

PRAKTIKUM 09-10: BPMN SIMULATION

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TUJUAN PEMBELAJARAN

Mahasiswa mampu menjelaskan notasi dan elemen BPMN 2.0.2

Mahasiswa mampu menerapkan BPMN 2.0.2 dalam pemodelan proses bisnis Sistem Informasi Manajemen

Mahasiswa mampu merancang dan membuat pemodelan proses bisnis SIM menggunakan BPMN

Mahasiswa mampu menggunakan fitur BPMN simulation di Bizagi

REFERENSI

<https://www.omg.org/bpmn/index.htm> (khusus BPMN)

<https://www.omg.org/spec/BPMN> (spesifikasi BPMN)

https://training-course-material.com/training/BPMN_2.0_Analysts

<https://romisatriawahono.net/bpmn/> (BPMN simulation)

MATERI

Simulation in Bizagi

- Bizagi Modeler allows simulation your business processes under the BPSim (Business Process Simulation) to support decision making and boost their continuous improvement
- To start using simulation in Bizagi all you need is a complete Process model
 - otherwise, it will not be able to be simulated
- For a complete simulation analysis we recommend using four levels:
 - Level 1 -Process Validation
 - Level 2- Time Analysis
 - Level 3 - Resources Analysis
 - Level 4 - Calendars Analysis
- Each subsequent level incorporates additional information that adds more complexity, providing a coherent analysis of your processes

- Levels are not interdependent, you may start at any level if you hold the required process data
- By default the Simulation mode will start at Level one, the first time a Simulation is run for the process model
 - It is best practice to start simulation at level one, and progress one level at a time
 - It is possible to move between levels at any time
- For each simulation level follow these steps:
 - Collect process data for the simulation
 - Add the data to the relevant shapes in the diagram
 - Interpret and present the outcomes

Supported Elements and Diagrams

- The following BPMN elements are not supported by the simulation engine:
 - Multiple events: Start, Intermediate and End
 - Complex gateways
 - Event based gateways followed by none intermediate events or tasks.
 - Multiple instance tasks
 - Multiple instance Sub-processes
- The following diagrams are not supported by the simulation engine:
 - BPMN Choreography diagrams
 - BPMN Conversation diagrams
 - Transactional process
 - Ad Hoc process

<https://help.bizagi.com/process-modeler/en/index.html?simulation.htm> (link Bizagi simulation user guide and videos)

DRAWING TOOL

Bizagi Modeler <https://www.bizagi.com/en/platform/modeler>

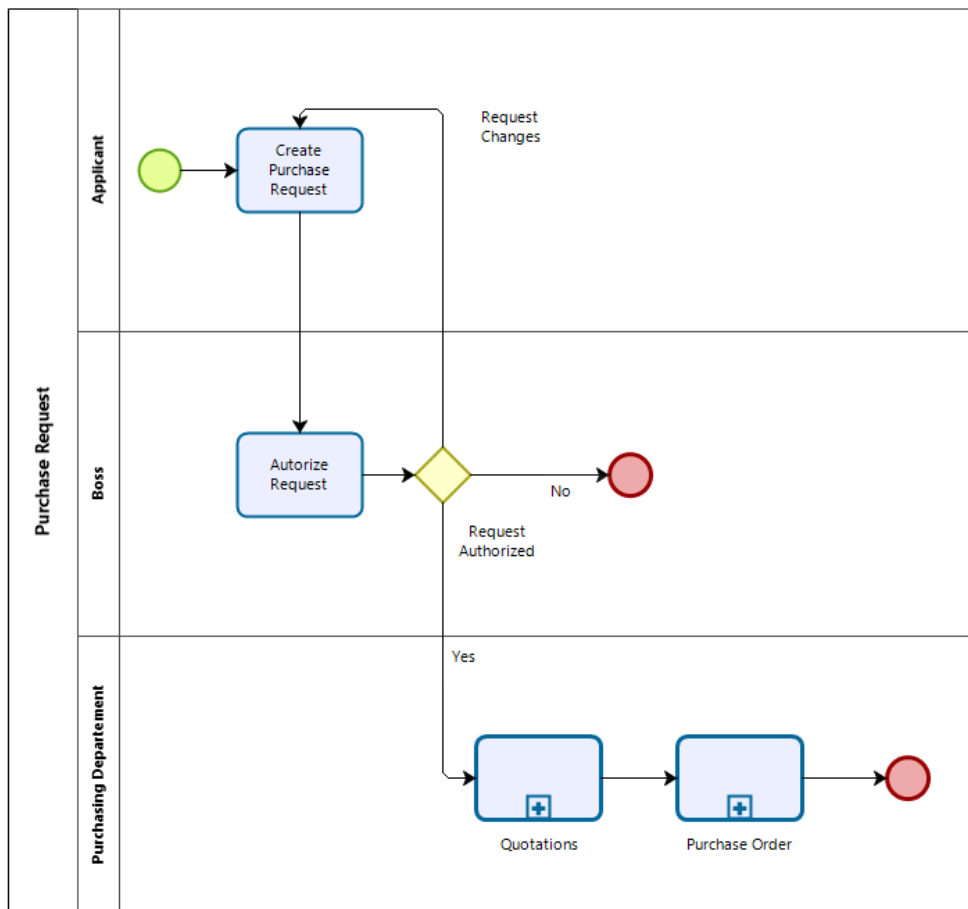
(Modeler Services - Workgroup Trial 30 hari) – **kita manfaatkan sebaik-baiknya untuk menyelesaikan latihan simulasi BPMN diagram yang telah dibuat**

