Comp4004 – Assignment 3

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**My Findings**

What you can test with Selenium

**ConnectionBasicsTest:**

* You can test if you can connect to the app
* You can test if you can open the lobby
* You can test if you can connect two players
* You can test if you can connect multiple players
* You can test if you can start the game.

**GameTest:**

* You can test if you can have the AI make their choices
* You can test if you can use the stay button
* You can test if you can use the hit button
* You can test if you can improve cards

**RankingTest:**

* You can test if you can rig the game to give the players specific cards.

**Strategy1:**

* You can test that the AI holds when they are given a straight or higher
* Possible to manually rig the game to force the else portion of strategy 1

What you can test with Selenium and Junit

**ConnectionBasicsTest:**

* Junit is used to test the proper console output is printed for all tests mentioned above in “What you can test with Selenium”
* Used to test if the proper number of human players are connected

**GameTest:**

* Junit is used to test the proper console output is printed for all tests mentioned above in “What you can test with Selenium”

**RankingTest:**

* Junit is used to test the proper console output is printed for all tests mentioned above in “What you can test with Selenium”

**Strategy 1:**

* Junit is used to test the proper console output is printed for all tests mentioned above in “What you can test with Selenium”

What you cannot test with Selenium by itself

**ConnectionBasicsTest:**

* If the proper number of human players are connected

What you cannot test with Selenium combined with Junit

**Strategy 1:**

The only way to test the else statement of strategy one, shown here: “else this AI player attempts to get a full house by exchanging everything that is not a pair or 3 of a kind”, is by hard coding the cards. This does not test the strategy properly as we must use a rigged game to set up this scenario. If we were to use a regular game there is no way for us to be certain that we will get the hands that are needed to test these scenarios.

When using a rigged game, you give it the starting hands, but you also choose which cards it exchanges. The fact that you choose which cards the AI discards makes the strategy testing irrelevant, as you are doing the work for it. The AI still decides when to HIT or STAY but the actual swapping of cards in done in the written code. Making it impossible to test fully.

How you’d go about using Selenium and other testing tools to test your game’s interface AND your game’s logic in a systematic way