Sequence Diagrams

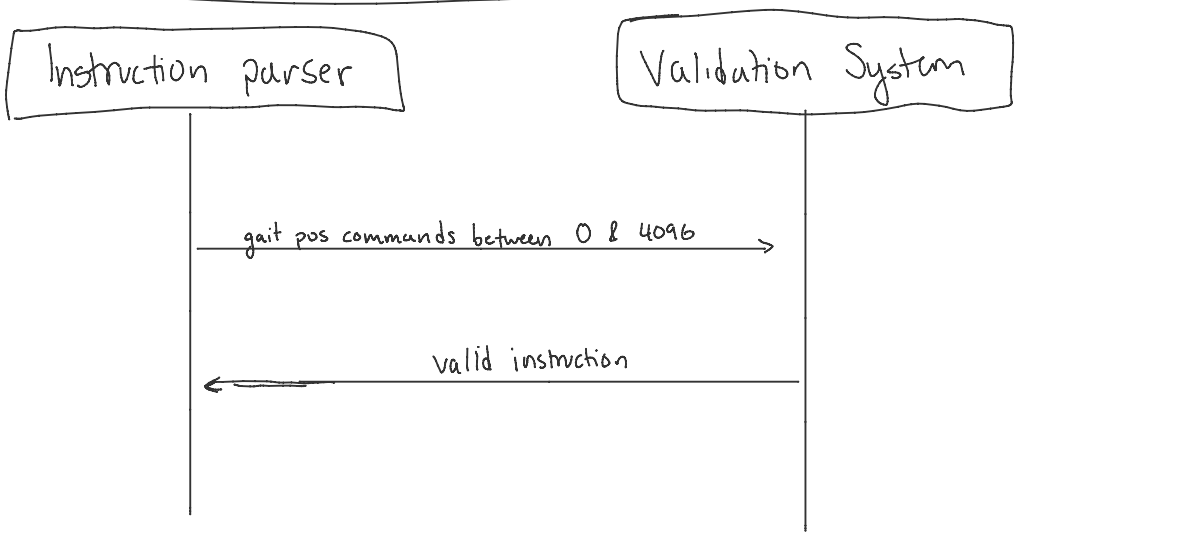
Sunday, March 31, 2019 8:49 PM

Sequence Diagrams for T-RHex prototype

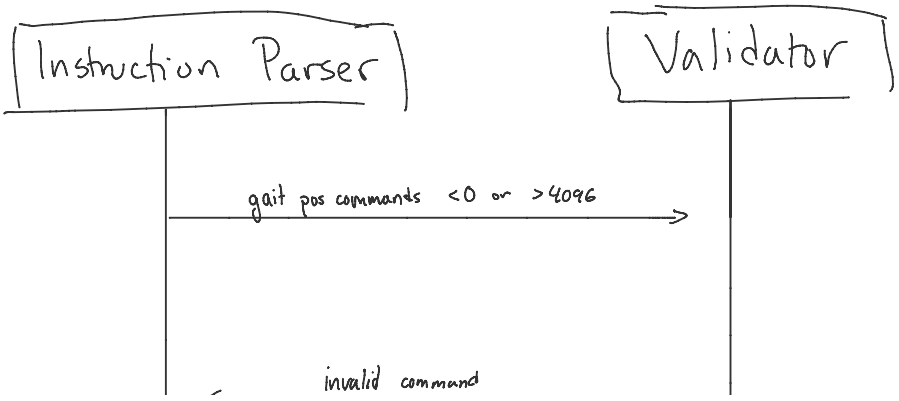
Created by Vivaun Bahl, vrbahl@andrew.cmu.edu for Team 1,

