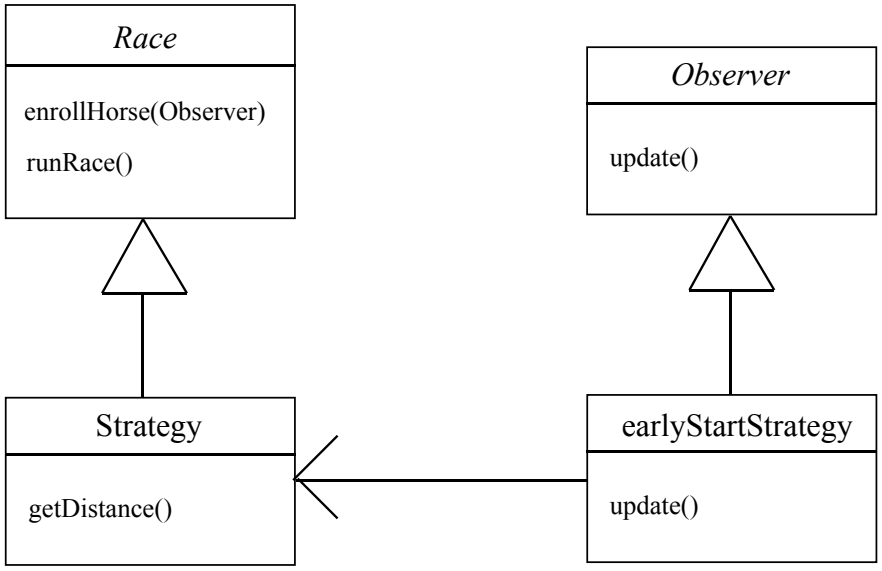
Emily Koykka

Homework 3



For this project, I decided to use the observer strategy for managing the horses, their strategies, and the race. The overarching class for horses/strategies is Strategy, which contains privates for that horse's speed and current distance. Strategy implements Observer to utilize the update function so that they will be notified for each iteration of the loop in race, representing time passing. Each different strategy extends Strategy and updates differently, according to what the strategy is. As a horse's strategy is updated, that horse's distance is increased by the speed it is going divided into seconds. Once a horse has reached 10 miles distance, the loop stops and that horse is declared the winner. This method of coding was effective since strategies, although different, all need to behave the same when reacting to the race itself. The fact the the observable class can call the updates to each observer makes racing and gaining distances for the horses easy and correct.