

Run the game in 'Debug' mode for testing. (Refer to the README.txt) You should be in a game with two players, "GraceHopper" and "Chris."

Debug mode comes with a console in the bottom left corner. In the text field at the bottom you can type commands. Type 'help' for information on commands. Player names aren't case sensitive. If told to type a command, you type it here.

#### Test 0:

- The current player's name and amount of money should be displayed in the top-right corner. (There are three default players.) Upon a player ending their turn this should change to the next player's information.

#### Test 1: Property Dialog; No Owner

1. Click on any unowned property (denoted by a grey hover-over tint).
  - a. This should display it's deed and current owner.
2. Click the "x" in the top right corner.
  - a. This should close the window.

#### Test 2: Property Dialog; You are the Owner.

1. In the debug console type "**prop gracehopper 1**"
  - a. This should add the property "mediterranean avenue" to her properties.
2. Click "Show Properties" in the top right corner.
  - a. -This should bring up a list of owned properties.
  - b. -'Buy' and 'Sell' buttons should be gray.
3. Hover your mouse over "mediterranean avenue"
  - a. The property on the board should light up red. (This is Grace's color)
4. Click "mediterranean avenue"
  - a. -This should bring up a new window
  - b. -'Buy House' and 'Sell House' should be green and red. If clicked they should have no effect because you don't own a monopoly.
5. Click "mortgage"
  - a. -This should bring up a confirmation window
6. Click "no"
  - a. - The window should close and you should be back where you started

#### Test 3: Property Dialog; You are Not the Owner

1. In the debug console type "**prop chris 5**"
  - a. -This should add the property "reading railroad" to his properties.
2. Hover over reading railroad.
  - a. -It should be cyan, because chris owns it.
3. Click on reading railroad (The center train on the bottom of the board)
  - a. This should bring up a window.
4. Hit the red "x" in the top right corner.

- a. This should close the window.

#### **Test 4: Testing Monopolies**

1. Type "set chris 1"
  - a. This should charge chris a rent of \$2
2. Type "**prop gracehopper 3**"
  - a. This should turn the 'Buy' button in the top right screen green. (Show properties should still be toggled)
3. Type "set chris 1" again.
  - a. This should charge chris a rent of \$4 since she now owns a monopoly.
4. Click 'Buy' once for 'mediterranean avenue'
  - a. -This should modify her money by 50
  - b. -A green house icon should appear on the property
  - c. -The 'buy' button should turn gray
  - d. -The 'sell' button should turn red
5. Click 'Buy' once for 'baltic avenue'
6. Type "set chris 1" again
  - a. This should now charge him \$10
7. Repeat steps 4-6 a total of 4 more times
  - a. Rent should be charged 30, 90, 60, then 250
  - b. The house icons on the board should increment until the 5th time
  - c. On the 5th time the houses should be replaced with a larger red hotel.
8. Click on 'baltic avenue'
  - a. You shouldn't be able to mortgage the property.
9. Sell all your houses (Selling the hotel resets to 0)
10. Mortgage a property
  - a. You should not be able to buy houses on that property.

#### **Test 5: Test Auction**

1. Type "set chris 6"
  - a. This should move him to 'oriental avenue'
2. Click 'Auction'
  - a. This should bring up an auction window.
  - b. All auctions start with the first player
  - c. The default bid should be '1'. This is displayed below the property deed.
3. In the bidding field (where the '1' is) type "20" and hit 'Bid'
  - a. GraceHopper should be the highest bidder with a bid of \$20.
  - b. Chris should be the current bidder
  - c. The default bid should now be 40
4. Without typing anything hit 'bid'
  - a. Chris should be the new highest bidder.
  - b. It should be GraceHopper's turn
5. Hit 'Pass'

- a. A window should tell you chris won
- 6. Press "OK"
  - a. Chris should now own the property
  - b. His money should be modified appropriately.

#### **Test 6: Test ScoreBoard**

1. Click "Show Scoreboard" in the top left window
  - a. There should be three buttons in the top row, "Player", "Money", and "Net Worth."
  - b. "Net Worth" should be selected.
  - c. There shouldn't be a trade button for the current player
  - d. The players should be sorted with highest net worth on top
2. Click "Player"
  - a. The players should be sorted alphabetically
3. Click "Money"
  - a. The players should be sorted by their current money.

