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**CS 32 Project 3 Report**

1. To handle the interaction between the player and a goodie, the doSomething() function of the Goodie class is invoked. The function first checks if the goodie is alive and has not been stolen by a MeanThiefBot. Then, it uses the function getColocatedStealable(x,y) to return the specific Actor pointer to the stealable goodie by iterating through the actor vector. Then, it uses the function isPlayerColocatedWith(x,y) from StudentWorld. This function checks if the player is on the same square as an actor by iterating through the vector of actors. If the player has the same (x,y) coordinates as the stealable goodie that we found earlier and the goodie allows agent colocation, then it returns true. Back to Goodie’s doSomething() function, if this function returns true, then the goodie will be set to dead, the player’s score will be increased by the PickupableItem’s score amount, and a sound will be played. Finally, it calls the function doGoodie(). This function is a purely virtual function in Goodie, but is implemented in the ExtraLife, RestoreHealth, and Ammo goodies. Each of these implementations calls their respective goodie effects.
2. I believe I was able to implement everything required by the spec.
3. I didn’t make any assumptions.