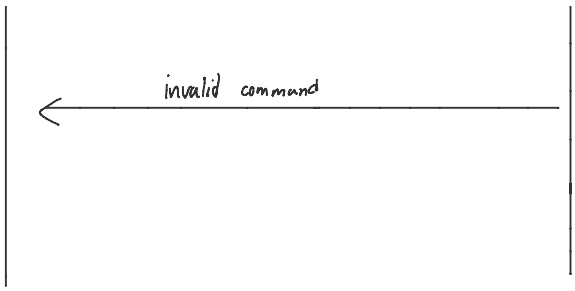
Last modified, Apr 1 2019

S1.1.1 – System encounters valid gait command

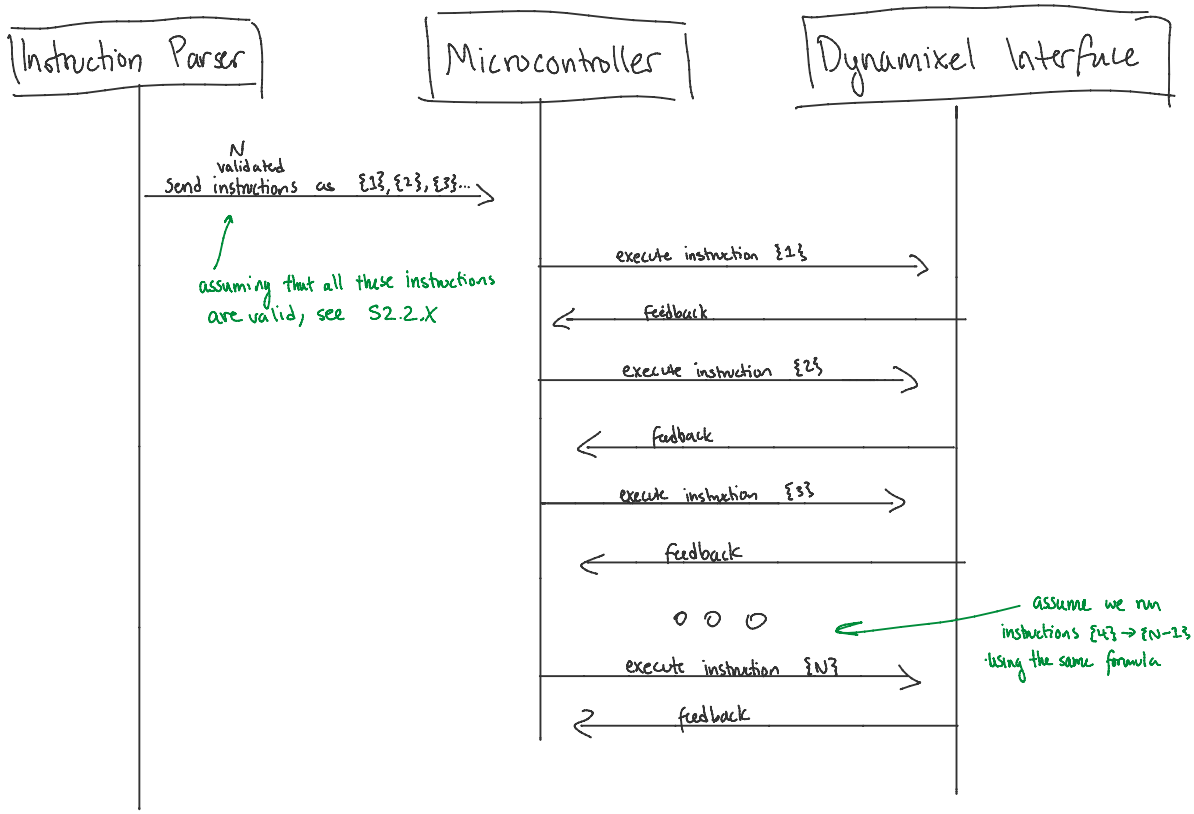


S1.1.2 - System encounters invalid gait command

