

PROP CLASH 11/01/2023

Alpha Release

Denitsa Asova

Janna Elghabaty

Omar Khaled

Bassant Elnaggar

Task Progress

- **Functional minimum:**
 - 1-1 hide and seek/kill game
 - Player can have a form of only one prop throughout the round
- **Low Target:**
 - Prop Player can change the prop throughout the round
 - Prop Player can create duplicates of oneself as decoys
- **Desired Target:**
 - Networked Multiplayer (Teams, 4v4 for example)
 - One mode with one theme
 - Full Game Cycle
- **High Target:**
 - Multiple modes
 - Multiple maps and themes
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- **Extras:**
 - Polished arts
 - Sound effects
 - Scanner to detect fake props
 - Procedurally generated levels

Done

In Progress

To Do

We focused this milestone towards having a complete game cycle from beginning to end.

Complete Mode Rules:

- Score Based in a round (5 mins)
- Hunter kills a prop to get score (100 points)
- Hunter kills a clone and loses score (-25 points)
- Prop gains score for each killed clone (25 points)
- Prop respawn if killed in a random position (15 spawn points)
- Prop gains score for n secs survived (25 * multiplier per 30 secs)
- Prop is changed to red (10 secs)
- Prop cooldown to duplicate (15 secs)
- Prop can have number of clones in the scene (5 clones)

Prop:

- The prop now can not abuse the duplication ability, there is a cool down which is enforced.

GamePlay Improvements:

- The hunter view is more immersive. We changed the Cinemachine Virtual Camera parameters in a way that the hands of the hunter and his weapon are visible while walking/running and attacking.
- An orbit camera is available for the prop pressing C to help hide him better in the scene.

Full Game Cycle:

Each player starts the game from a Start Menu, which can be seen in Figure 9. After Play is pressed the LogIn scene gets loaded. Players are prompted to enter an IP address and a user name and can join either as host or client. If no IP address is provided, the default 127.0.0.1 is used. If no user name is provided, the player get assigned the name "user" plus their local client id appended at the end. Since we created our own lobby room, we do not offer the discovery of running game sessions and all players have to enter the IP address of the host manually. If players join as clients, they have to wait until the host starts the game session.

After the session is started, all players enter the lobby, which can be seen in Figure 8. There they can choose their desired team and see what team the other players have already chosen. When a team is picked, the player's user name gets added to the current list of players in the respective team. All players are initially added as hunters but they can switch between the teams until the host starts the game. Since our game is so far created as a LAN multiplayer game and all players can see the current status of both teams, we do not check whether there is minimum one player on each team. We plan to handle this case by switching the current mode to the classic assassination mode, which we have already implemented but not integrated into the game cycle because we wanted to focus on the hunter-prop game rules.

After the teams are finalized, all players are introduced to the game controls. Once everyone gets familiar with them, the host starts the game round and all players are randomly spawned on the map. The round proceeds according to the game rules explained above. Since this mode is score based, after the current round is completed, the team score gets calculated by suming up all individual team players' scores. The team with the higher score wins or the round ends with a draw. The displayed round statistics can be seen in Figure 11. The players then get redirected to the lobby once again and can start another round, while also being able to change their teams.

Level Design:

- We changed the design of the level to give a more interesting and fun gameplay. The level design of the scene is split into two parts, indoor and outdoor, respectively. For the outdoor scene we tried to create a spooky garden atmosphere by having the following:
 - Smoke particle system on grave stones
 - Leafless angry trees
 - Eyeballs, hands, etc.
- Then for the indoor scene, we created a church haunted by ghosts.
- We also changed the light effects in the scene from being completely black to giving it a galaxy space effect.
- We used a shader graph on the windows to simulate the light effect when the red moon's light hits the windows.
- We additionally increased the spookiness of the scene by adding appropriate ambient music.

