
Exercise: Earliest Deadline First (EDF) + Least Laxity First (LLF) Scheduling (Coding task, ca. 1h)

1. Introduction

In the last exercise we completed the RMS scheduling simulation and augmented the simulation such that it can give us an answer whether the task set can be scheduled in any case - even if the LL- or the HB-schedulability test can make no statements about the schedulability of the task set.

2. Coding task

Now write a scheduling simulation such that the 1.) Earliest Deadline First scheduling and then the 2.) Least Laxity First approach is simulated.

Take the scheduling examples from the lecture (3 tasks with $Z1=(0,1,3,3)$, $Z2=(0,1,4,4)$ and $Z3=(0,2,5,5)$) and check whether the simulator correctly schedules the tasks according to the EDF and LLF scheduling strategy respectively.

Compare the EDF / LLF scheduling of the above 3 tasks also with the RMS scheduling strategy by entering the same values in the RMS simulator.