

Demo - Hearthstone Clone

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Walkthrough the list of commands that you can use and play with the fully-functional Hearthstone Clone (Sorcery).

*I have created a command “-deck” that you can use to display the deck for testing purposes. Hence, you must explicitly pass “-testing” in your command-line argument.

1. Command-line arguments

-deck1 *filename* -deck2 *filename*

To test this command, you may run

```
./sorcery -deck1 ./codeForStudents/custom.deck -deck2  
./codeForStudents/custom.deck [-testing]
```

You may drop either (including both) of “-deck1 *filename*” or “-deck2 *filename*” to use a default deck which can be found in “./codeForStudent/default.deck”

For example,

```
./sorcery [-testing]
```

Or

```
./sorcery [-testing] -deck2 ./codeForStudents/custom.deck
```

We will use the second case to prove our flexibility of handling command line arguments. Note that custom.deck has 4 less cards than the default.deck (namely, Air Elemental, Dark Ritual, Aura of Power, and Standstill).

Run

```
./sorcery -testing -deck2 ./codeForStudents/custom.deck
```

After entering the names, run

```
deck // displays player 1's deck
hand // displays player 1's hand
end // end player 1's turn, now player 2's turn
deck // displays player 2's deck
hand // displays player 2's hand
```

Then you will see that exactly 4 of the aforementioned cards are missing in player 2's deck and hand.

*You can try with custom3.deck to test a deck that has more than one quantity of a card type (if time permits).

-init filename

If one of the first two lines is empty, then it is treated as an “empty name” for the player. Hence, we name it “anon. player” in replace of it.

To test this, run

```
./sorcery -init init.txt
Enter the name of player 2: Rebecca Chu
board // display the names of the players
```

Since “init.txt” has only one empty line, the player 1's name is “anon. player” while player 2's name is “Rebecca Chu”

*You can check with init2.txt, init3.txt, init4.txt to test various naming

*You can check with init5.txt or other init files (that are used later) to test other various commands.

*Note we will be using lots of init files for you to quickly test commands.

*Note that we made the program in such a way that it supports both the classic ctrl+D or our custom command “quit” to safely terminate the program.

*Note the init files (i.e. init5.txt) can have an infinite number of empty lines after the first two lines, and each empty line of command is skipped for efficiency.

-testing

The -testing argument enables testing mode, changing gameplay in four ways:

- If a player attempts to play a spell or activate an ability and does not have enough magic to do so, their magic is simply set to 0 and they play the spell or activate the ability as if they had enough magic.
- Players may now use the discard i command to discard the ith card in their hand.
- Players may now use the draw command to draw a card.

You may test these by running:

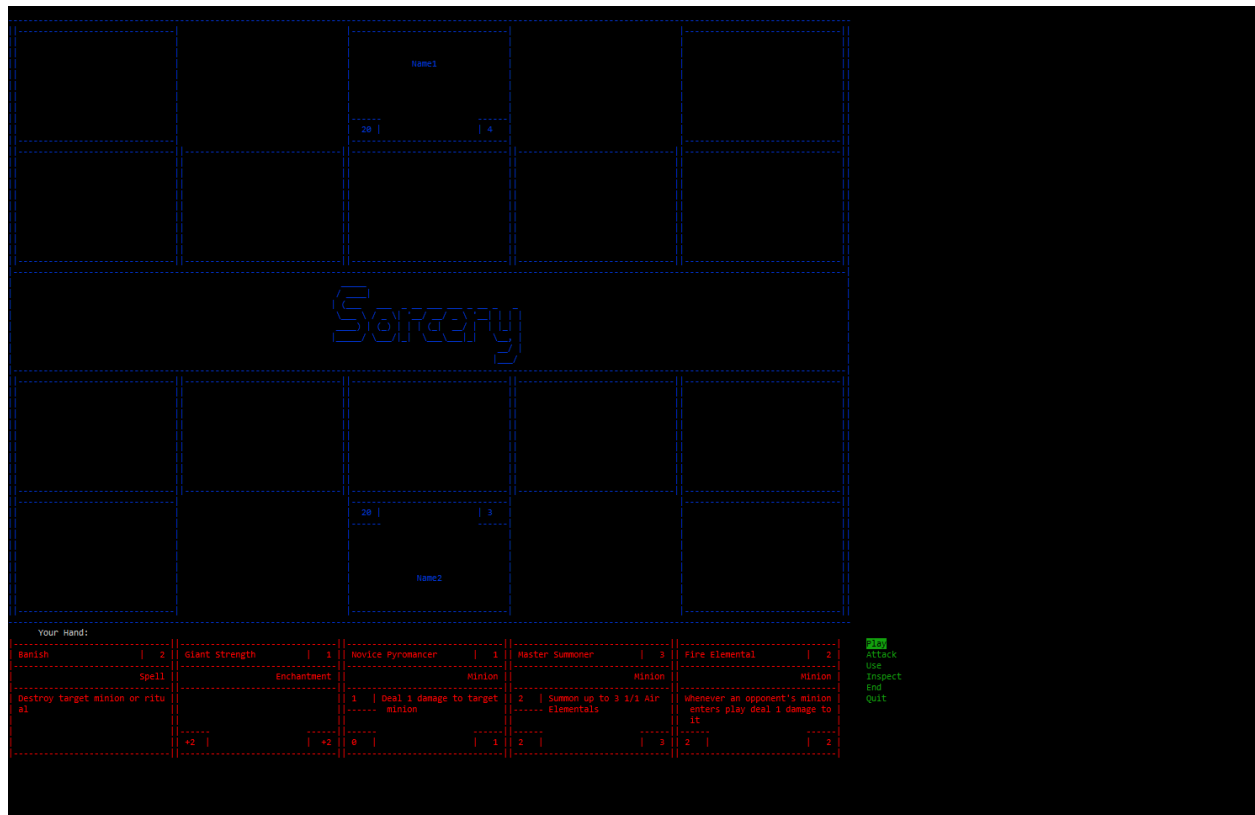
```
./sorcery -init init6.txt -testing  
draw  
dand  
discard 1  
hand
```

