Bus Systems

Exercise 4

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Flexray Scheduling analysis (mandatory)

- Now, you have used the CAN scheduling analysis

- Modify the CAN bus scheduling analysis eqations in a way that make then suitable for the analysis of FlexRay bus systems:

  - The Flexray network is configured to consist of static segments of length l_s and dynamic segments of length l_d.
  - Frame definitions (Frame length, Period, Deadline) are defined similar to CAN bus scheduling analysis
  - Frame priority is a number between 0 and n
  - Estimate whether a frame with priority $0 \leq x \leq n$ that is ready at beginning of dynamic segment is guaranteed to be scheduled in the same dynamic segment
  - Assume all other frames to be ready at beginning of dynamic segment (worst case)