

Lab - 7

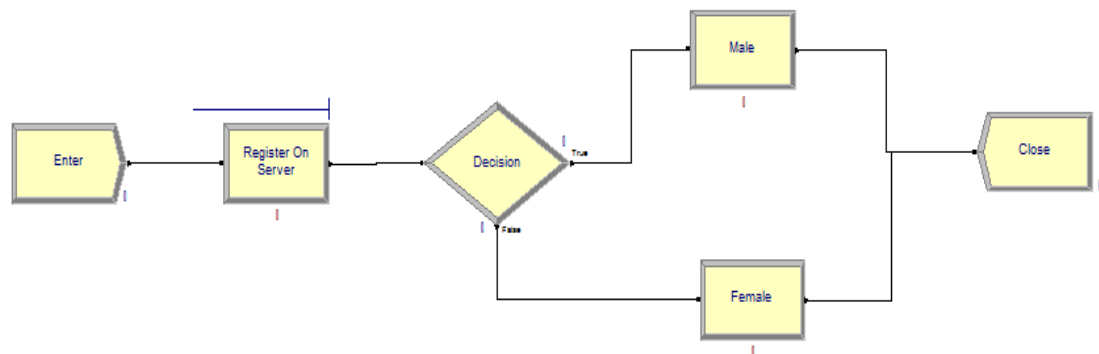
Online Shopping System

Problem:

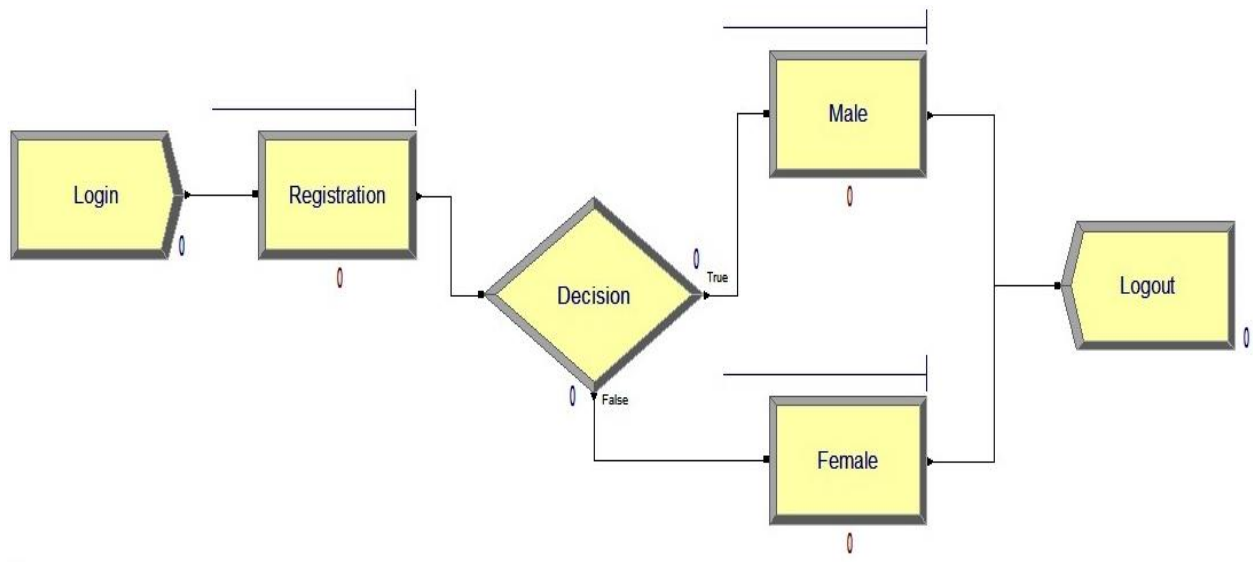
Consider a model of Online Shopping System. Assume that in every 7 minutes one order can be placed, in an exponential distribution fashion. First every visitor needs to register with the system, for able to buy products. There is only one active server for the registration process, with service time 2 to 4 min uniformly. Remark that this system considers the first 50 registered visitor as male customers, and remaining as female. The chances of a customer can be male or female is 50%. Male customer takes 15 minutes and female customer takes 5.2 minutes to complete his/her buying. After complete buying, they just logout from the server.

We are interested in simulating the system for 24 hours.

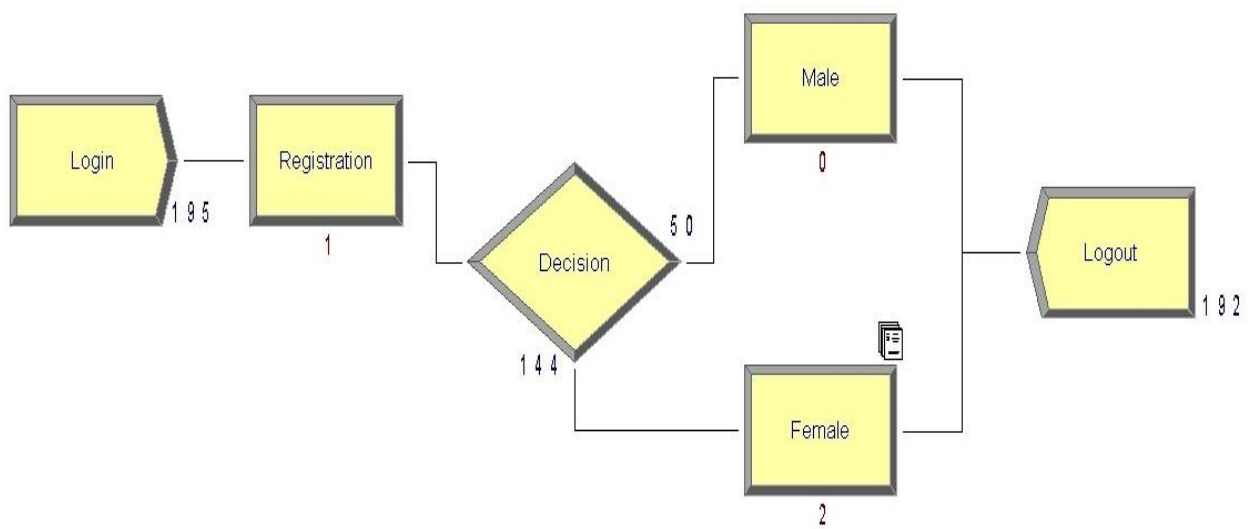
Model:



Diagram



Before simulation



After simulation