

# Team 4 Project Specifications

## Product Backlog

User Stories & Main Features			
ID	User Stories	Features	Specifications
Join and Exit Game			
1	As a user, I need to create an account for myself to be identified in the game.	Register	User needs to register an account using username, and password
2	As a user, I need to log into an account to be eligible for joining a game	Login	Enter username and password to login
3	As a user, I need to enter a waiting room and be permitted into a game when six players have entered the waiting room.	Join game	click a 'join game' button
4	As a player, I need to exit the game.	Exit game	User returns to waiting room and clicks on 'exit game' button
Special Characters Actions			
5	As a player assigned a 'wolf' role, I need to submit my choice of the player to attack every night.	Wolves attack	Click on a player avatar and then a 'confirm' button
6	As a player assigned a 'seer' role, I need to choose a person to verify his/her identify every night	Seer	Click on a person's avatar, then confirm, and see via Canvas / chat box
7	As a player assigned a 'guard' role, I need to submit my choice of a player to guard every night. (I can not guard the same player consecutively)	Guard	Click on one of the player's avatar, and confirm (can't click on the avatar of a player's guarded the night before)
General Player Actions			
8	As a player, I want to see my role in the game and my teammates(for	See assigned roles	Canvas shows the identity by displaying a

	werewolves) so that I can perform corresponding actions.		card. Werewolves will see teammates with the same color.
9	As a player, I need to send chat messages in order to make my speech or to communicate with other "wolf" players to decide our attack target.	Send chat messages	Type chat messages in the chat box.
10	As a player, I need to vote for the player whom I believe to be the 'wolf'.	Vote	Click on a player's avatar and then a 'confirm' button
System Actions			
11	As a player, I need to finish my action (make my speech, make my vote, and choose my target, etc.) within a certain time in order for the game to proceed.	Timer countdown	User needs to finish action before the time is up, otherwise the user is considered to give up the action or the system will make a default decision.
12	As a player, I need to know what step we are at in order to make corresponding action.	System Message	User does nothing and receives a message
13	As a player, I need to know whether the game is finished or not and who wonned.	Game over	User does nothing and receives a message

#### Bonus features:

1. Create / Join a game room -- multiple game rooms going on at the same time
2. Audio/Video chat -- Each player can make audio/video chat when it's their turn
3. Customize roles combinations -- Players can customize the number of villagers, wolves and special characters
4. 9-player version [Additional Roles: Witch, Hunter] -- 3 villagers, 3 special characters, 3 wolves in the game
5. Recognize if someone is offline during a game -- prevent the game from being stuck when a player goes offline

## Sprint 1 backlog

Product Owner: Shujing Lin (andrew id: shujingl)

General Goals			
ID	User Stories	Features	Specifications
1	As a user, I need to create an account for myself to be identified in the game.	Register	User needs to register an account using email, username, and password
2	As a user, I need to log into an account to be eligible for joining a game	Login	Enter username and password to login
3	As a player, I need to send chat messages in order to make my speech or to communicate with other “wolf” players to decide our attack target.	Send chat messages	Type chat messages in the chat box.
4	As a user, I need to enter a waiting room and be permitted into a game when six players have entered the waiting room.	Join a game	click a ‘join game’ button
5	As a player, I need to exit the game.	Exit game	User returns to waiting room and clicks on ‘exit game’ button

Specific Tasks				
ID	Task	Owner	Status (not started / in progress / stuck / on hold / completed)	Note
1	Create login / register pages html, css	Shujing	completed	
2	Create waiting room page html, css	Shujing	completed	
3	Create canvas page html	Shujing	In progress	
4	Create canvas page css	Shujing	In progress	
5	Create Register Form	Shujing	completed	

6	Create Login Form	Shujing	completed	
7	Login / register / exit game features	Shujing	completed	
8	Add model for game status	Shuyi	completed	
9	Join game room feature	Shuyi	In progress	
10	Distribute card feature	Shuyi	In progress	
11	Added asgi.py routing.py consumers.py	Junwei	completed	
12	Real time chat room feature	Junwei	In progress	
13	Websocket handshake	Junwei	Stuck	
14	Get information from models(user ID, time)	Junwei	In progress	

### Front-end:

Working canvas

### Back-end:

#### Log in, register

A new user will be able to register a new account to join the game.

