

CASE STUDY GUIDELINES

1. I suggest you follow the steps below in carrying out your case study:
 - You should characterize the distributions of the interarrival times and the service times before attempting to develop the model of the system. You already have the background to accomplish this step from your experience with the ARENA Input Analyzer. See the project hints.
 - An important step is to understand the operation of the current and proposed systems well enough to identify the right queuing models to represent them. See the project hints.
 - Within the context of queueing systems, we primarily considered the case in which the interarrival and service times are both well-modeled by an exponential distribution. If this is not the case, then there is a correction for non-Markovian queues that you may use; see (particularly approximation 8.32) for detailed information.
2. You are expected to hand in a paper no longer than 5 single-spaced pages, excluding Appendices. Below is a list of the primary sections required to be in your paper:
 - Objective
 - Executive summary
 - System Analysis (for current system)
 - Proposed System I Analysis
 - Proposed System II Analysis
 - Sensitivity Analysis (see the project hints)
 - Recommendations
 - Errors and Shortcomings

