GYM supervisors can determine the correct amount of resources that are needed for efficient use prior to making a costly expenditure in terms of maintenance and electricity. By looking at simulation-model data, such as the number of males and females that use a specific piece of equipment, and then running simulation models with varying amounts of different resources, management can also ensure customer satisfaction by providing sufficient resources.

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### Group 5 Team Members

- Suvigya Saxena 20IM30022
- Harsh Singh 20IM30006
- Sneha Kumari 20IM30020
- Arindam Barman 20IM30002
- Manishka Mukhopadhyay 20IM10022
- Tanmay Malatkar 20IM10040
- Pranay Manoj Harwani 20IM10029
- Mukesh Bunkar 20IM10025