

# Demo

This demo will show how to use the program “sorcery”. This will include the details on how to play the game along with images of sample commands and their effects.

First, when the program start, it will ask for the players’ name:

```
[z335wu@ubuntu1804-002:~/cs246/project/sorcery$ ./sorcery
[Player 1: Iam Robot
Player 2: █
```

If the user enter without typing, the program will asks for the name again:

```
[z335wu@ubuntu1804-002:~/cs246/project/sorcery$ ./sorcery
[Player 1: Iam Robot
[Player 2:
Player 2: █
```

Until you give the name of the player.

```
[z335wu@ubuntu1804-002:~/cs246/project/sorcery$ ./sorcery
Player 1: Iam Robot
Player 2:
Player 2: Player
Iam Robot's turn
█
```

The program will indicate whose turn it is, and you can give various commands. If you want to see what commands are available, type “help”:

```
Iam Robot's turn
help
Commands: 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.
```

If you enter “board”, the program will show you the interface for the board:

Iam Robot's turn  
board

		Iam Robot		
		20	4	
SORCERY				
		20	3	
		Player		

Each player starts with 3 magic, and the maximum magic will increase at the beginning of turn for each player. Each player will also start with 20 health. In the board, you can see the health “20” on the left side for each player.

The hand command will show the the all the card currently in the hand:

Iam Robot's turn  
hand

Silence	1	Master Summoner	3
Enchantment		Minion	
Enchanted minion cannot use abilities		2	Summon up to three 1/1 air elementals
		2	3

There can be a maximum of 5 cards in hand, if at the beginning of the term, the user has 5 cards, no more card is going to be drawn, and the following message will appear to remind the user:

Your hand is full, a card was not drawn.  
Iam Robot's turn  
I hand

Silence	1	Master Summoner	3	Raise Dead	1	Recharge	1	Air Elemental	0
Enchantment		Minion		Spell		Spell		Minion	
Enchanted minion cannot use abilities		2 Summon up to three 1/1 air elementals		Resurrect the top minion in your graveyard and set its defence to 1		Your ritual gains 3 charges			
	2		3					1	1

The user can use “play” commands with index (1 to 5), depending on what the card is the user may be required to enter extra indexes. If the card you want to play is a “Minion”:

Iam Robot's turn  
hand

Unsummon	1	Silence	1	Aura of Power	1	Fire Elemental	2	Earth Elemental	3
Spell		Enchantment		Ritual		Minion		Minion	
Return target minion to its owner's hand		Enchanted minion cannot use abilities		1 Whenever a minion enters play under your control, it gains +1/+1		Whenever an opponent's minion enters play, deal 1 damage to it			
					4	2	2	4	4

It is in the 5th position, so type the command “play 2”, the Minion “Earth Elemental” will be deployed on the field. The user can check the field to see the minion:

Iam Robot's turn  
play 5  
Iam Robot's turn  
board

			Iam Robot		
		20	5		
Earth Elemental	3				
Minion					
4	4				
SORCERY					
		20	7		
		Player			

After using the card, it will be removed from the hand:

Iam Robot's turn  
hand

Unsummon	1	Silence	1	Aura of Power	1	Fire Elemental	2
Spell		Enchantment		Ritual		Minion	
Return target minion to its owner's hand		Enchanted minion cannot use abilities		1 Whenever a minion enters play under your control, it gains +1/+1		Whenever an opponent's minion enters play, deal 1 damage to it	
				4		2	2

If the card you want to play is a “Ritual”, in the sample, the ritual is in the 3rd position, so type “play 3”:

Iam Robot's turn  
play 3  
Iam Robot's turn  
board

Aura of Power	1	Iam Robot					
Ritual							
1	Whenever a minion enters play under your control, it gains +1/+1						
		20					4
Earth Elemental	3						
Minion							
4						4	
SORCERY							
		20					7
		Player					

And the Ritual will be on the board. For this ritual, it will be triggered whenever a minion enters under the user’s control, and it will cost one counter out of the 4 counters the ritual has. If a minion enters like the “Fire Elemental” in 3rd position in hand:

Iam Robot's turn  
hand

Unsummon	1	Silence	1	Fire Elemental	2
Spell		Enchantment		Minion	
Return target minion to its owner's hand		Enchanted minion cannot use abilities		Whenever an opponent's minion enters play, deal 1 damage to it	
				2	2

After playing the “Fire Elemental”, its attack and defence both increase by 1 under the effect of the ritual. Since the ritual is triggered and used, the counter, that the ritual has, is reduced by 1 to 3, and when it reaches 0, it will be removed from the board.

