**Class Exercise – 6.2**

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**Submission**: Save this Word document with your answers as a PDF file and upload the PDF file to Canvas.

**Area Transit Authority**

The Area Transit Authority (ATA) is a rural public transportation company. ATA operates a fleet of 25 buses that serve approximately 1,000 riders each day. The bus operation involves 10 regular routes, plus routes for special events. The ATA employs 20 full-time drivers and 10 to 15 part-time drivers. The dispatcher coordinates the hiring of drivers, staffing routes with drivers, and communicates with the drivers regarding traffic information and special passenger pick-up arrangements.

Use one of the diagramming tools identified on the “External Tools Page” in Canvas.   
You’ll need such a tool for this chapter’s case study.

**Tasks**

1. Identify possible actors in ATA’s bus operations:

* Mechanic
* Driver
* Trainer
* Rider
* Planner
* Dispatcher

1. Identify possible processes in ATA’s bus operations:

* Hiring
* Execute Route
* Staffing Route
* Training
* Communicating

1. Complete the use case narrative for one of the processes of the bus system using the actors identified above.

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| Case Name: | Staffing route |
| Actors: | Dispatcher, driver |
| Successful Completion: | Staffed |
| Alternative: | Part time driver cancelled route |
| Pre-Condition: | Available full time driver |
| Post-Condition: | Informed driver |
| Assumptions: | Available bus |

1. BONUS: Create a state transition diagram that describes typical passenger states and how they change based on specific actions and events.