



**ISTE STAFF CHAPTER [TN 205]
ACADEMIC YEAR 2021-22 (EVEN SEMESTER)
WEBINAR REPORT**

10.05.2022

A one day webinar titled “**A load balancing algorithm for data center to optimize cloud based Applications**” was organized by the ISTE Staff Chapter [TN 205] through YouTube live streaming on **05.05.2022** from 3.00p.m. to 4.00p.m. to the faculty members of Kings College of Engineering with an objective to offer a better understanding of A load balancing algorithm for data center to optimize cloud based Applications. Welcome address was delivered by Mrs.T.Gnanajeya, Coordinator / ISTE Chapter. The session was handled by eminent resource person **Mrs.R.S.Karthiga, Assistant Professor/Computer Science and Engineering**. The resource person presented the concepts Introduction, Task scheduling architecture IAAS, Proposed Framework, Proposed load balancing algorithm, Make span time, Execution time, Resource utilization in good manner. Totally 22 faculty members actively participated in this session and gained knowledge about A load balancing algorithm for data center to optimize cloud based Applications. Vote of thanks was given by Mrs.T.Gnanajeya, Coordinator / ISTE Chapter. After the session participants gave the feedback through feedback link.

Webinar Highlights

The image is a promotional banner for a webinar. It has a dark blue background with a yellow torn-paper effect at the bottom. At the top left, there are logos for ISTE and Kings College of Engineering's 21st anniversary. At the top right, there is the Kings College of Engineering logo and accreditation information. The main text in the center reads: 'ISTE Staff Chapter (TN 205) organizes WEBINAR ON A Load Balancing Algorithm for Data Center to Optimize Cloud based Applications'. Below this, it says '05 MAY 2022 THURSDAY' and 'TIME 03:00 P.M.'. On the right side, a blue box contains the name 'MRS. R.S. KARTHIGA' and her title 'ASST.PROF/CSE, KCE'.

WEBINAR BROCHURE

3:05 PM

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INTRODUCTION

- Cloud computing is on demand services to client.
- Efficient allocation of tasks in IaaS is a crucial process in cloud computing.
- Load balancing is obtained by allocation of tasks.
- In this paper, they proposed LB algorithm with three parameter
 1. Make span time.
 2. Deadline in SLA (Service level Agreement)
 3. Completion time.

Karthiga is presenting

3:08 PM

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TASK SCHEDULING ARCHITECTURE IN IAAS

Karthiga is presenting

3:09 PM

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PROPOSED FRAMEWORK

Karthiga is presenting

3:11 PM

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PROPOSED LOAD BALANCING ALGORITHM

- One to many cloudlet request send to per virtual machines.
- Task arrive in random order
- Each task has length, deadline, completion time and finally arrival time.
- It checks completion time for each workload against total no. of tasks.

