

Sporadic Server

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Abstract—abstract for the topic

I. INTRODUCTION

Introduction to the topic.

A. Sporadic/Aperiodic Tasks

Meaning of sporadic - unpredictable and irregular occurring happening only in a few places, isolated and scattered.

Sporadic/Aperiodic Tasks - a completely unknown and unpredictable task: arrival times are unknown, execution times might be also unknown. Sounds like an unmanageable task. What is the solution?

B. Implementing Standard Solutions

What would happen, what would be the result, if we would use standard solutions to manage these specific types of tasks, is it effective, where do the standard solutions succeed and where do they fail.

C. Sporadic Server

Sporadic Server - an implementation on how to handle and store Sporadic Tasks. Definition of sporadic server and theoretical working concept.

II. IMPLEMENTATION

An example of how could this be implemented. Implementation in Ada [3]

III. HISTORY OF DEVELOPMENT

A detailed timeline of how this method came to be developed, who developed it and what were the intentions

IV. USAGE AND APPLIANCE

Where is it applied in real situations, where is it used in

V. ADVANTAGES

Any positive advantages related to this method, why and where is it useful to use this method

VI. DISADVANTAGES

Any disadvantages, which might lead to certain issues, why and where this method can not be applied

VII. EVALUATION

Personal opinion, is it useful, is there future for this method?

VIII. CONCLUSION

Final thoughts, concluding the topic

REFERENCES

- [1] G. C. Buttazzo "Hard Real-Time Computing Systems: Predictable Scheduling Algorithms and Applications" 3rd ed. New York: Springer, 2011
- [2] Brinkley Sprunt, Lui Sha, John Lehoczky "Scheduling Sporadic and Aperiodic Events In a Hard Real-Time System" 1989
- [3] Brinkley Sprunt, Lui Sha "Implementing Sporadic Servers in Ada" 1990