Chess Game Code Coverage

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Project Stakeholder	Dr. Filippos Vokolos, Ph. D.			

Revision History

Name	Date	Reason for Change	Revision
Armaan Bhasin, Brandin Bulicki, Aparna Mishra, Tumaresi Yalikun, Briana Schuetz	08/23/2020	First Draft of the Code Coverage Document	1.0

1. Unit Test Code Coverage

Please refer to the GameManager.py and testing.py files for unit test results. The testing program can be run running python3 testing.py from terminal. To see the results list of unit tests, please refer to the excel sheet.

For getting the results, we used unittest and coverage libraries. To see the test results type in coverage run testing.py then to see the percentage, do coverage report. To see the results in html, type coverage html

Coverage report: 81%					
Module 1	statements	missing	excluded	coverage	
GameManager.py	498	128	0	74%	
testing.py	179	0	0	100%	
Total	677	128	0	81%	

2. Static Code Analysis

Used pylint to do the static code analysis. Results are shown in the screenshot below. To generate the results from terminal, type pylint GameManager.py

```
umarisMBP:coveragereport tmrs$ pylint GameManager.py
 GameManager.py:14:0: W0301: Unnecessary semicolon (unnecessary-semicolon)
GameManager.py:23:0: W0311: Bad indentation. Found 7 spaces, expected 8 (bad-indentation)
GameManager.py:23:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
GameManager.py:23:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:32:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:34:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:34:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:38:0: C0301: Line too long (102/100) (line-too-long)
GameManager.py:40:0: C0325: Unnecessary parens after 'elif' keyword (superfluous-parens)
GameManager.py:40:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:42:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:46:0: C0301: Line too long (102/100) (line-too-long)
GameManager.py:46:0: C0301: Line too long (101/100) (line-too-long)
GameManager.py:46:0: C0305: Unnecessary parens after 'elif' keyword (superfluous-parens)
GameManager.py:51:0: C0325: Unnecessary parens after 'elif' keyword (superfluous-parens)
GameManager.py:51:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
GameManager.py:50:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
 GameManager.py:20:0: W0311:
GameManager.py:59:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
GameManager.py:60:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:68:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
GameManager.py:60:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:76:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
GameManager.py:83:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:84:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
 GameManager.py:84:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:85:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
  ameManager.py:87:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
   ameManager.py:89:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
   ameManager.py:90:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
 sameManager.py:92:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:94:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
   ameManager.py:95:0: C0325: Unnecessary parens after 'if'
                                                                                                                                                               keyword (superfluous-parens)
   ameManager.py:97:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
 GameManager.py:99:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
                                                                                                                                                      'if' keyword (superfluous-parens)
 GameManager.py:100:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:102:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
 GameManager.py.107.0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:115:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:123:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:131:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:137:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
   ameManager.py:104:0: C0325: Unnecessary parens after 'elif' keyword (superfluous-parens)
   ameManager.py:137:0: C0325: Unnecessary parens after 'elif' keyword (superfluous-parens)
 SameManager.py:140:0: C0325: Unnecessary parens after
SameManager.py:148:0: C0325: Unnecessary parens after
SameManager.py:156:0: C0325: Unnecessary parens after
                                                                                                                                                     'if' keyword (superfluous-parens)
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                                                                                                                                                      'if' keyword (superfluous-parens)
 sameManager.py:164:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
dameManager.py:172:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
dameManager.py:173:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
dameManager.py:180:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
   ameManager.py:181:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
 JameManager.py:189:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
JameManager.py:199:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
JameManager.py:197:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
JameManager.py:198:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
        meManager.py:204:0: C0325: Unnecessary parens after 'elif' keyword (superfluous-parens)
 GameManager.py:205:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:207:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:209:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
   ameManager.py:211:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
   ameManager.py:213:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
 SameManager.py:215:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
SameManager.py:217:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
   ameManager.py:219:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
 GameManager.py:219:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens) is ameManager.py:222:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens) is ameManager.py:223:0: C0301: Line too long (170/100) (line-too-long) is ameManager.py:225:0: C0301: Line too long (171/100) (line-too-long) is ameManager.py:227:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens) is ameManager.py:236:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens) is ameManager.py:237:0: C0301: Line too long (101/100) (line-too-long) is ameManager.py:239:0: C0301: Line too long (102/100) (line-too-long) is ameManager.py:2410: C0301: Line too long (102/100) (line-too-long) is ameManager.py:2410: C0301: Line too long (102/100) (line-too-long) is ameManager.py:2410: C0301: Line too long (102/100) (line-too-long)
              anager.py:241:0: C0325: Unnecessary parens after 'elif' keyword (superfluous-parens)
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SameManager.py:241:0: C0325: Unnecessary parens after 'in' keyword (superfluous-parens)
GameManager.py:246:0: C0325: Unnecessary parens after 'elif' keyword (superfluous-parens)
GameManager.py:249:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
GameManager.py:250:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
ameManager.py:257:0: C0325: Unnecessary parens after 'while' keyword (superfluous-parens)
GameManager.py:258:0:
                     C0325:
                            Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
GameManager.py:266:0: C0325: Unnecessary parens after
                                                     'while' keyword (superfluous-parens)
GameManager.py:267:0: C0325: Unnecessary parens after
GameManager.py:274:0: C0325: Unnecessary parens after
                                                      'while' keyword (superfluous-parens)
GameManager.py:275:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
                                                      'elif' keyword (superfluous-parens)
ameManager.py:281:0:
                     C0325:
                            Unnecessary parens after
GameManager.py:282:0: C0325: Unnecessary parens after
                                                     'if' keyword (superfluous-parens)
                                                      'if' keyword (superfluous-parens)
GameManager.py:283:0: C0325: Unnecessary parens after
GameManager.py:285:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
GameManager.py:287:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:288:0: C0325:
                            Unnecessary parens after
                                                      'if'
                                                          keyword (superfluous-parens)
ameManager.py:290:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:292:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
GameManager.py:293:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
GameManager.py:295:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
GameManager.py:297:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
ameManager.py:298:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:300:0: C0325:
                            Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
GameManager.py:302:0: C0325: Unnecessary parens after
                                                     'elif' keyword (superfluous-parens)
GameManager.py:305:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
                                                      'if' keyword (superfluous-parens)
GameManager.py:313:0: C0325: Unnecessary parens after
GameManager.py:321:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
ameManager.py:329:0: C0325:
                            Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
ameManager.py:335:0: C0325: Unnecessary parens after
                                                     'elif' keyword (superfluous-parens)
GameManager.py:338:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
GameManager.py:346:0: C0325: Unnecessary parens after
                                                       if' keyword (superfluous-parens)
                                                      'if' keyword (superfluous-parens)
GameManager.py:354:0: C0325: Unnecessary parens after
GameManager.py:362:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
ameManager.py:370:0: C0325: Unnecessary parens after
                                                      'while' keyword (superfluous-parens)
GameManager.py:371:0: C0325:
                            Unnecessary parens after
                                                       if' keyword (superfluous-parens)
GameManager.py:378:0: C0325: Unnecessary parens after
SameManager.py:379:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:387:0: C0325: Unnecessary parens after
                                                      'while' keyword (superfluous-parens)
ameManager.py:388:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:395:0: C0325:
                            Unnecessary parens after
                                                      'while' keyword (superfluous-parens)
GameManager.py:396:0: C0325: Unnecessary parens after
                                                     'if' keyword (superfluous-parens)
GameManager.py:402:0: C0325: Unnecessary parens after
GameManager.py:403:0: C0325: Unnecessary parens after
GameManager.py:405:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
ameManager.py:407:0: C0325:
                            Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
iameManager.py:409:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:411:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
GameManager.py:413:0: C0325: Unnecessary parens after
GameManager.py:415:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:417:0: C0325:
                            Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
ameManager.py:419:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
GameManager.py:429:0: C0301: Line too long (123/100) (line-too-long)
SameManager.py:431:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
GameManager.py:442:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
ameManager.py:446:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
iameManager.py:456:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:457:0: C0325:
                            Unnecessary parens after 'if' keyword (superfluous-parens)
iameManager.py:458:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
GameManager.py:460:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
                                                      'return' keyword (superfluous-parens)
GameManager.py:461:0: C0325: Unnecessary parens after
GameManager.py:466:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
ameManager.py:468:0: C0325:
                            Unnecessary parens after
                                                      'return' keyword (superfluous-parens)
ameManager.py:480:0: C0325:
                                                     'return' keyword (superfluous-parens)
                            Unnecessary parens after
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GameManager.py:502:0: C0325:
                                                      'if' keyword (superfluous-parens)
                                                      'return' keyword (superfluous-parens)
GameManager.py:503:0: C0325: Unnecessary parens after
GameManager.py:504:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
GameManager.py:516:0: C0325: Unnecessary parens after
                                                      'if' keyword (superfluous-parens)
ameManager.py:517:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
GameManager.py:518:0: C0325:
                            Unnecessary parens after
                                                      'return' keyword (superfluous-parens)
GameManager.py:527:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:532:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
GameManager.py:544:0: C0325: Unnecessary parens after 'if' keyword (superfluous-parens)
ameManager.py:547:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
ameManager.py:567:0: C0325:
                            Unnecessary parens after 'if' keyword (superfluous-parens)
ameManager.py:570:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
ameManager.py:572:0: C0325: Unnecessary parens after 'return' keyword (superfluous-parens)
```