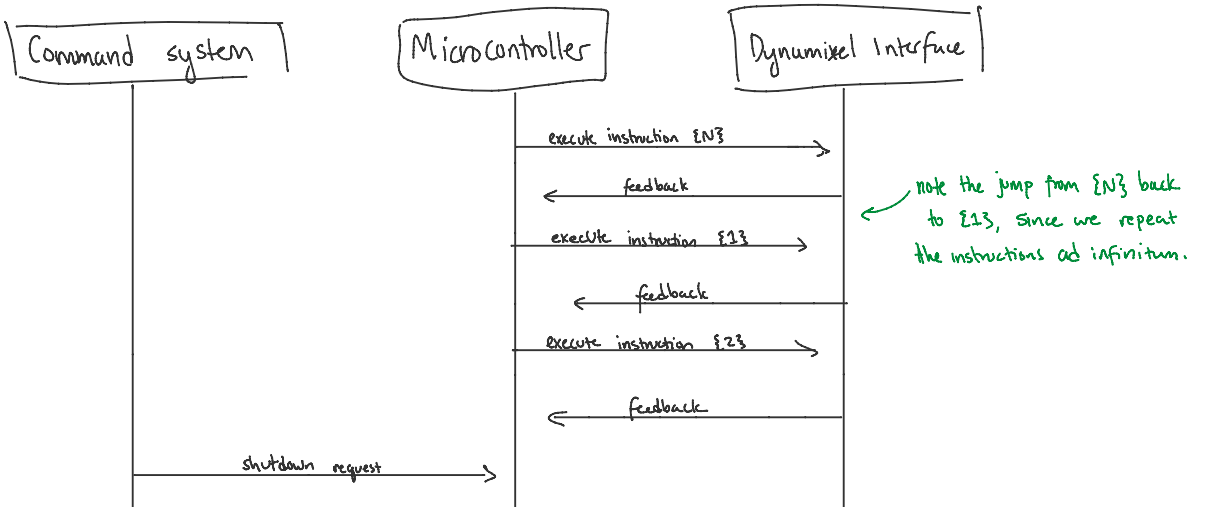


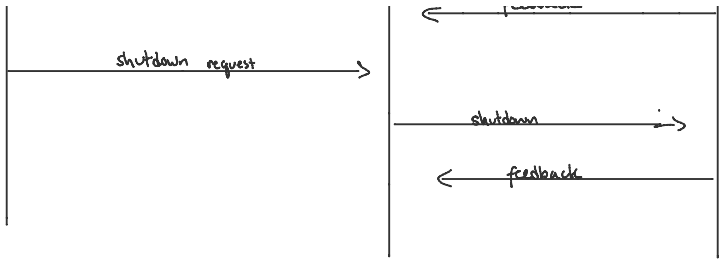


S1.2.0 - System executes instructions in the order received

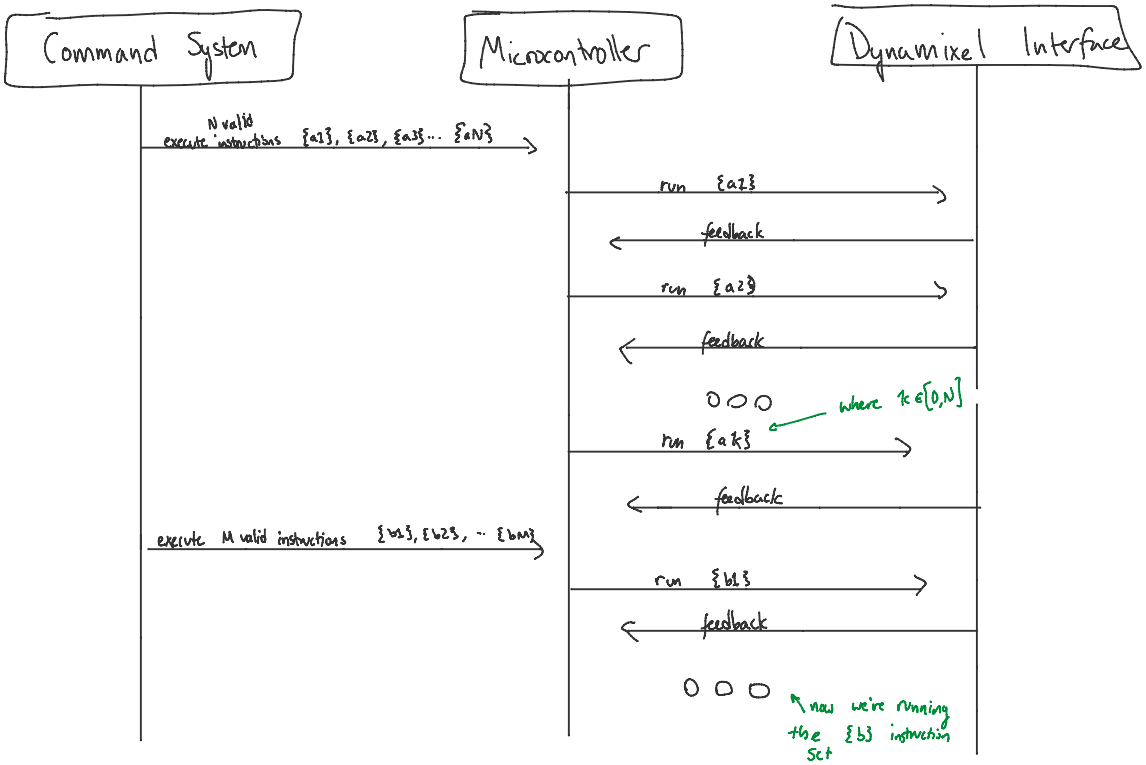


S1.3.0 - System receives shutdown command