#### **Test 7: Test Trade**

1. Make sure it's GraceHopper's turn.
2. Mortgage 'baltic avenue'
3. Buy a house for 'mediterranean avenue'
4. Open the scoreboard and hover over "trade"
  - a. All of Chris's properties should be highlighted cyan.
5. Press "trade"
  - a. A trade window should appear
  - b. Grace Hopper should be on the left
  - c. 'mediterranean avenue' should be red because it has a house on it
  - d. 'baltic avenue' should be magenta because its mortgaged
  - e. Chris should be on the right
  - f. All of his properties should have light gray buttons
6. Try to click 'mediterranean avenue'
  - a. Nothing should happen
7. Click 'Baltic Avenue'
  - a. Baltic avenue should be added to the center.
  - b. Total value should be updated to \$60
8. Click 'baltic avenue' again
9. Click one of Chris's properties
10. In the text field under total value on the left side try to enter '5000' and press TRADE
  - a. An error message should come up
11. Press "OK"
  - a. the trade window should return with the settings you had earlier.
12. Change "5000" to 500, select all of Chris's properties and hit "Trade"
  - a. Grace Hopper should have all the properties

- b. Chris should have no properties.

### **Re-launch the game in debug mode**

#### **Test 8: Test Income Tax**

1. Type "set GraceHopper 4"
  - a. A popup should appear with options 10% or 200
2. Press "Pay 10%"
  - a. Her money should be modified by \$150 (now 1,350)
3. Repeat step 1
4. Press "Pay \$200"
  - a. Her money should be modified by \$200 (now 1,150)

#### **Test 9: Test Luxuray Tax**

1. Type "set GraceHopper 38"
  - a. She should be prompted to pay \$75
2. Press "Pay"
  - a. Her money should be modified by \$75 (now 1,075)

#### **Test 10: Test landing on a property with insufficient funds**

- 1.
2. Type "money GraceHopper -1075"
  - a. her money should be 0
3. Type "set GraceHopper 1"
  - a. A window should pop up explaining you can't buy the property and must auction
4. Press "Auction"
5. Try to bid any amount
  - a. You should get a confirmation asking if you're sure
6. Press "Yes"
7. Press "Pass"
  - a. GraceHopper should win the auction for the amount you specified
  - b. Her money should be negative

#### **Test 11: Test Roll Dice**

1. Press "Roll Dice" in the bottom of the screen
  - a. this should roll the dice and move the player that amount
2. Resolve any effects
  - a. If you didn't roll doubles it should say "End Turn"
3. Press "End Turn"
  - a. It should switch people
4. Repeat steps 1-3 until you roll doubles (relies on RNG)
  - a. Upon finishing step 3 the button should still say "Roll Dice"

5. Repeat steps 1-3 until you roll doubles twice (relies on RNG)
  - a. rage quit and assume it works
6. If you really want to test steps 5 and 6 go into the code and change the following file:
  - a. com.cs414.monopoly/game/PreRollStateafter "int[] dice = rollDice()" add

```
    dice[0] = 5;
    dice[1] = 5;
```

Now repeat steps 4 and 5  
REMOVE THIS CODE WHEN DONE

### **Re-launch the game in debug mode**

#### **Test 12: Test Jail**

1. Type "set chris 30"
  - a. This lands him on "go to jail" and he should now be in jail
  - b. Chris should not gain \$200
2. Type "set gracehopper 10"
  - a. She should be in the "just visiting" portion of jail
3. Press "roll dice" and resolve effects
4. Press "End Turn"
  - a. It should be Chris's turn and the button in the bottom right corner should say "Roll to Escape"
  - b. A popup with options should come up
5. Press "Roll"
6. Press "Roll to Escape"
  - a. If you roll doubles it should move you that many then your turn should end
  - b. If you don't roll doubles your turn should end
7. If chris is not in jail, put him in jail with step 1
8. On the start of his next turn press "Pay 50\$"
  - a. This should let chris play his turn as normal. If he gets doubles he can keep going.

#### **Test 13: Test passing Go**

1. Type "set chris 39" and resolve effects
  - a. note his current money
2. Type "move chris 1"
  - a. his money should be modified by +\$200 (pass go)
3. Type "set chris 0"
  - a. his money should be modified by +\$200 (land on go)

