Schedulability test for a jobset using Deadline Monotonic algorithm

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INTRODUCTION

For the Real-Time Operating System (ROS01) course taught at Rotterdam University of Applied Science the authors have to prove they understand the theory of RTOS scheduling and can analyse a jobset for a real time system. After the analysis of the jobset the authors should conclude if the jobset if schedulable according to the Deadline Monotonic algorithm.

The schedulability tests assume that the jobset will be executed on a uniprocessor system where tasks are preemtable. It also assumes that that there is no context-switching time. It also assumes that the execution of the scheduler does not require the processor, that is, the scheduler runs on another specialized processor.

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1 SUMMARY