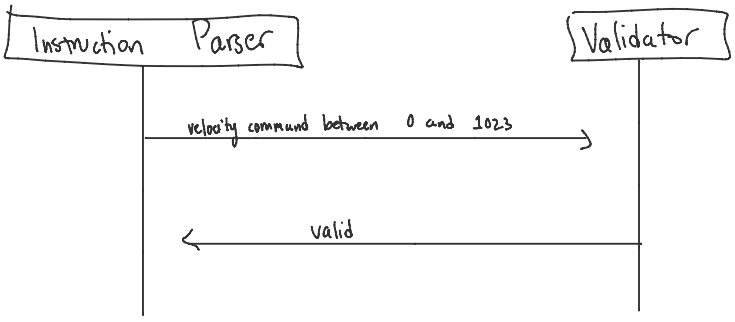




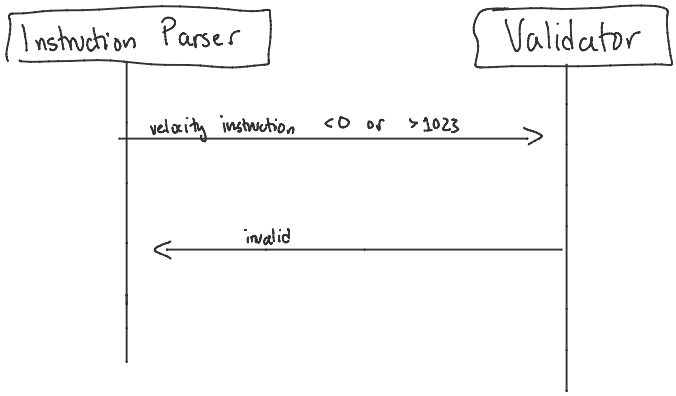
S1.4.0 - System receives a different set of commands



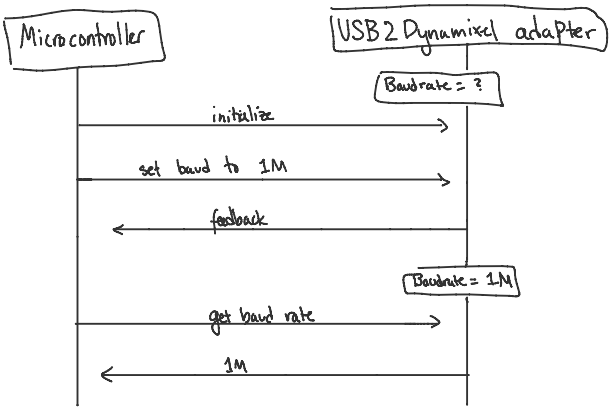
S1.5.1 - System receives valid velocity command



