

Refactor

- Adventurer
- Smithy

These cards were easily moved into their own functions. As an added bonus, I was able to delete the variables `int cardDrawn` and `z` from the function `cardEffect()` which contained the switch statement.

- Baron
- Village
- Great Hall

These cards were straightforward to refactor. All that was required was copying the body of the switch block into their own functions.

Bugs

1. `playSmithy()`

Changing `<` to `<=` in the for loop can change the score of the game at runtime and reverse the outcome. The compiler has nothing to say about this error.

2. `playBaron`

Changing `<` to `>` in

if (`choice1 < 0`)

can also change the winner of the game.

3. `playGreatHall`

If we take the address of variable in the wrong place the compiler will scold us with a conversion warning but still finish building the program. But running the program results in a segmentation fault.

4. `playAdventurer`

Assigning

`[state->handCount[currentPlayer]]`

instead of

`[state->handCount[currentPlayer]-1]`

is a classic off by one array access resulting in a core dump at runtime.

This is an easy mistake to make, but a particularly nasty bug to track down. Worse, the compiler is no help here.