Iam Robot's turn  
play 3  
Iam Robot's turn  
board

<table><tr><td>Aura of Power</td><td>1</td></tr><tr><td colspan="2">Ritual</td></tr><tr><td>1</td><td>Whenever a minion enters play under your control, it gains +1/+1</td></tr><tr><td></td><td>3</td></tr></table>	Aura of Power	1	Ritual		1	Whenever a minion enters play under your control, it gains +1/+1		3	<table><tr><td colspan="2">Iam Robot</td></tr><tr><td>20</td><td>2</td></tr></table>	Iam Robot		20	2					
Aura of Power	1																	
Ritual																		
1	Whenever a minion enters play under your control, it gains +1/+1																	
	3																	
Iam Robot																		
20	2																	
<table><tr><td>Earth Elemental</td><td>3</td></tr><tr><td colspan="2">Minion</td></tr><tr><td></td><td></td></tr><tr><td>4</td><td>4</td></tr></table>	Earth Elemental	3	Minion				4	4	<table><tr><td>Fire Elemental</td><td>2</td></tr><tr><td colspan="2">Minion</td></tr><tr><td colspan="2">Whenever an opponent's minion enters play, deal 1 damage to it</td></tr><tr><td>3</td><td>3</td></tr></table>	Fire Elemental	2	Minion		Whenever an opponent's minion enters play, deal 1 damage to it		3	3	
Earth Elemental	3																	
Minion																		
4	4																	
Fire Elemental	2																	
Minion																		
Whenever an opponent's minion enters play, deal 1 damage to it																		
3	3																	
<div>SORCERY</div>																		
	<table><tr><td>20</td><td>7</td></tr><tr><td colspan="2">Player</td></tr></table>	20	7	Player														
20	7																	
Player																		

If the card you want to play is a “Spell”, there may be extra inputs for index needed. For example, the card “Recharge” does not require an index for the player, or an index for minion on the field. Simply just enter “play 2”, the ritual exists will increase 3 charges.

Player's turn  
hand

<table><tr><td>Potion Seller</td><td>2</td></tr><tr><td colspan="2">Minion</td></tr><tr><td colspan="2">At the end of your turn, all your minions gain +0/+1</td></tr><tr><td>1</td><td>3</td></tr></table>	Potion Seller	2	Minion		At the end of your turn, all your minions gain +0/+1		1	3	<table><tr><td>Recharge</td><td>1</td></tr><tr><td colspan="2">Spell</td></tr><tr><td colspan="2">Your ritual gains 3 charges</td></tr></table>	Recharge	1	Spell		Your ritual gains 3 charges	
Potion Seller	2														
Minion															
At the end of your turn, all your minions gain +0/+1															
1	3														
Recharge	1														
Spell															
Your ritual gains 3 charges															



However, some spells like “Banish”, require player and target index in hand.

Banish	2
Spell	
Destroy target minion or ritual	

If the “Banish” is in the 1st position of your hand, and you want to target at the first minion of the opponent. Type “play 1 2 1”, which the first index is the position in hand, the second index decides which player you choose (1 for the user, 2 for the opponent), the last one decides the i th minion on that player’s field, or ritual, which means the last index has to be “r”.

**IMPORTANT:** in spells, “Blizzard”, “Raise Dead” and ‘Recharge“ only need “play” and index in hand, and all other spells need “play”, index in hand, player index and index for target minion/ritual.

Same with “Enchantment”, which the last card type, requires the first index to be the position in hand, the second index decides which player you choose (1 for the user, 2 for the opponent), the last one decides the i th minion on that player’s field.

**IMPORTANT:** all enchantments need “play”, index in hand, player index and index for target minion.

If you want to check your minion and the enchantment it has , use inspect:

board

		Iam Robot		
		20	6	
Bomb	2			
Minion				
Deals damage to all the opponent minions equal to its attack value when it dies				
1	2			
SORCERY				
		20	7	
		Player		

Iam Robot's turn  
inspect 1

Bomb	2
Minion	
Deals damage to all the opponent minions equal to its attack value when it dies	
1	2

Delay	1
Enchantment	
Enchanted minion does not gain an action on their next turn. This enchantment is automatically destroyed after 1 turn	

Silence	1
Enchantment	
Enchanted minion cannot use abilities	

Here, the Bomb has two enchantments on it. The index can be from 1 to 5, if the index does not have a minion, an error message will pop up.