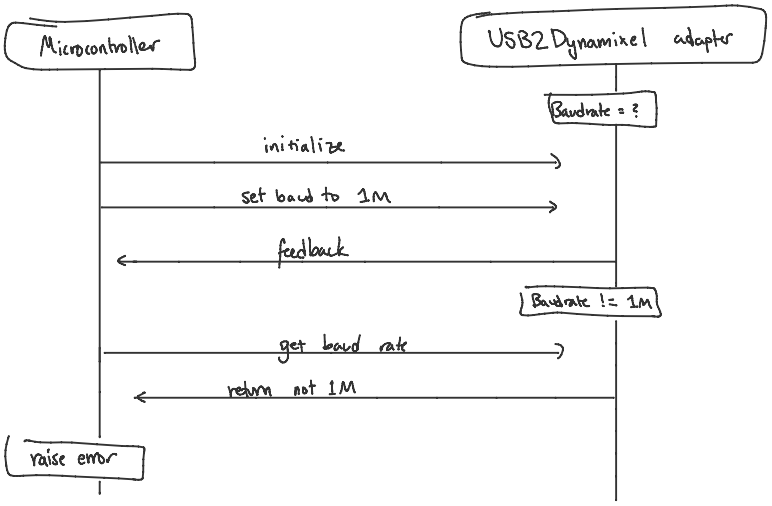
S1.5.2 - System receives invalid velocity command



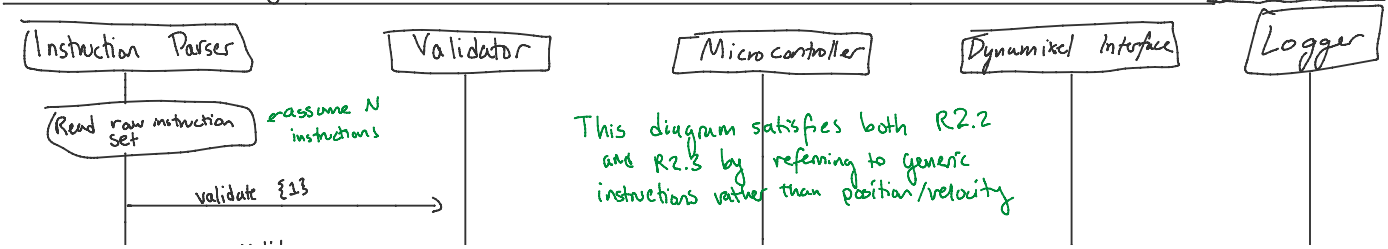
S2.1.1 - System succeeds to set baud rate to 1M baud