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meditages by 600 & C0015 imagescalary spreas after "return" beyond (sour-floor-purpo)
meditages by 100 of C0015 moles and State (setting front-blanched and meditages) posted to C0015 moles and State (setting front-blanched and meditages) posted to C0015 moles and State (setting front-blanched and meditages) posted to C0015 moles and State (setting front-blanched and front
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GameManager.py:610:0: C0103: Function name "simpleBoard" doesn't conform to snake_case naming style (invalid-name)
GameManager.py:610:0: C0116: Missing function or method docstring (missing-function-docstring)
GameManager.py:611:4: C0103: Variable name "simpleB" doesn't conform to snake_case naming style (invalid-name)
GameManager.py:612:4: C0103: Variable name "r" doesn't conform to snake_case naming style (invalid-name)
GameManager.py:613:4: C0103: Variable name "c" doesn't conform to snake_case naming style (invalid-name)
GameManager.py:615:8: C0103: Variable name "simpleR" doesn't conform to snake_case naming style (invalid-name)
GameManager.py:621:12: C0103: Variable name "c" doesn't conform to snake_case naming style (invalid-name)
GameManager.py:622:8: C0103: Variable name "c" doesn't conform to snake_case naming style (invalid-name)
GameManager.py:623:8: C0103: Variable name "r" doesn't conform to snake_case naming style (invalid-name)
GameManager.py:693:-1: W0105: String statement has no effect (pointless-string-statement)
GameManager.py:6:0: W0611: Unused import socket (unused-import)
```

3. Version Control

Used git to maintain version control during edits.

