

**INFOST 340 – Systems Analysis**  
**Semester: Fall 2016**  
**Instructor: Kevin Trainor**  
**Assignment: State Machine Diagram**  
**Course Component: Skills Practice**  
**Grading Rubric**

## Submission

### Timeliness (49 available points)

#### Requirements

Must be submitted by date and time indicated in the weekly schedule.

Percent Credit	Description
100	On Time
67.3469	Late
0	Not submitted or submitted too late

## File Submitted (10 available points)

### Requirements

Submit only 1 file.

File type must be .PDF.

File name includes student name.

File name meets all requirements stated in assignment instructions.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

# State-Machine Diagram

## Completeness (20 available points)

### Requirements

The diagram should explain all of the expected states of an important entity in the data model.

If the assignment specifies a specific entity, then this specific entity must be the subject of the diagram.

The states considered should not be limited to only one entity type in the data model. Often, one application entity is represented by more than one entity type. For instance, the state of an order might be reflected in the various states of the entity types Order, PaymentEvent, PickEvent, ShipEvent, and DeliveryEvent.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## Technique (21 available points)

### Requirements

The diagram should track the state of only one application entity. Sometimes this is challenging because more than one entity type is being used to track the state of a single entity. Nevertheless, this diagram is not intended to track the states of all entities in the data model. So, while it might consider the states of Order, PaymentEvent, PickEvent, ShipEvent, and DeliveryEvent, it should not also track the states of other distinct application entities like Customer, Employee, and Message.

The boxes on the diagram must represent states of the entity. They cannot represent actions.

The lines on the diagram should be labeled with a description of the activity that triggers the change in state. Not all activities need to be represented in the diagram. Only the last (triggering) activity needs to be documented here.

If choice symbols are used on the diagram, two or more lines must flow out of the choice symbol that are labeled with [guard conditions].

Lines that flow from a terminal state box to the termination (stop) symbol should not be labeled with a description of some trigger. Triggers introduce new states. Each state box that flows directly to the termination (stop) symbol is a terminal state. No subsequent state is possible.

No state boxes may appear on the diagram that are not connected by some flow to the initial (start) symbol and the terminal (stop) symbol.

States that cannot be reached from the start of the diagram are not permitted.

States from which the end of the diagram cannot be reached are not permitted.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.

0	Meets no expectations.
0	Not submitted or submitted too late.

## Grade Adjustments

### Adjustment (100 available points)

#### Requirements

Assignment must be submitted on time.

Work submitted must show good faith effort on all parts of the assignment.

All directions included in the instructions must be followed.

Percent Credit	Description
0	Meets all expectations. No additional credit needed to meet a minimum score of 85.
0	Meets all expectations. Some additional credit needed to meet a minimum score of 85.
0	Does not meet expectations.
0	Not submitted or submitted too late.

**Net Available Points = 100**