

Simulation editor verification checklist

2019년 4월 23일 화요일 오전 9:33

1. Graph drawing

- a. Drawing component: Click on toolbox's component and click on canvas to draw
- b. Cancel drawing: Component is selected, press Esc button
- c. Delete component: select component and press delete button/icon
- d. Edit component's label: double click on the component to show properties and edit component's label
- e. Component properties: double click on the component to show properties
- f. Save properties: on properties windows, click save button
- g. Cancel save properties: on properties windows, click cancel button and close window
- h. Close properties windows: press close button on the upper right corner of the window
- i. Connecting component: double click on a component to show arc, drag this arc to the other component to connect both components

2. Structure verification

- a. Connected graph component on canvas:
 - i. Start
 - 1) INPUT: NULL
 - 2) OUTPUT: 1: activity or branch
 - 3) Cardinality: 1 simulation : 1..M start
 - ii. Stop
 - 1) INPUT: 1: activity or branch
 - 2) OUTPUT: NULL
 - 3) Cardinality: 1 simulation : 1..M stops
 - iii. Activity
 - 1) INPUT: 1: start, activity or branch
 - 2) OUTPUT: 1: activity, branch or stop
 - 3) Cardinality: 1 simulation : 1..M activities
 - iv. Branch split
 - 1) INPUT: 1: activity, other branch or start
 - 2) OUTPUT: 2..M: activity, other branches or stop
 - 3) Cardinality: 1 simulation: 1..M branch
 - v. Branch join
 - 1) INPUT: 2..M: activity, other branches or stop
 - 2) OUTPUT: 1: activity, other branch or start
 - 3) Cardinality: 1 simulation: 1..M branch
- b. Unconnected graph component on canvas:
 - i. Generator
 - 1) Cardinality:
 - a) 1 simulation: 1..M generator
 - b) 1 generator: 1..M start
 - c) 1 generator: 1 object type or 1 data table
 - ii. Queue
 - 1 queue place : 1..M tokens each having its own capacity
 - 1) Cardinality:
 - a) 1 simulation: 1..M queues
 - b) 1 activity: 1 queue (?)
 - c) 1 queue: 1..M activities (shared queue)
 - iii. Resource
 - 1) Cardinality:
 - a) 1 simulation: 1..M resources
 - b) 1 activity: 1 resource pool (?)
 - c) 1 resource pool: 1..M activities (shared resource)
 - iv. Object type
 - 1) Cardinality:

- a) 1 simulation: 1..M object type
 - b) 1 object type: 1...M generator
 - v. Function
 - 1) Cardinality:
 - a) 1 simulation: 1..M function
 - b) 1 function: 1 resource
 - c) 1 function: 1..M monitoring KPI
 - d) 1 function: 1..M activities
 - vi. Monitoring KPI
 - 1) Cardinality:
 - a) 1 simulation: 1..M monitoring KPI
 - b) 1 monitoring KPI: 1..M activities
 - vii. Data table
 - 1) Cardinality:
 - a) 1 simulation: 1..M data table
 - b) 1 data table
 - c. Not drawn on the canvas, since it is **exactly one component** needed for a simulation:
 - i. Simulation control
 - ii. Configuration
- 3. Minimum structure of a simulation model**
 - a. 1 start
 - b. 1 stop
 - c. 1 activity
 - d. 1 generator
 - e. 1 object type
 - f. 1 resource
- 4. Data import
- 5. Data export
- 6. Auto save