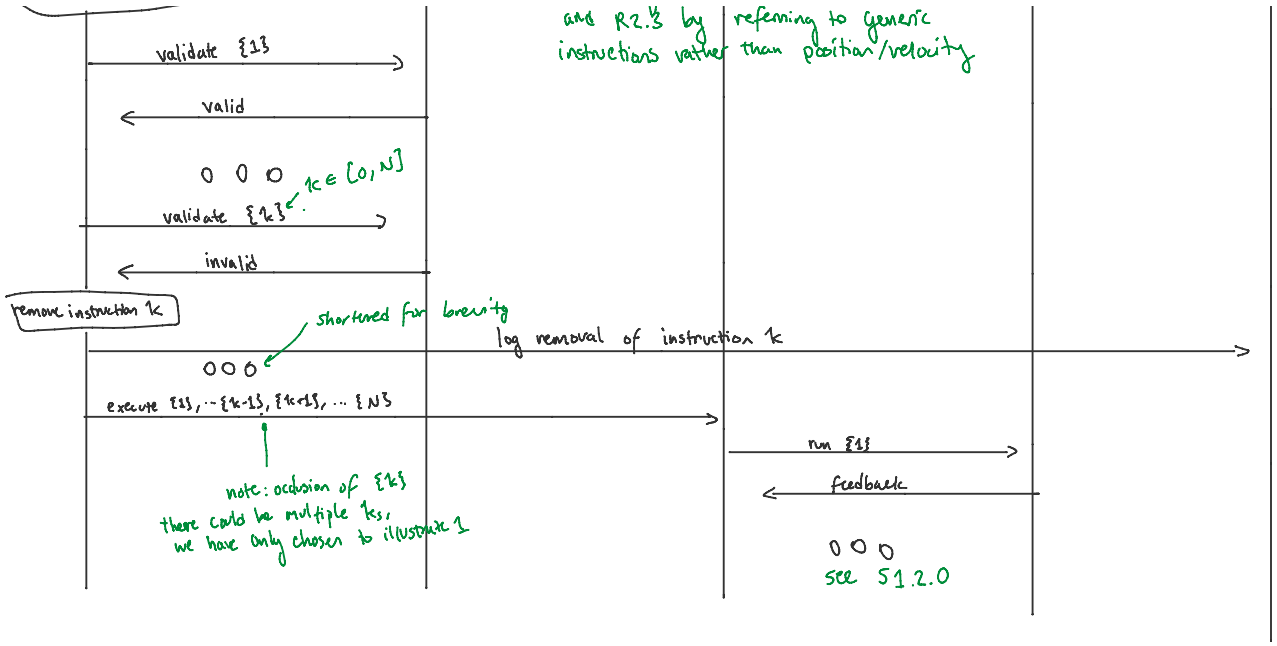


S2.1.2 - System fails to set baud rate to 1M

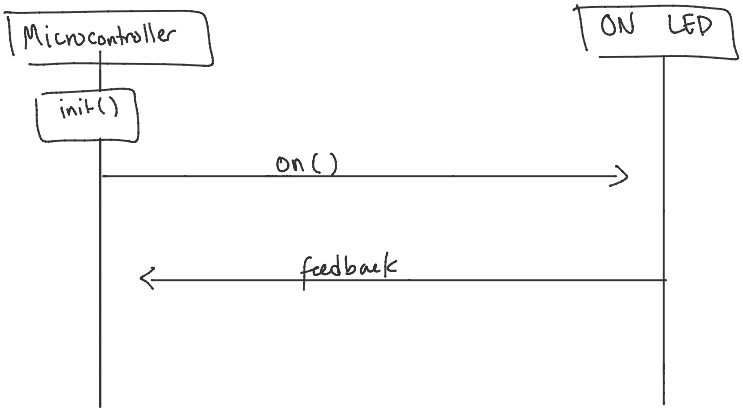


S2.2.0 - System commands servo to angle according to valid & invalid instructions

