

## Running the Simulator

***Download GameState.java file to your working directory to replace the one that is already there from Milestone 2.***

### ***The players.txt file***

Both simulators read the names of the player's .java files from the file called `players.txt`. This is an ordinary text file that can be edited with vim, Notepad, or your IDE's editor. It should contain four comma-delimited lines, as so:

```
Rossanna,rcatahan  
Becky,rbrown4  
Gray,gkemmey  
Jake,jnedza
```

The text before the comma is the player's name, and will show up on the screen. The text after is the *prefix* of the player's .java class, which should be followed by `"_UnoPlayer"` to form the actual class name (and `"_UnoPlayer.java"` to form the actual file name.) For instance, the above line specifies that player "Rossanna" will be using file `rcatahan_UnoPlayer.java`. **All player's Java files must be compiled and in the same directory in order to be found by the simulator.**

### ***Text-based simulator***

The text-based simulator takes two command-line arguments, the second of which is optional: the number of rounds in the overall match, and the string "verbose" or "quiet" (the default being "verbose"). When verbose, the simulator prints out each play as shown in the figure below -- this is best when running only a single game. When quiet, the simulator only prints the overall scoreboard at the end of the match, to increase the speed of long simulations. The entire command line, therefore, is something like: `java UnoSimulation 1` **OR** `java UnoSimulation 10000 quiet`.

```
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threepio$ java uno.UnoSimulation 1
Initial upcard is 9.
Rossanna (S,2,1,1,8,R,2) plays R on 9.
Jake (W4,+2,3,9,S,R,9) plays W4 on R. (and calls YELLOW).
  Gray draws W4.
  Gray draws 9.
  Gray draws 2.
  Gray draws 3.
Becky (5,W,6,3,6,0,5) plays 6 on W4.
Rossanna (S,2,1,1,8,2) plays 1 on 6.
Jake (+2,3,9,S,R,9) plays 9 on 1.
Gray (R,2,R,W4,6,7,S,W4,9,2,3) plays 9 on 9.
Becky (5,W,3,6,0,5) plays W on 9. (and calls RED).
Rossanna (S,2,1,8,2) has to draw (S).
Jake (+2,3,9,S,R) plays S on W.
Becky (5,3,6,0,5) plays 3 on S.
Rossanna (S,2,1,8,2,S) has to draw (1). plays 1 on 3.
Jake (+2,3,9,R) has to draw (5).
Gray (R,2,R,W4,6,7,S,W4,2,3) plays 7 on 1.
Becky (5,6,0,5) plays 0 on 7.
Rossanna (S,2,1,8,2,S) has to draw (5). plays 5 on 0.
Jake (+2,3,9,R,5) plays 5 on 5.
Gray (R,2,R,W4,6,S,W4,2,3) plays R on 5.
Jake (+2,3,9,R) plays +2 on R.
  Rossanna draws 7.
  Rossanna draws 1.
Becky (5,6,5) has to draw (S).
Gray (2,R,W4,6,S,W4,2,3) plays 2 on +2.
Jake (3,9,R) plays 3 on 2.
Rossanna (S,2,1,8,2,S,7,1) plays 8 on 3.
Becky (5,6,5,S) has to draw (4).
Gray (R,W4,6,S,W4,2,3) plays W4 on 8. (and calls YELLOW).
  Jake draws W.
  Jake draws 0.
  Jake draws 4.
  Jake draws R.
Rossanna (S,2,1,2,S,7,1) plays 2 on W4.
Becky (5,6,5,S,4) plays S on 2.
Jake (9,R,W,0,4,R) plays W on S. (and calls BLUE).
```

The text-based simulator, like the graphical simulator, uses the `players.txt` file to determine the names of the players and their filenames (see above).