

CSC130 EA1

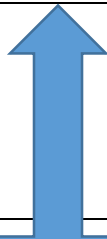
Program #3 - Airport Simulation

Application (with main method)

Creates the 3 threads
Starts the 3 threads
Waits for the duration of the simulation (based on the simulation time specified)
Stops the 3 threads

Runway Thread (Consumer)

Needs access to the Arrival and Departure Queues
Determines priority (which plane has access to the runway)
Simulates time spent on the runway



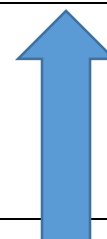
Arrival
Queue



Arrival Thread (Producer)

These 2 threads:

wait (based on time until next formula)
generate plane with random id
add the plane to the queue



Departure
Queue



Departure Thread (Producer)

Airline Class

Has an ID, (fuel time optional)
Keeps track of the time entered the queue
Keeps track of the time exited the queue