A registered user will be able to log in to join the game.

#### Join game

A user will be able to click on a 'join game' button to enter a waiting room and be permitted into the game when there are six players.

#### Distribute card

System will randomly distribute cards(identity) to every player when the game starts.

#### Update chat messages

In the game room, users can send chat messages with websocket. Chat will be seen by all users.

## Data Models

```
from django.db import models
from enum import Enum

# A Player can have four different roles, plus one unassigned:
class PlayerRole(Enum):
    VILLAGER = "VILLAGER"
    WOLF = "WOLF"
```

```

SEER      = "SEER"
GUARD     = "GUARD"
NONE      = "NOT ASSIGNED"

@classmethod
def choices(cls):
    return tuple((i.name, i.value) for i in cls)

# A Player can have three statuses.
class PlayerStatus(Enum):
    ALIVE = "ALIVE"
    OUT   = "OUT" # attacked by the wolves or voted out by other players

    @classmethod
    def choices(cls):
        return tuple((i.name, i.value) for i in cls)

# The Player model keeps track of the player's username and role.
class Player(models.Model):
    # Username must be shorter than 30 characters.
    username = models.CharField(max_length=30)
    role     = models.CharField(max_length=30,
choices=PlayerRole.choices())
    status   = models.CharField(max_length=30,
choices=PlayerStatus.choices())
    vote     = models.ForeignKey('self', on_delete=models.CASCADE)
    # TODO: Tentative field, indicate whether a player is making a speech
or not
    speech   = models.BooleanField(default=False)

    def __str__(self):
        return 'Player(' + self.username + ')' + self.role

class GameStatus(models.Model):
    # False means night, True means day.
    night    = models.BooleanField(default=False)

```

```
# Target player's id, null means the wolves haven't decided yet.
target          = models.IntegerField(null=True)

# Indicates whether it is time for a character to use skill.
# null means the player who got assigned the character is out.
wolves          = models.ForeignKey(Player, on_delete=models.PROTECT,
related_name="is_wolf", null=True)

seer             = models.ForeignKey(Player, on_delete=models.PROTECT,
related_name="is_seer", null=True)

guard           = models.ForeignKey(Player, on_delete=models.PROTECT,
related_name="is_guard", null=True)

villagers        = models.ForeignKey(Player, on_delete=models.PROTECT,
related_name="is_villager", null=True)

# Booleans indicating whose turn this is at night (tentative).
wolves_turn      = models.BooleanField(default=False)
seer_turn        = models.BooleanField(default=False)
guard_turn       = models.BooleanField(default=False)
```

## Wireframes

# Werewolves

Username

Password

Log In

[Resgister](#)