Karthiga is presenting

3:13 PM

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MAKE SPAN TIME

The equation for make span time

$$MT = \text{Max}(CT)$$

$$MT_{avg} = \frac{\sum \text{Max}(CT)}{n}$$

Where
 CT- cloudlet completion time
 n- no. of virtual machines

Karthiga is presenting

3:14 PM

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EXECUTION TIME

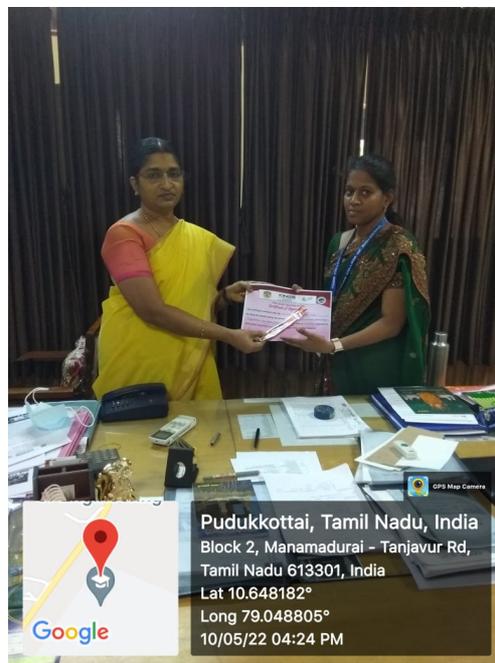
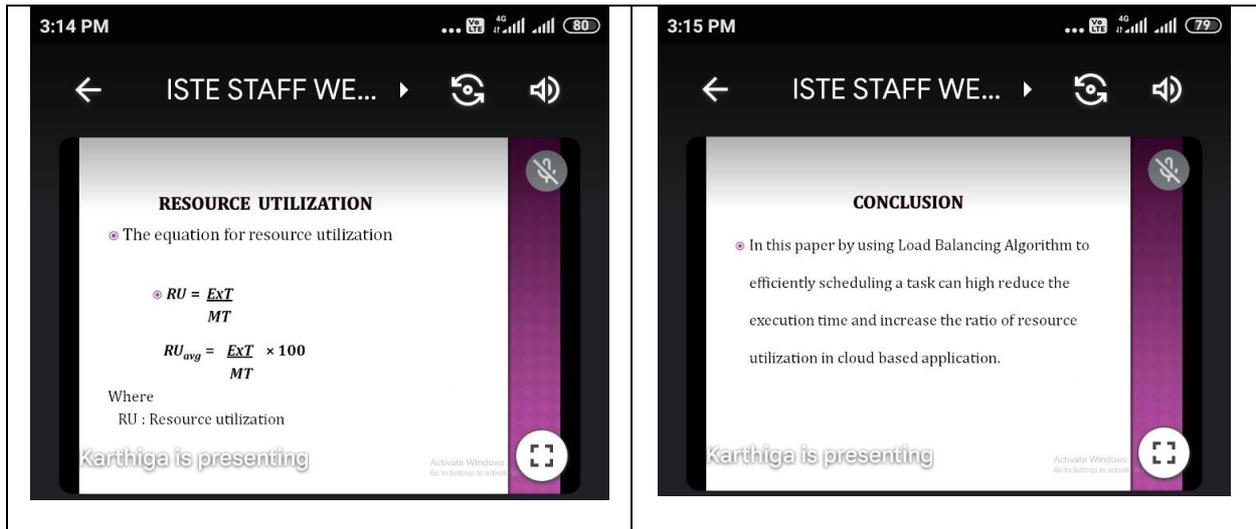
The equation for execution time