Or interactively (i.e. without passing an init file) if you would like to see them spontaneously and more thoroughly (recommend it that way).

-graphics

To use the better user interface, the -graphics option must be passed on the command line. To make sure everything is displayed properly, make sure you have the appropriate terminal size.

After entering the player names, you will be taken to the following screen:



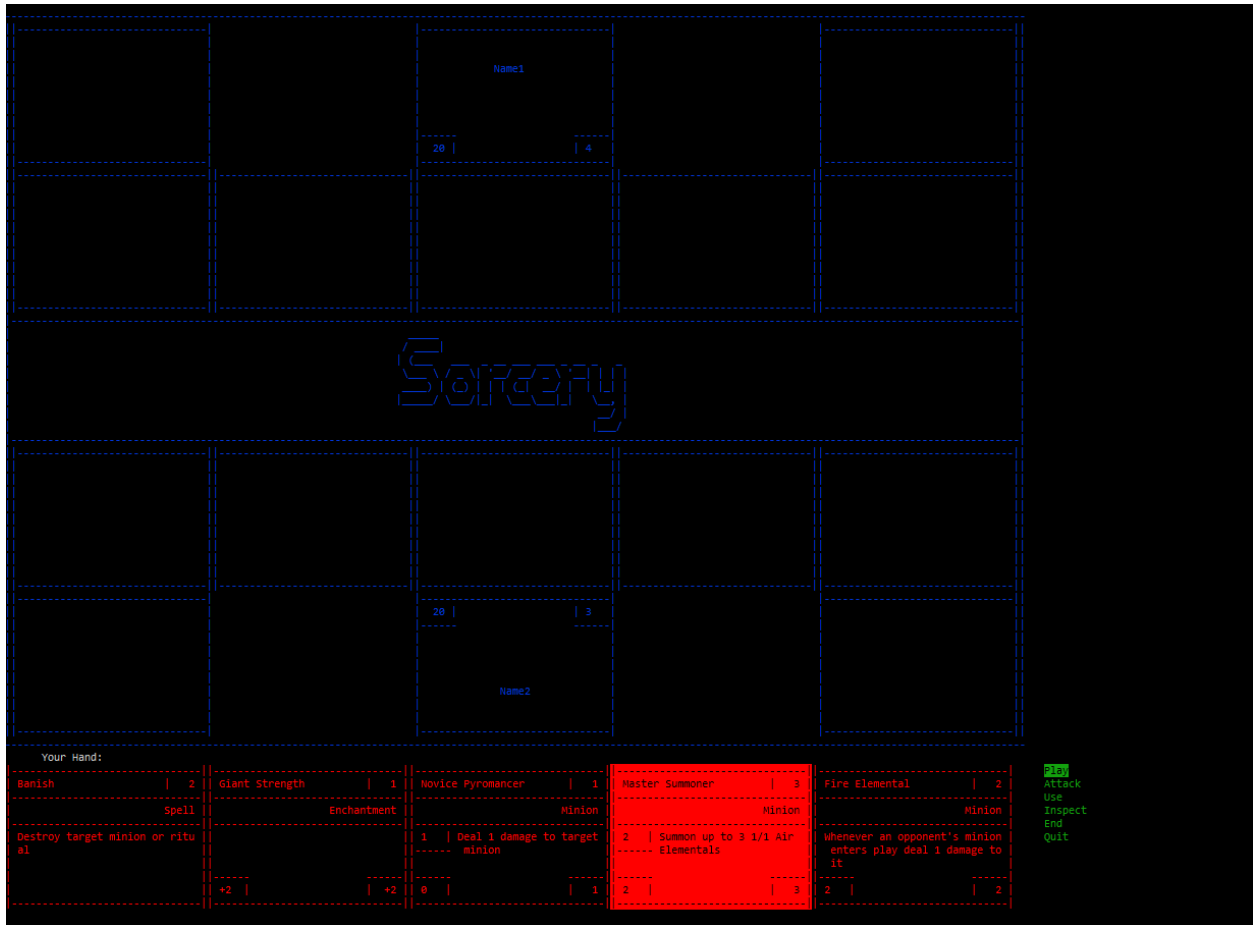
The action menu is at the right of the hand displayed and needs to be navigated by the arrow keys, specifically the UP and DOWN keys.

