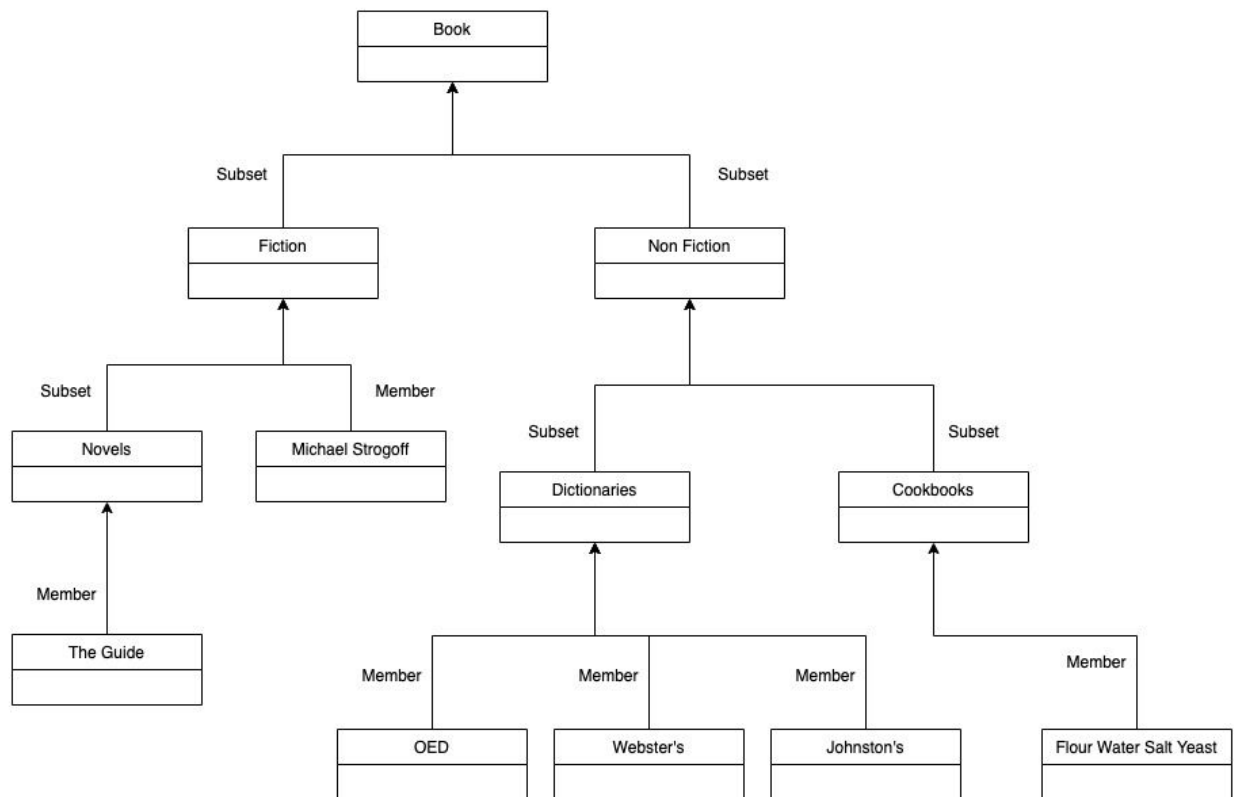


# Assignment 4

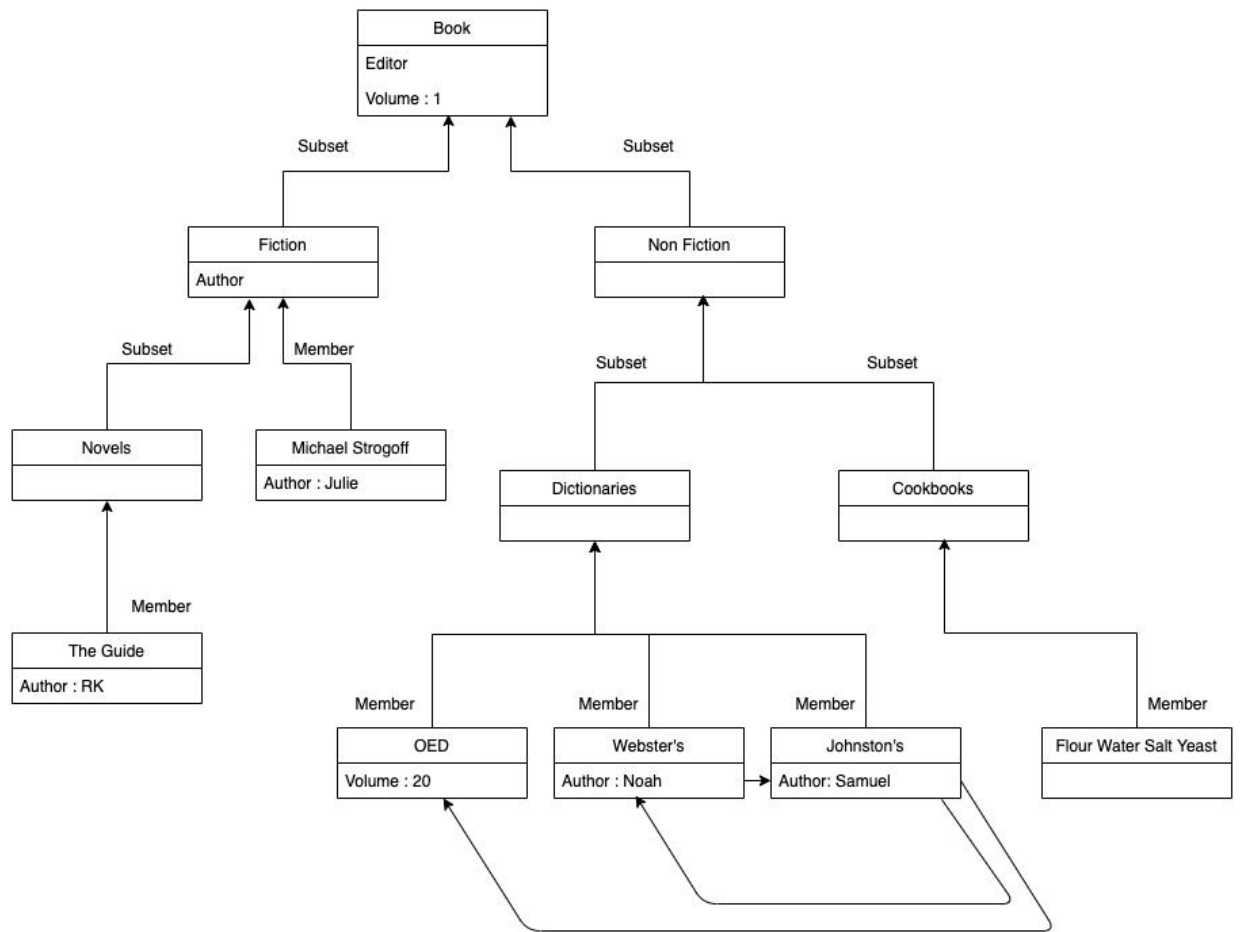
Name: Adarsh Trivedi  
Unity Id: atrived  
Student Id: 200317604

## 1. Question 1



- 
- 
- q1b.pl file attached in moodle.
- Note: Websters and Johnstons agree with each other since both have them have properties author, editor and volume. OED agrees with Johnstons agrees with OED since OED has editor and volume which is a subset of properties of what Johnstons has ie, author, editor, volume. But the vice versa is not true, hence OED doesn't agree with

Johnstons.



d. q1d.pl file attached in the moodle.

## Question 2:

2a.

Init(clean(garage)  $\wedge$   $\sim$ sparkplug(car)  $\wedge$   $\sim$ belt(car)  $\wedge$   $\sim$ engine(car))  
goal(install(engine,car)),

action(addplug(plugin,car), precondition:- ( $\sim$ beltinstall(belt), clean(garage)),  
Effect: beltinstall(belt)  $\wedge$   $\sim$ clean(garage))

action(addbelt(belt,car), precondition:- ( $\sim$ plugininstall(belt)  $\wedge$  clean(garage)),  
Effect: plugininstall(belt)  $\wedge$   $\sim$ clean(garage))