[inspect 2  
No minion in this position

“Use” command activates the minion’s activate ability, with index targeting the minion you want to activate

Player's turn  
[board

		Iam Robot		
		207		
SORCERY				
Master Summoner	3			
	Minion			
2	Summon up to three 1/1 air elementals			
2				
		207		
		Player		

Player's turn  
use 1  
Player's turn  
board

		Iam Robot						
		20	7					
SORCERY								
Master Summoner	3	Air Elemental	0	Air Elemental	0	Air Elemental	0	
Minion		Minion		Minion		Minion		
2	Summon up to three 1/1 air elementals							
2	3	1	1	1	1	1	1	
		20	5					
		Player						

Minions like “Apprentice Summoner” or “Master Summoner”, their ability need no target, but “Novice Pyromancer” will need the minion index on the target opponent's field.

board

		a		
		20	8	
Master Summoner	3	Novice Pyromancer	1	
Minion		Minion		
2	Summon up to three 1/1 air elementals	2	Deal 1 damage to target minion	
2	3	0	1	
SORCERY				
Bomb	2			
Minion				
Deals damage to all the opponent minions equal to its attack value when it dies				
1	2			
		20	5	
		b		



use 2 1  
a's turn  
board

				a			
		20		6			
Master Summoner		3		Novice Pyromancer		1	
Minion				Minion			
2		Summon up to three 1/1 air elementals		2		Deal 1 damage to target minion	
2		3		0		1	

SORCERY

Bomb		2									
Minion											
Deals damage to all the opponent minions equal to its attack value when it dies											
1		1									

				20		5			
				b					

For Attack command  
When the opponent has no minion on the field, attack i, where i the your i th minion.

a's turn  
board

				a			
		20		5			
Fire Elemental		2					
Minion							
Whenever an opponent's minion enters play, deal 1 damage to it							
2		2					

SORCERY

				20		4			
				b					

a's turn  
attack 1  
a's turn  
board

		a		
	20		5	
Fire Elemental	2			
Minion				
Whenever an opponent's minion enters play, deal 1 damage to it				
2	2			

SORCERY

		18	4	
		b		

When the opponent has minions, you must attack the minions first, attack i j, where i is your i th minion, j is the j th minion on the opponent's field that you want to attack.

a's turn  
board

		a		
	20		6	
Potion Seller	2			
Minion				
At the end of your turn, all your minions gain +0/+1				
1	5			

SORCERY

Fire Elemental	2			
Minion				
Whenever an opponent's minion enters play, deal 1 damage to it				
2	2			

		20	3	
		b		

	a		
<div style="display: flex; justify-content: space-between;"> <span>Potion Seller</span> <span>2</span> </div> <div style="border: 1px solid black; padding: 2px; text-align: center; margin: 2px 0;">Minion</div> <div style="font-size: 0.8em;">At the end of your turn, all your minions gain +0/+1</div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span style="border: 1px solid black; padding: 2px 5px;">1</span> <span style="border: 1px solid black; padding: 2px 5px;">3</span> </div>			

# SORCERY

<div style="display: flex; justify-content: space-between;"> <span>Fire Elemental</span> <span>2</span> </div> <div style="border: 1px solid black; padding: 2px; text-align: center; margin: 2px 0;">Minion</div> <div style="font-size: 0.8em;">Whenever an opponent's minion enters play, deal 1 damage to it</div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span style="border: 1px solid black; padding: 2px 5px;">2</span> <span style="border: 1px solid black; padding: 2px 5px;">1</span> </div>			
---	--	--	--

	b		
--	---	--	--

Bomb	2
Minion	
Deals damage to all the opponent minions equal to its attack value when it dies	
1	2

Bomb	2	Novice Pyromancer	1
Minion		Minion	
Deals damage to all the opponent minions equal to its attack value when it dies		2	Deal 1 damage to target minion
1	2	0	1

You can also discard card by index (from 1 to 5)

a's turn  
hand

Novice Pyromancer		1	Air Elemental		0
Minion			Minion		
2	Deal 1 damage to target minion				
0		1	1		1

a's turn  
discard 1  
a's turn  
hand

Air Elemental		0
Minion		
1		1

You can use -deck1 and -deck2 changes the default deck for two players to the file followed by -deck1 and -deck2.

Sample: ./sorcery -deck1 deck1.txt -deck2 deck2.txt

Finally, use quit comand to end the program.

```
a's turn
quit
z335wu@ubuntu1804-008:~/cs246/project/sorcery$
```