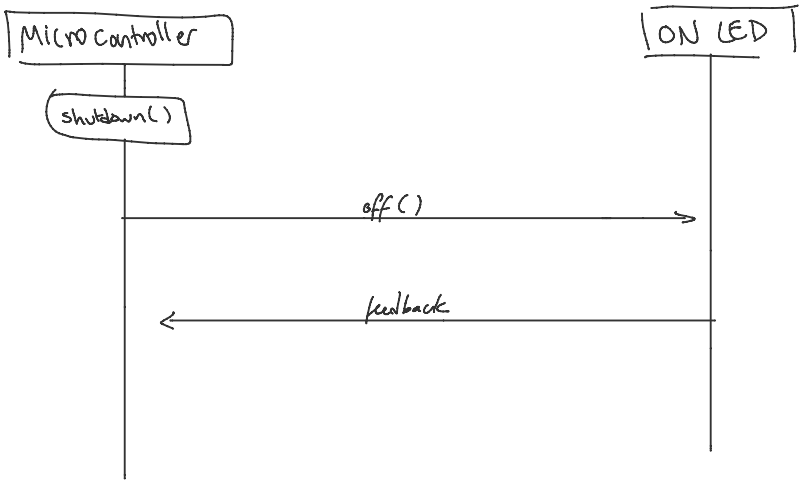




S3.1.1 - System reports ON state via LED

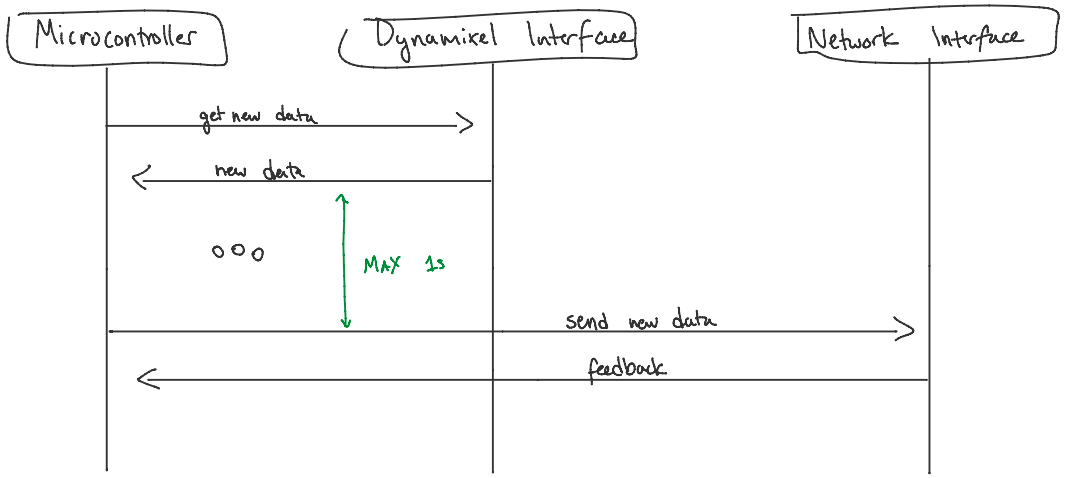


S3.1.2 - System reports OFF state via LED

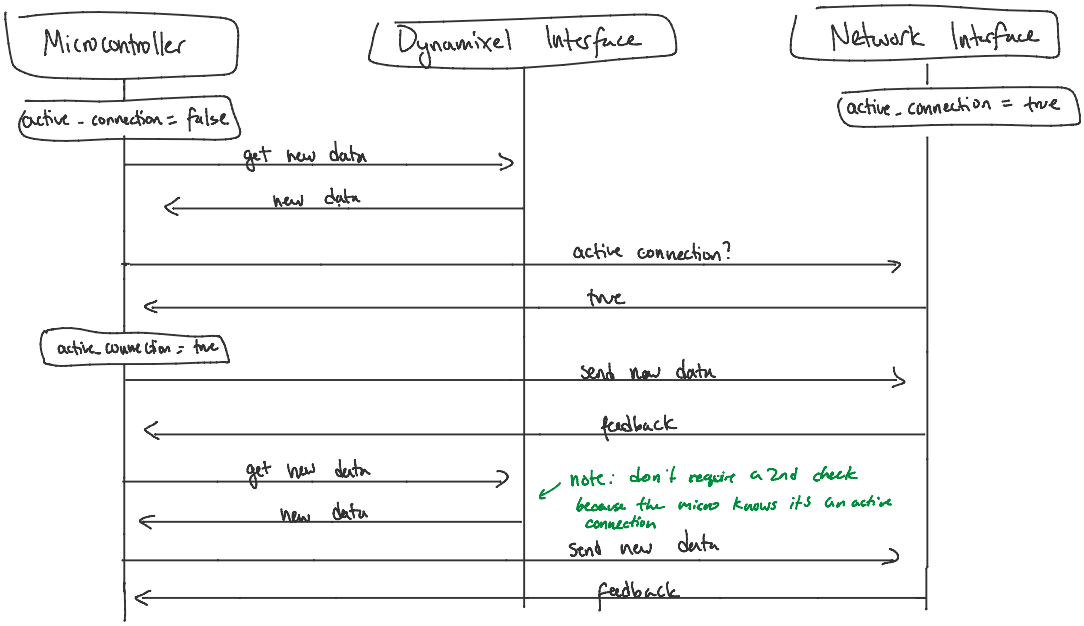


☆ we elect to not specify sequence diagrams for R3.2 and R3.3 due to their similarity to R3.1

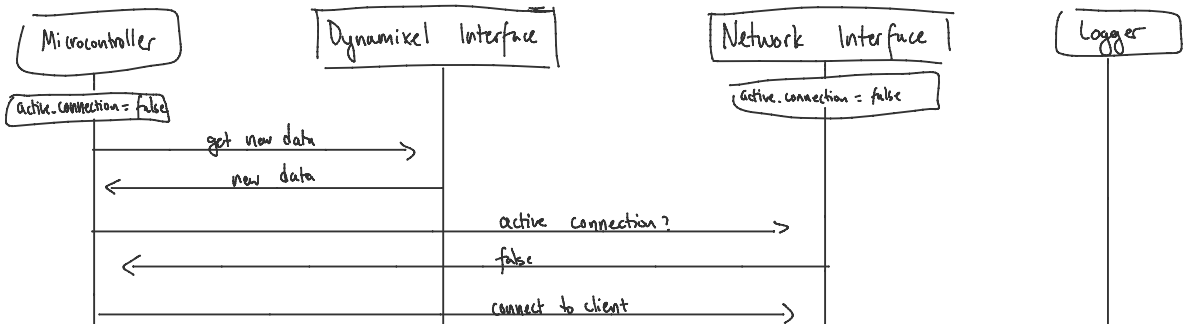
S4.1.0 - System timing constraint

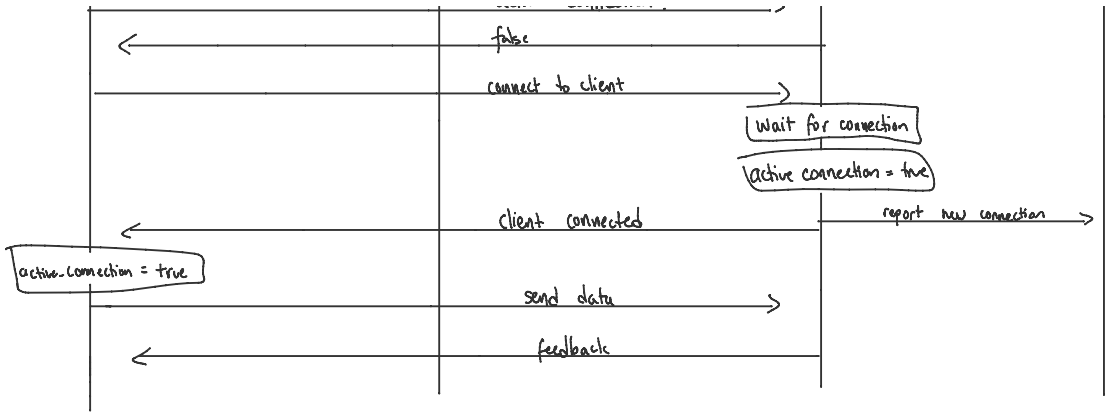


S4.2.1 - System sends data over network interface that has an active connection, but the system doesn't know it



S4.2.2 - System attempts to send data over a network interface, but the network interface has no active connection





☆ We elected to not write sequence diagrams for R4.3 - 4.7 because those requirements cover specific data, and S4.x refer to those data generically

S4.8.0 – Client computer disconnects, system attempts reconnect.