AFP Assignment 1

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20th November 2015

1 Unit Tests

Initially, I decided to start with some simple Unit Tests which I wrote manually in my rally.erl file. For this purpose, I added the following line in the beginning of the file

```
1 - include_lib("eunit/include/eunit.hrl").
```

in order to use the EUnit testing framework for Erlang. After that, at the end of the file, I put three tests which I got from the assignment's file with the instructions and more concretely, from the sample invocations for the **rally** function:

```
1 % Perform 3 Unit tests
2 rally_test_() ->
3 [?_assertEqual(R, rally(lists:nth(1, N), lists:nth(2, N), lists:nth(3, N))) ||
4 {N,R} <- [{[30, 10, [{10,100},{5,70},{3,40},{6,100},{0,0}]], 5},
5 {[40, 50, [{15,100},{0,0}]], 3},
6 {[40, 20, [{1,50},{1,40},{1,30},{1,20},{1,10},{1,20},{1,30},{1,40},{1,50},{0,0}]], 5}]].
```

Because of the EUnit framework, I was able to use the name of the module and the automatically created function **test** in order to notice if some of the test were going to fail. To do that, I did the following thing

```
1 Eshell V7.1 (abort with ^G)
2 1> rally:test().
3 All 3 tests passed.
4 ok
```

2 Property-based Tests