## **Abstract**

Modeling is a real system representation of objects with mathematical form and a logic relationship. In general, simulation defined as dynamic representation from some of real worlds by using computer and run with selected time. One of modeling technique is Discrete Event Simulation (DES), doing a system modeling what changing each everytime. This method have the character of stochastic, dynamic, and discrete-event.

In this final exam implementation some queue simulation models using queue rule which different each other queue model. Queue simulation models the build are single server queue, multi server queue, time shared computer model, multi teller bank with jockeying, dan job-shop model.

The model have parameter customer, arrival dan service time. With result output time average size of the queue, time average utilization of the Server, time average wait in queue. Examination result to application functionality indicate that functions of queue model can run and match with specification have been specified.

Keywords: DES, queue, state, event, modeling, simulation