Final Project Proposal: Miller's Hollow Online

Team **Miller's Hollow**
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1 What is Werewolves of Miller's Hollow?

Werewolves of Miller's Hollow(Werewolves) is a popular offline discussion game. In the beginning of the game, each player gets one role, which could be a werewolf, citizen or some special roles, such as seer and witch. The game proceeds in alternating night and day rounds.

At night, all players close their eyes and werewolves pick up a victim to kill. After that, special roles can use their skills. For example, a witch can save the victim. **At daytime**, everyone make a speech to say anything they want, maybe including truth, misdirection and nonsense. After that, players vote to exile one player. The villagers win if all werewolves die. The werewolves win if all villagers die.

For more info, please visit `http://www.playful-pedagogy.org/the-werewolves-of-millers-hollow.html`

2 What is Miller's Hollow Online?

Miller's Hollow Online is a website to put the popular game Werewolves online. The original motivation is from ourselves. We all enjoy play Werewolves but sometimes we can't find enough people to play together, or sometimes we don't have enough time and space. Then **Miller's Hollow Online** is born.

Different from other offline games like cards and chess, the joy of this game is based on its intensive discussion, so we decide to introduce **realtime video call** in Miller's Hollow Online like Fig. 2.

In Miller's Hollow Online, apart from playing with friends, users can also play with strangers, which make the game more exciting. There will also be task, tournament and level systems introduced to make this more joyful.

3 How does it work?

3.1 Use Case 1: Building a Room Game

Actor	Authorized User
Precondition	Main page of Miller's Hollow Online is presented to the user with identification
Postcondition	A room game with settings and share id is created The user is added to the room game and selected as the room owner A room view like Fig. 1 is presented to user
Main path	1. User selects Building a Room Game in the main page 2. User selects game type and maximum player number 3. User selects Build button

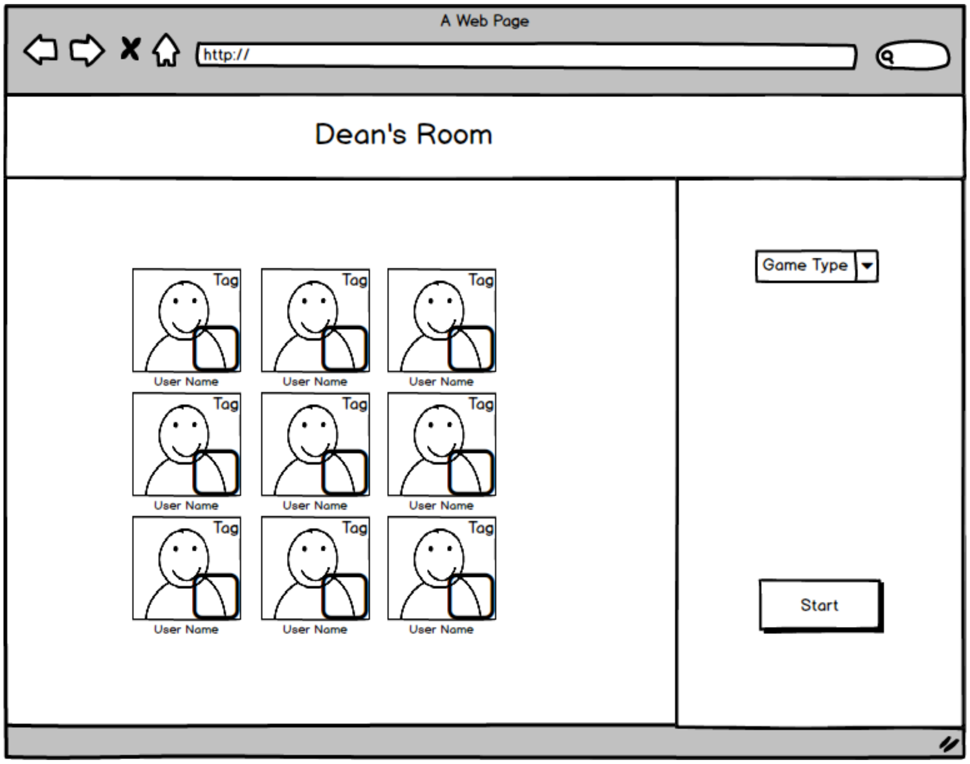

Figure 1: Wireframe of Game Room

3.2 Use Case 2: Joining a Room Game

Actor	Authorized User
Precondition	Main page of Miller's Hollow Online is presented to the user with identification
Postcondition	The user is added to the room game if the players don't reach the maximum size A room view like Fig. 1 is presented to user
Main path	1. User selects Joining a Room Game in the main page 2. User enters shared id of a room game 3. User selects Join button

