

Bugs:

When running my card tests with my bugs I got Segmentation faults.
When running without my bugs, there were no errors.
I found no bugs when running my unit tests. All tests were passed.

Unit Testing:

After running Gcov, the coverage for my program was 21.29%. This of course means that not all cases are covered, but nearly a quarter of them are. For most programs, this would not be ideal, and we would create more test cases to try and increase the coverage. I tested some functions like `getCost` and `isGameOver`, which aren't used all too often, so testing functions like `discardCard` or a more used function would increase coverage easily.

Unit Testing Efforts:

-My first unit test tests `whoseTurn`. I create a gamestate, fill the Kingdom card slots, initialize a game, and send an arbitrary number of requests to the gamestate to check whose turn it is. Each time I check, I `assert()` whose turn it is, so if the turn doesn't increment, then it will fail.

-My second unit test tests `isGameOver`. I create a gamestate, fill the Kingdom card slots, initialize a game, and set the number of provinces and other property cards to various numbers to check if the game will end if there are no provinces left. It will fail if there are properties left and the game tries to end.

-My third unit test tests `getCost`. This one I simply called `getCost` on various cards to determine if the function worked correctly. I did not need to create a gamestate or simulate a game.

-My fourth unit test tests `buyCard`. I create a gamestate, fill the Kingdom card slots, initialize a game, and set the number of buys to various amounts and try to buy a card with varying amounts of money. I tested having buy actions but no money, having no buy actions and having money, and having both buy actions and money.