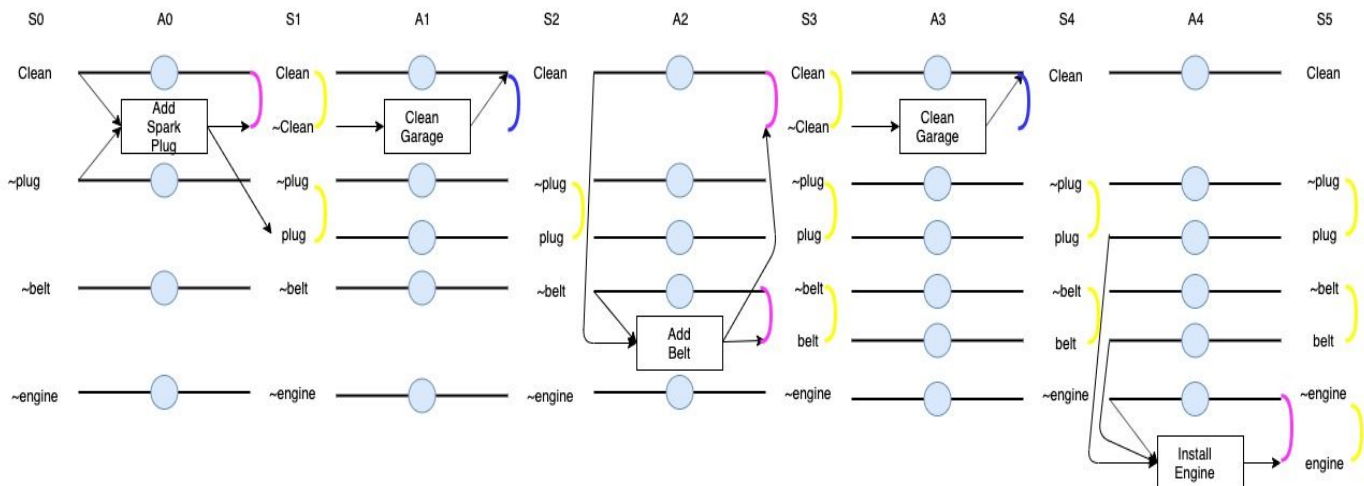
action(clean(garage), precondition:- ( $\sim$ clean(garage)),  
Effect: clean(garage))

action(intallEngine(engine,car), precondition:- sparkplug(car), belt(car),  $\sim$ engine(car),  
Effects: engine(car))

2b.

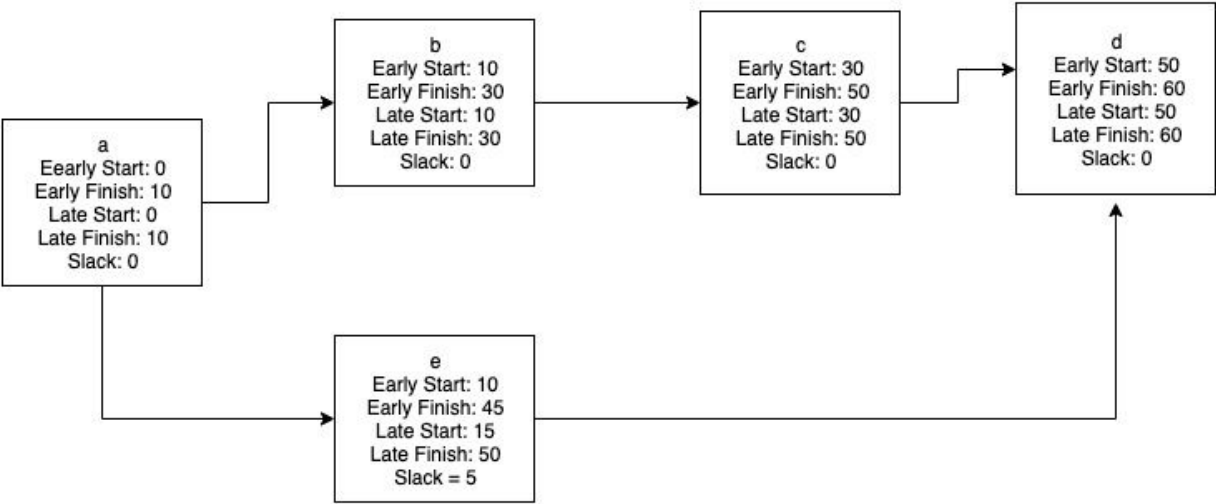
Inconsistent Effect : —  
Inconsistent Support : —  
Competing needs: —  
Inference: —

Graph Plan : Question 2



Question 3:

Sequence 1



Critical Path : a, b, c, d

Sequence 2

Critical Path: a, l, m, n, j, k, g