<https://www.bpsimulator.com/run/> (online)

PRAKTIKUM

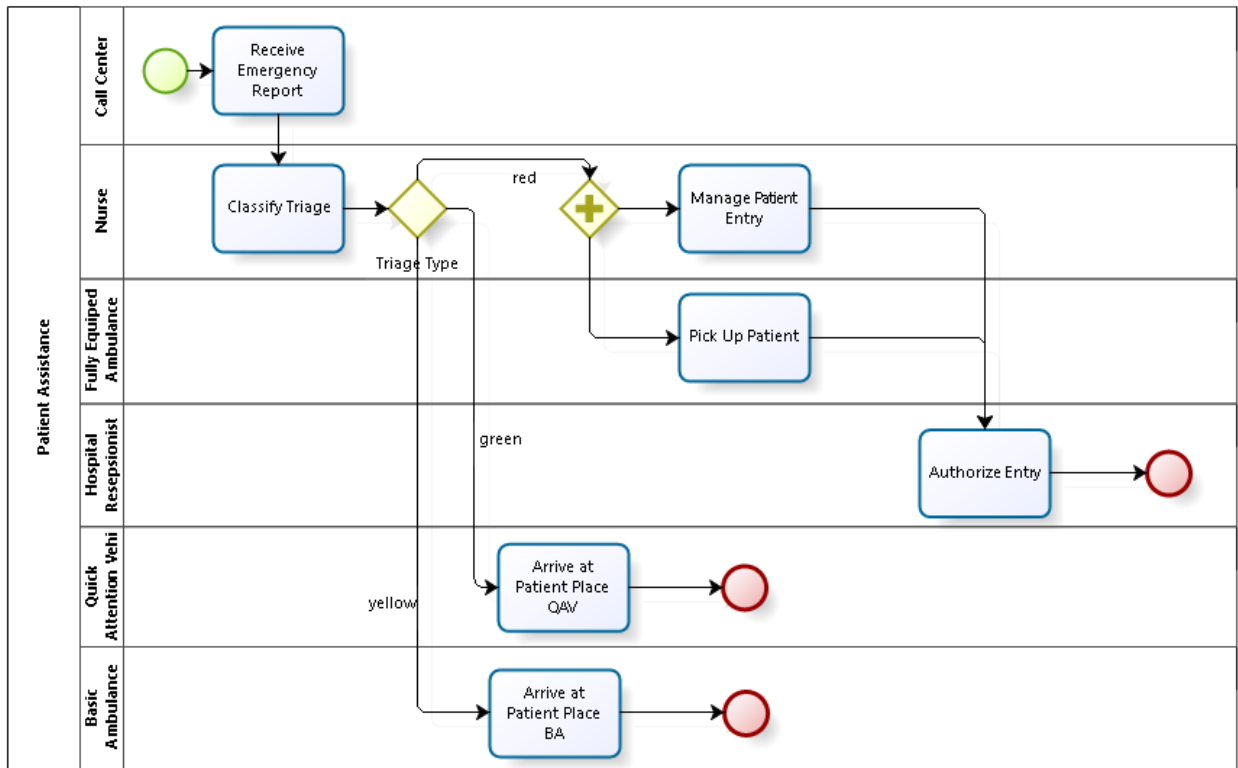
Nb:

- Ikuti petunjuk step by step pada slide no. 11 sampai slide no.20
 - Ulangi step 1 – 8 untuk melanjutkan ke level selanjutnya
 - Ikuti petunjuk pada slide no. 28 – no.129 untuk menambahkan data di *relevant shape* (notasi BPMN yang sesuai) pada diagram dan analisis hasil/result
 - Baca slide no.21-25 untuk mengetahui data yang perlu diinputkan dan struktur hasil/result
- Buatlah diagram BPMN “*purchase request*” sebagaimana diagram dibawah ini. Kemudian buat dan eksekusi model simulasi dari process validation (lv1), time analysis(lv2), resources analysis(lv3), calendar analysis(lv4).



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- Buatlah diagram BPMN dengan studi kasus “*patient assistance*” sebagaimana diagram dibawah ini. Kemudian buat dan eksekusi model simulasi dari process validation (lv1), time analysis(lv2), resources analysis(lv3), calendar analysis(lv4).
(Baca slide 26 -27)



TUGAS

(Deadline submission tugas belum ditentukan)

Buatlah laporan praktikum yang berisi screenshot setiap proses praktikum diatas serta

1. Buatlah analisis dari hasil simulasi pada praktikum no.1
2. Buatlah analisis dari hasil simulasi pada praktikum no.2

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