Press ENTER on the option you want to select.

Suppose you choose Play.

One of the Hand's cards will be highlighted and you can navigate this by using the LEFT and RIGHT arrow keys.

Select the card you want to play by ENTER and then choose your target. You can also choose a No Target option appearing in place of the Quit option.



The highlights are left on purpose so that the user knows what they are doing. Note that the Inspect Minion information is displayed on the right of the board.

2. Gameplay

Now for the main gameplay.

To walk you through all the commands, we will need to fix the seed, which can only be done in -testing mode. Note however that if a player doesn't have enough magic to play a card outside of testing mode, the error message "Player doesn't have enough mana" will be displayed. And you can give any invalid parameters to get the error message "Parameter isn't a valid number". Also, if you give an incorrect number of parameters (different from the pdf) to a command, an error message will be displayed showing "Incorrect number of parameters". Type help to see

```
help -- Display this message.
end -- End the current player's turn.
quit -- End the game.
attack minion other-minion -- Orders minion to attack other-minion.
attack minion -- Orders minion to attack the opponent.
play card [target-player target-card] -- Play card, optionally targeting target-card owned by target-player.
use minion [target-player target-card] -- Use minion's special ability, optionally targeting target-card owned by target-player. inspect minion -- View a minion's card and all enchantments on that minion.
hand -- Describe all cards in your hand.
board -- Describe all cards on the board.
```

```
play 3
Player doesn't have enough mana
```

So now let's start.

```
$ ./sorcery -testing
Name1
Name2
board
hand
```

And you'll see that the display works.

Next let's try playing a minion.

```
play 3
play 3 _ _
```

Both the actions will give you the same result as a minion doesn't require a target to be played. It just gets placed on the board.

```
board
```

to see the new state of the board. You'll see a Master Summoner placed on one of Name1's minion slots. Notice your reduced magic as well.

```
hand
```

to see your updated hand. The Master Summoner should be removed from your hand.

Now let's try the enchanting the minion.

You could try "play 2" but oops!

```
play 2
Please specify a target to play this card
```

So let's give the card a target.

```
play 2 1 1
board
inspect 1
```

Now you'll see your Master Summoner has gained the Giant Strength enchantment. And also, our inspect command works as well!

Now let's try attacking.

```
attack 1 3
Enemy have no minion at position 3
```

as expected.

So try "attack 1" instead

```
attack 1
board
```

And you'll see Name2 just lost life equal to 4 points.

Now let's end Name1's turn.

```
end
board
```

and you'll see Name2's mana incremented by 1.

```
hand
```

have a look at your hand.

Let's play both of your minions.

```
play 1
play 1
```

Do "board" to check if that worked correctly.

Now let's make your Earth Elemental attack the opposing player to avenge the life Name2 lost.

```
attack 1
Oh no! The player's minions stopped your Earth Elemental from attacking them!
```

Frustrating.

Okay, let's try to get rid of that Master Summoner.

```
attack 1 1
board
Oh no! See that your Earth Elemental died!
```

Let's play our two spell cards

```
play 1
play 2
```

Do "board" to check if that worked correctly.

```
end
hand
to get to next player
have a look at your hand.
```

Let's play our ritual card

```
play 4
```

Do "board" to check if that worked correctly.

```
play 3
to see that our ritual works correctly
```

```
play 1
to play our second ritual and replace the first one we played on the board
```

If you play invalid commands you get an error message. Try these.

```
play hi
The parameter is not a valid number

play
Invalid number of paramaters

play 1 2
Invalid number of paramaters
play 0
The parameter is not a valid number
```