$$EXT = AcT$$

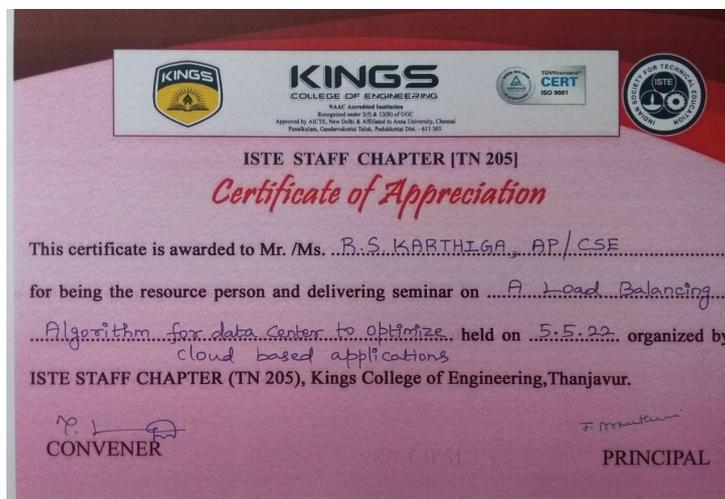
$$EXT_{avg} = \frac{\sum AcT}{n}$$

Where
 EXT : Execution time
 ACT: Actual CPU time
 n: No. of cloudlet

Karthiga is presenting

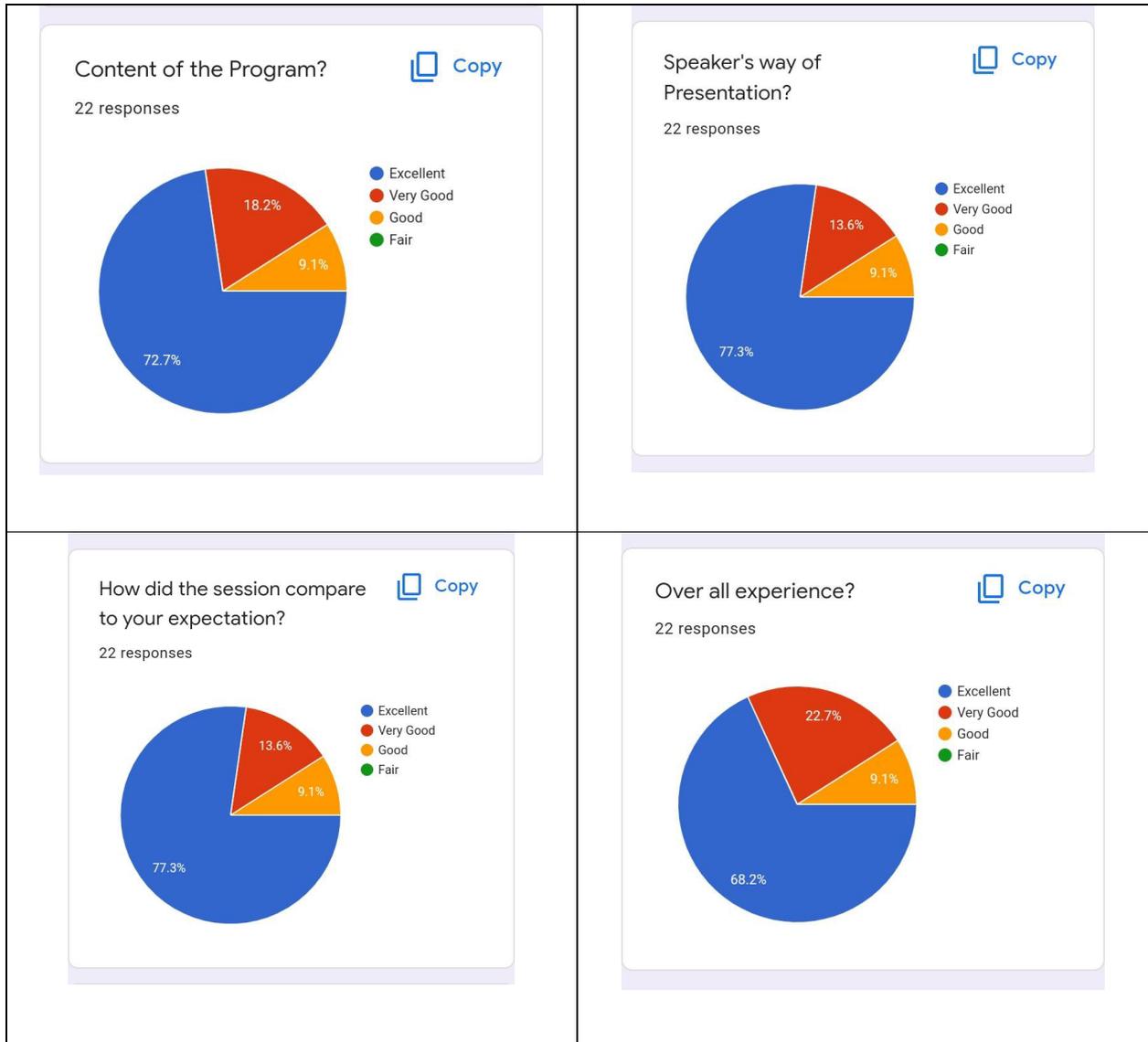


Principal gives away the Certificate of Appreciation to the Resource Person



Certificate of Appreciation - Resource Person

Feedback Questions and Responses



Mrs.T. Gnanajeya
Convener

Dr.J. Arputha Vijaya Selvi
Principal