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Project 3 Report

Every tick each bank square’s doSomething() is called which calls the bankCoins(Player\* p) function to check if a player is on the square. If during that tick a player is directly over the bank square but still moving (ticks\_to\_move != 0), then it will check if the player has more than five coins, if the player has more than five coins then five coins are deducted from the player through the setCoins(int coins) function. If the player has less than five coins, then all of their coins are deducted from the player. In both cases the bankCoins function calls a setBankBalance function in the student world that keeps track of the total bankBalance from all the bank squares and plays the deposit sound. The number of coins the player lost is added to the bank balance. If the player stops on a bank square (ticks\_to\_move == 0), then the player is no longer a new player so the new player bool is set to false, then the amount of coins in the global bank balance is given to the player with the getBankBalance function in the student world. The global bank balance is set to 0 and the bank withdraw square sound is made.

I do believe that I finished everything in the spec and interpreted the rest around the edges. It is possible that some of the interactions between the players and boo may be a bit weird because I found it hard to reset when a player could swap coins again, but otherwise, I think the game should work very close to what was specified.

List of Assumptions:

1. Some interactions were determined by the ordering of the actors in the list, for instance, lets say Peach lands on a square and gets 3 coins but then Bowser comes along and takes all her coins, or does Bowser come along and take all her coins, and then peach lands on the square. In the end I made the squares go first, then boo, then Bowser.
2. Sounds may be played in different orders depending on the way the actors in the list are called also when actors are called based on the ordering I developed.
3. Baddies don’t respect directional squares
4. Dropping square action is randomized to remove star or coins
5. I’m sure I made other assumptions but those are the main ones I can think of