MTS System Efficiency Detail Sequence Diagram - CS6310 Assignment 9 - Group 1 - UML 2.0

s:SimulationEngine

:Bus

:Stop

— calcSystemEfficiency() →

Loop

[Buses]

getSpeed() →

← speed

getCapacity() →

← capacity

totalSpeed += speed

totalCapacity += capacity

busCost = coefficientSpeed * totSpeed + coefficientCapacity * totCapacity

Loop

[Stops]

getWaitingCount() →

← waitingCount

totalWaiting += waitingCount

systemEfficiency = coefficientWaiting * totalWaiting + coefficientBus * busCost + coefficientCombined * totalWaiting * busCost

← systemEfficiency

Comments

System Efficiency is modelled as a computed value that is sent to the UI whenever any action involving change in sys efficiency happens

That said, this is a simple calculation and doesn't involve many methods. Its a two liner code
Hence I have expanded the sequence diagram with some of the math steps and where they are performed so that the diagram doesn't look sparse