Elsa Rodriguez Plaza/CS6310/Assignment 6/SequenceDiagram In this diagram I represented the passenger exchange functionality, measuring the system's efficiency (I am assuming that whenever a bob is in moved, the system will also sleighly the system's efficiency using the objective function mentioned in the assignment), also added the manage excise rater's function before a change the passenger exchanges starts, since there could have been a change in the busies capacity before the more bus command is executed. stop:Stop bus:Bus route:Route rider:Rider rA: rOff: rOn: rOn: RiderOrsImulator RiderOrsImulator RiderOrsImulator vElement: VisualSimulationElement The problem statement describes that the Route object makes reference to stop IDs. However, I represented the Route as having a list of Stop objects rather than Stop IDs. The reason for this is that I placed the topic for distance that the state of the TravelMapRenderer and VisualSimulationElement are classes that represent the visual behavior of the Simulation, e.g. rendering the new bus position, etc. Although these classes are not required, I represented them here for completion event = getEventFromQueue() Location in this diagram represents the Stop's latitude and longitude — getLocation() — ——- locationNextStop —— The problem statement does not explain in detail how the riders' departure and arrival time will be handled. But, I am assuming that the information on the time of departure and arrival. I am also assuming that this information will be used to calculate the critique of the problem of the pr logicalTime = calculateTravelTime(travelDistance In case the user decided to reduce the bus capacity, we need to handle the "excess riders" rd = generate RidersDepart() dInfo = displayInformationLine (bus.getId(), nextStop.getId(), logicalTime, riders, distanceRemaining) refreshMapElement(location, dlnfo,sEfficiency) createSimulationEvent (event)