Assignment #2 – CS362

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**Refactor**

The definition of refactoring code is defined as “Code refactoring is the process of restructuring existing computer code—changing the factoring—without changing its external behavior. Refactoring is intended to improve nonfunctional attributes of the software.” This means to improve on the code so that the functionality works better. To do this we needed to create functions for each card that we refactored so that it is works better. For each function called, I put the correct parameters into the function call and make sure that the code compiles and plays.

1. int AdventurerFunction(int drawntreasure, struct gameState \*state, int currentPlayer,int \*temphand,int z){}
2. int SmithyFunction(int currentPlayer, struct gameState \*state,int handPos){}
3. int MineFunction(struct gameState \*state,int currentPlayer,int choice1,int choice2,int handPos){}
4. int RemodelFunction(struct gameState \*state,int currentPlayer,int choice1,int choice2,int handPos){}
5. int StewardFunction(struct gameState \*state, int currentPlayer,int choice1,int choice2, int choice3,int handPos){}

**Bugs**

For each function, I tried to add at least 2 bugs to it. The bugs are subtle because most of the time it’s just changing some numbers around, so the functionality is not as good.

1. For the adventurer card, I changed it so the deck still has one card in it then it wil shuffle and add to the deck. The second bug I added is that the top card is not removed from the hand.
2. For the smithy card, I changed the 3 to 2 so you only draw 2 cards instead of 3. And then I changed 0 to a 1 in the discardCard which will send the card to the played pile and add playedcardcount + 1.
3. For the Mine card, The added bug is I changed choice2 to choice1 and then I lowered the getcost function from a 3 to 1. then I changed 0 to a 1 in the discardCard which will send the card to the played pile and add playedcardcount + 1.
4. For the remodel function, I changed choice2 to choice1 again. And then I changed the j to j-1 in the discard trashed cards part of the function
5. For the steward function, the first bug is the person only drawing one card instead of two. Then the second bug is you only get 1 coin instead of 2. Then the last bug I introduced was changing the 1 to 0 in the discard card so the don’t get put in the play pile.