3.3 Use Case 3: Matching Game

Actor	Authorized User
Precondition	Main page of Miller's Hollow Online is presented to the user with identification
Postcondition	The user is added to a matching pool in the backend to find a game The user is added to a matching game A game view like Fig. 2 is presented to user
Main path	1. User selects Joining a Matching Game in the main page

4 What are we going to do?

4.1 Technologies & Division

- Frontend (Jin Wang): AngularJS, phaser
- Backend (Shangjie Chen): Django, MySQL
- Video transmission (Yiyun Yao): WebRTC
- Source Control: git

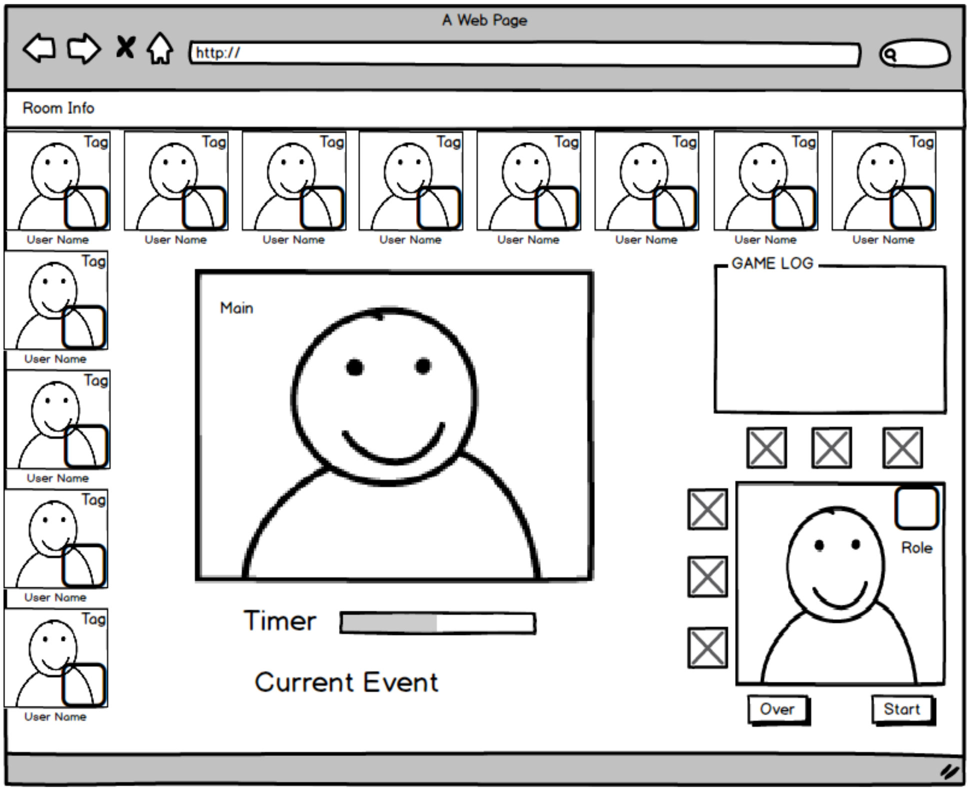

Figure 2: Wireframe of Game View

- Continuous Integration: Jenkins

4.2 Requirements

4.2.1 Basic

1. Video call available among 9 people, which is the minimum number of Werewolves
2. A simple sequence of logic with timers to enable players to speak round by round
3. User authentication and authorization, registration and friend systems
4. Building room games, joining room games and other utilities in a room, such as getting ready.

4.2.2 Advanced

1. Full game logic, including changing night and daytime, killing, voting and skills of special roles.
2. Game log and information alert of game, including current events, voting report and death report.
3. Interactive user interface in the frontend
4. Matching game mode, which requires a matching pool in the backend

4.2.3 Final

1. Communication, task, tournament and level systems
2. High quality of services