

SOEN 331 Assignment 3
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monitoring specification

$Q = \{\text{monidle}, \text{regulate_environment}, \text{lockdown}\}$

$q_0 = \text{monidle}$

$\Sigma_1 = \{\text{no_contagion}, \text{contagion_alert}, \text{after_100_ms}\}$

$\Sigma_2 = \{\text{broadcast FACILITY_CRIT_MSG}, \text{inlockdown} = \text{true}, \text{inlockdown} = \text{false}\}$

$\Lambda = \{$

$\rightarrow \text{monidle}$

$\text{monidle} \xrightarrow{\text{no_contagion}} \text{regulate_environment}$

$\text{regulate_environment} \xrightarrow{\text{after_100_ms}} \text{monidle}$

$\text{monidle} \xrightarrow{\begin{array}{l} \text{contagion_alert/} \\ \text{broadcast FACILITY_CRIT_MSG} \\ \text{inlockdown} = \text{true} \end{array}} \text{lockdown}$

$\text{lockdown} \xrightarrow{\begin{array}{l} \text{purge_succ/} \\ \text{inlockdown} = \text{false} \end{array}} \text{monidle}$

$\}$

$V = \text{inlockdown} \{\text{true}, \text{false}\}$