### Login page

# Werewolves

Username

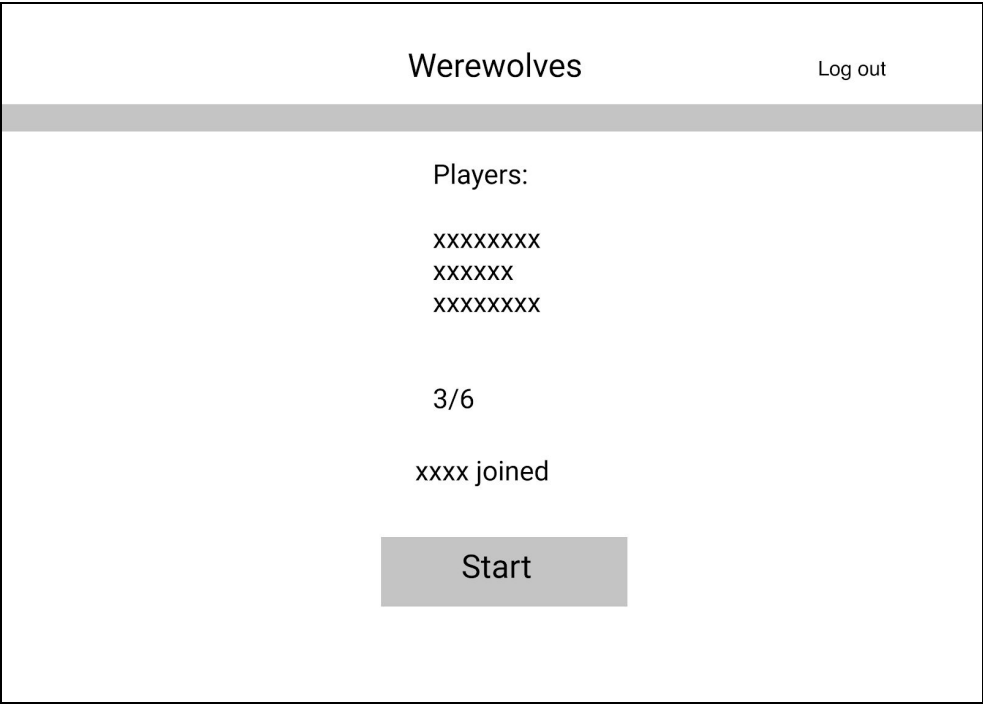
Email

Password

Confirm Password

Register

### Register page

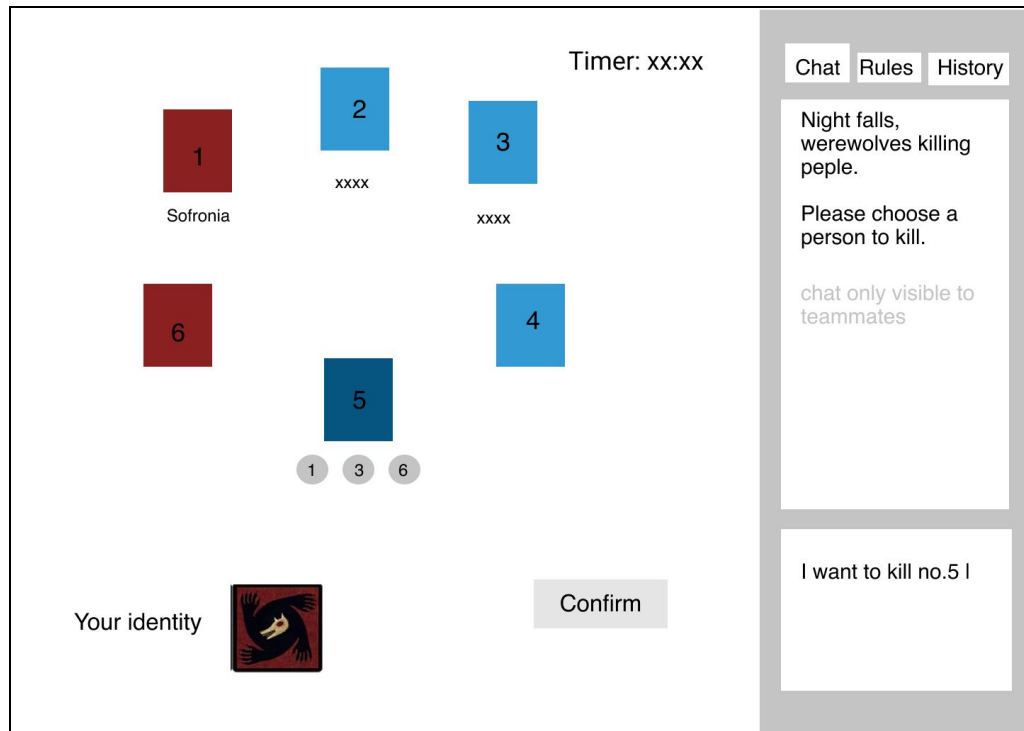


Waiting room, cannot start the game until there are 6 players

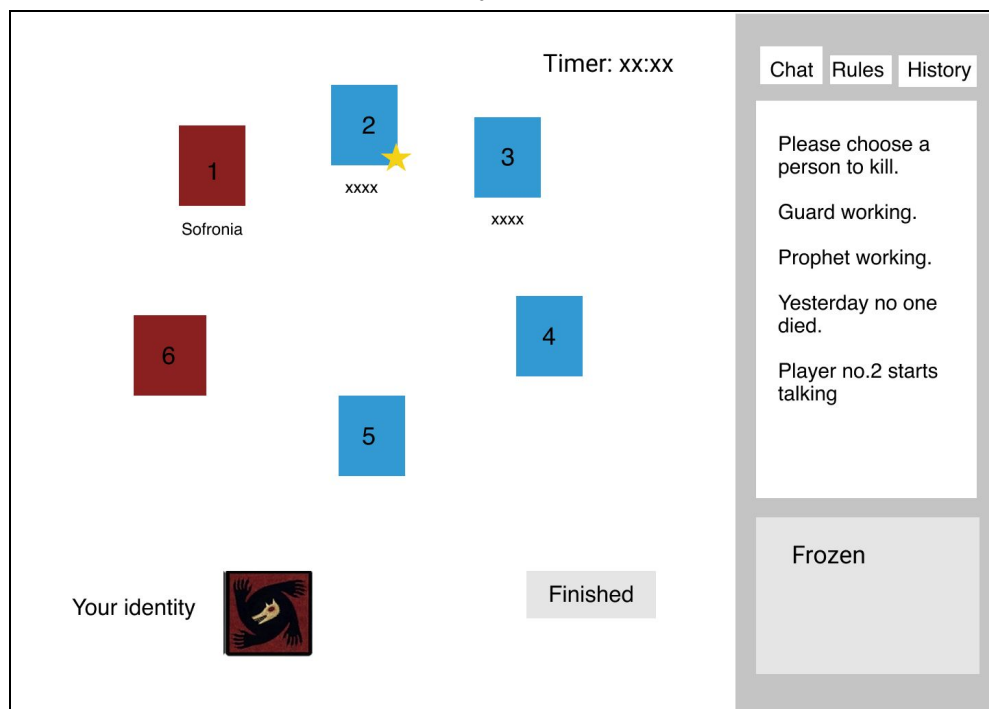


Werewolves' view. Can see player's identity and teammates





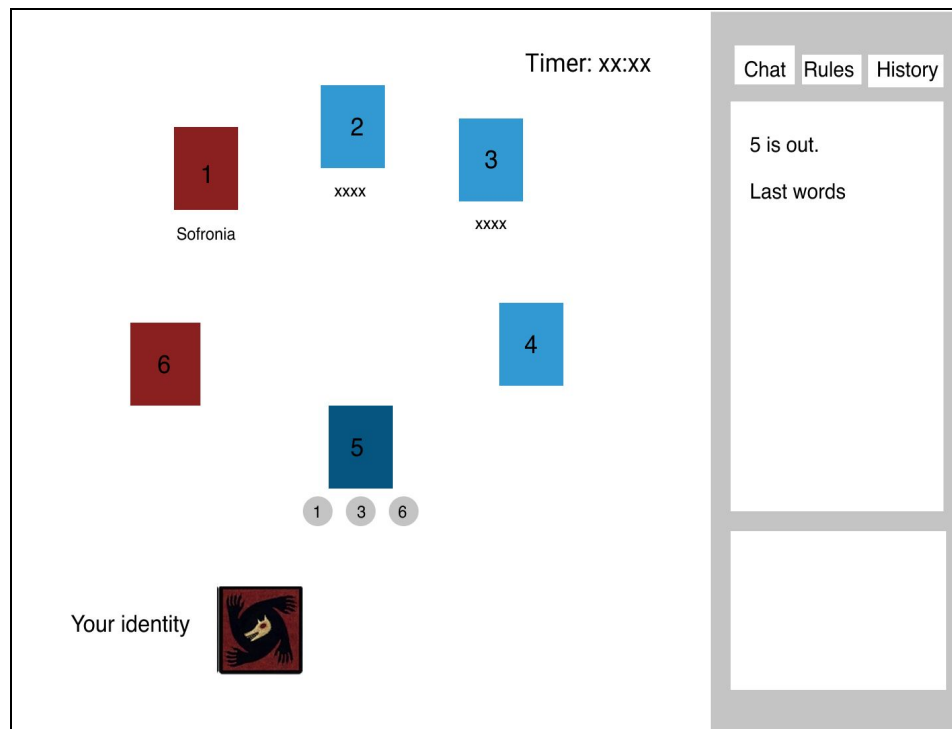
Werewolves can chat among each other(chat only visible to the werewolves) and choose a player to kill



When it is daytime, the server will randomly pick a player and players will speak one by one. (there will be a star indicating who is speaking)



Players vote for the suspects after everyone finishes their speech



Who gets the most votes is eliminated. Canvas will show who votes for this player.

Timer: xx:xx

1

Sofronia

2

xxxx

3

xxxx


6

5

out

4

Your identity



ChatRulesHistory

5 is out.  
Last words  
Night falls  
.....

Canvas indicates who is out. A new round starts.