

## Homework 8

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Question:

8.10. How does a sequence diagram differ from a state diagram? How are they similar?

Answer:

A sequence diagram typically shows the execution of a particular use case for the application and the objects (as in instances of a class) that are involved in carrying out that use case. It could either show a single path, or all of the various paths, through the use case, starting with an actor (user, external system, event) initiating some kind of action.

State diagrams show the various states that are valid for an object (which could be anything from a method to a class to the system as a whole). That could be a particular class or the system as a whole. This type of diagram shows what actions are valid for a given object, depending on what state it is currently in.