1. queue::Vector{Int}

serving::Vector{Int}

N::Int

NW::Vector{Int}

WQ::Vector{Time}

WS::Vector{Time}

TS::Vector{Vector{Time}}

Tmax::Time

IAT::Time

iatime::Time

stime::Vector{Time}

1. struct A1 <: ArrivalEvent end

struct D1 <: DepartureEvent end

struct D2 <: DepartureEvent end

struct D3 <: DepartureEvent end

1. Diagram

   Description automatically generated
2. Example output from “[ThreeCenterSystem] my\_tests.jl”:

With an equal chance to go to center 2 and 3, they should have very similar total wait times:

Mean total wait time from service center 1: 9.946

Mean total wait time from service center 2: 13.544

Mean total wait time from service center 3: 13.59

With different chances to go to center 2 and 3, they should have very different total wait times:

Mean total wait time from service center 1: 10.032

Mean total wait time from service center 2: 3.07

Mean total wait time from service center 3: 41.738

1. I used the same state variables and events from question 1 for question 2
2. queue::Vector{Int}

serving::Vector{Int}

N::Int

NW::Vector{Int}

WQ::Vector{Time}

WS::Vector{Time}

TS::Vector{Vector{Time}}

Tmax::Time

IAT::Time

iatime::Time

stime::Vector{Time}

1. struct A1 <: ArrivalEvent end

struct D1 <: DepartureEvent end

struct D2 <: DepartureEvent end

struct D3 <: DepartureEvent end

1. [insert png]
2. e) f) g) Example output:

h) The feedback system gets bottlenecked at service center 2