Machine-1 EMS

Devesh Tarasia *19-Jan-2021*

Problem Statement:
To create a program that would be able to monitor the status of machine-1 and be able to detect the type of fault, the part associate with the fault and possible rectification

Type of Data:

- Functional Nodes: The values of these nodes constantly change throughout the operation of the machine and and can be used as an indicator of progress of the process through the workstation
- State Nodes: The values of these nodes remain unchanged throughout the operation and are an indicator of the 'health' of the machine. If some state tags are wrong, then the machine is not in the right state to operate
  - State Nodes common for all components
  - State Nodes specific for each component
- Operational Times: Timestamps of the Functional Nodes when a change of value occurs in the nodes

Current Approach:
Idea:
The idea is to compare the node values at each event change with the correct values. The correct values are stored in a matrix where each row has the values of functional nodes at each change.
At each event change, the values of all the functional nodes is checked with corresponding row. The row numbers represent the the event number, which are incremented chronologically.
To check the difference between