**CS 1632 – DELIVERABLE 2: Unit Testing Ruby Rush**

Aliyah Flores

**Github**: @aliflooo

<https://github.com/aliflooo/D2>

While creating the ruby\_rush program, I had run into a few problems, which in turn, ended up with the non-fulfillment of some of the requirements necessary for Deliverable 2. These requirements are as follows:

1. A prospector shall prospect until they have visited the number of locations indicated by the third argument, number of turns. This may include “repeats” – for example, a prospector who went to Enumerable Canyon, Duck Type Beach, Matzburg, Duck Type Beach, Enumerable Canyon has visited five locations, even though they visited only three unique locations.
2. After a prospector has visited the number of locations specified by the initial argument number of turns and thus finished prospecting, the number of rubies and fake rubies the prospector has discovered shall be displayed.
3. When displaying information, the correct singular and plural forms shall be used, e.g. “0 rubies”, “1 ruby”, “2 rubies”.

My main issues were with the number of turns argument given by the user on the command line. My code will take in the number of turns, but the loop will not execute fully so that it searches for rubies with that number of locations. I think my issue with this was that I was not implementing my loops correctly within my simulate() method. With requirement (3) from above, I created unit tests to ensure that the correct singular and plural forms were used, but both tests failed continuously, so I assume there are mistakes within my if statements for my print\_rubies() method.

The following are defect reports for the two failing tests mentioned above:

**SUMMARY:** When the total amount of rubies is equal to 0, the grammatical form of the word ‘ruby’ must be plural (“rubies”), and the location would move.

**DESCRIPTION**: Upon running Minitest, the system fails.

**REPRODUCTION STEPS:** Run the program on the command line using ruby all\_tests.rb. This will start up Minitest.   
**EXPECTED BEHAVIOR:** Expected the output found below:

Expected /\tFound 0 fake rubies in Enumerable Canyon.\n Heading from Enumerable Canyon to Monkey Patch City. /  
**OBSERVED BEHAVIOR:** Observed output found below:

Expected /\tFound 0 fake rubies in Enumerable Canyon. / to match "Heading from Enumerable Canyon to Monkey Patch City. \n".  
**SEVERITY:** This problem persistently occurs when the user runs Minitest. As such, it shows that the program is incorrect and the correct values are not passing through. It is a severe problem, because it shows that the program immediately changes location without updating the user on not finding any rubies or fake rubies.   
**IMPACT:** Because of this, the program’s output will never be entirely correct, since the number of rubies are never entirely accurate.

**SUMMARY:** When the total amount of rubies is greater than 1, the grammatical form of the word ‘ruby’ must be plural (“rubies”).

**DESCRIPTION**: Upon running Minitest, the system fails.

**REPRODUCTION STEPS:** Run the program on the command line using ruby all\_tests.rb. This will start up Minitest.   
**EXPECTED BEHAVIOR:** Expected the output found below:

Expected /\tFound 2 rubies in Enumerable Canyon. /  
**OBSERVED BEHAVIOR:** Observed output found below:

Expected /\tFound 2 rubies in Enumerable Canyon. / to match "".  
**SEVERITY:** This problem persistently occurs when the user runs Minitest. As such, it shows that the program is incorrect and the correct values are not passing through. It is a severe problem, due to the fact that the number of rubies and fake rubies are not passing into the @totalr and @totalf variables.  
**IMPACT:** Because of this, the program’s output will never be entirely correct, since the number of rubies do not seem to be incrementing.

**Test Screenshot:**

