1. I have a Actor class, a Avatar class derived from the Actor class, and a Bank class derived from the Actor class. I designed two functions Actor::landOn and Actor::moveOn that takes in a Avatar pointer to see if an avatar land on / move on an actor. I also have a m\_newPlayer data member in Avatar class. Using these functionalities I can have Bank::doSomething detect if a player move on it / a new player land on it. Then, I have a m\_bank data member in StudentWorld and a m\_coin data member in Avatar, along with setter/getter functions of each data member. By calling these setter/getter functions in Bank::doSomething, the bank square can add/subtract coins from m\_bank/m\_coin.
2. My program exit with code -1073741819 in visual studio, but I’m not sure what’s the problem. I checked that there’s no memory leak and try to use vector::at function to access the containers, but I still couldn’t figure out what’s the problem there.
3. I assumed that, after teleport by an event square, an avatar need to first roll die before choosing a valid direction. However in the sample executable file the player seem to be able to move without choosing a valid direction. But in the spec it says the avatar needs to choose its direction, so I decide to follow what the spec says.