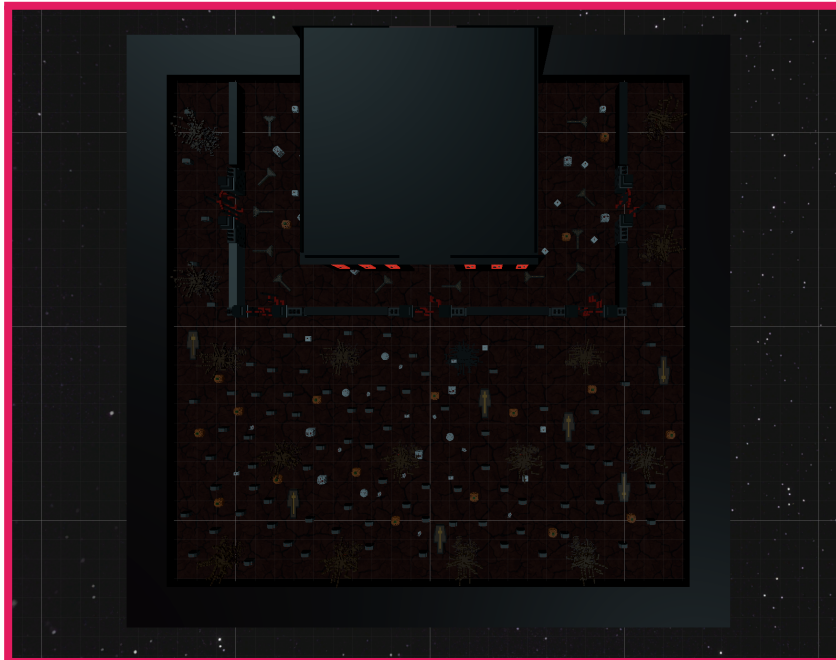


Figure 1: Level top view



Figure 2: Scene design

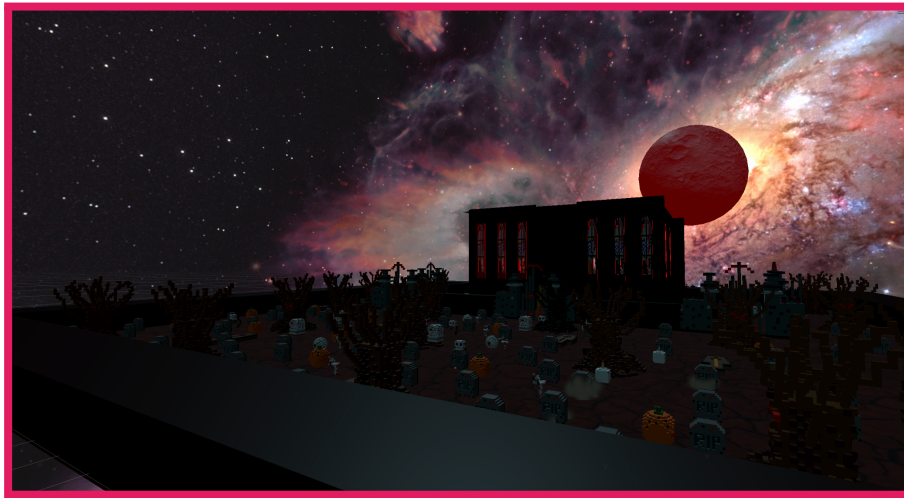


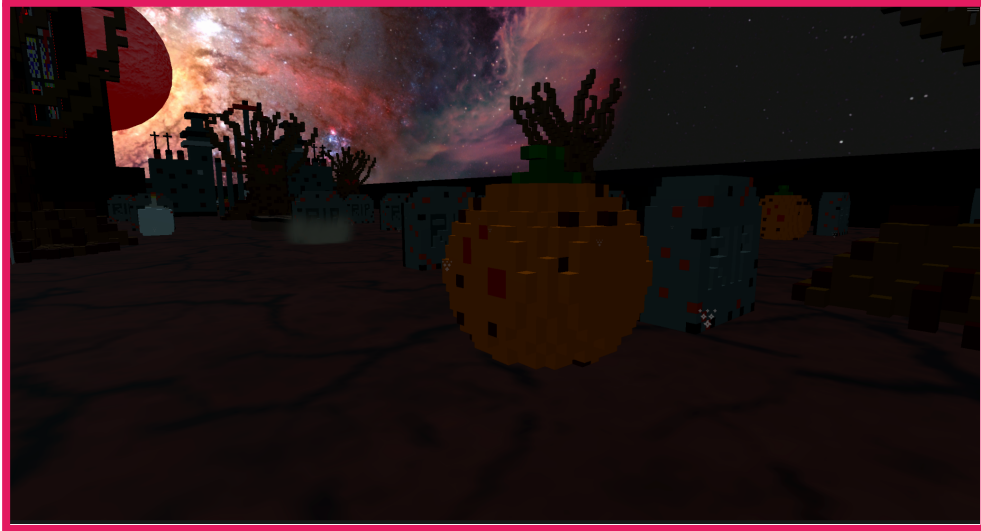
Figure 3: Bloody moon effect



Figure 4: church front view



Figure 5: church from inside



Models and Arts:

- As we mentioned we are using voxel art for our arts thus all models in the game need to be created from scratch and since we changed the level design of the game play thus we needed to add some models.
- Thus for this release we added the church structure as well as fine-tuning and polishing the previous models to fit more in the scene and have better visuals.
- We also created a "Scream monster" model that we are planning to add as the main player if we have time.

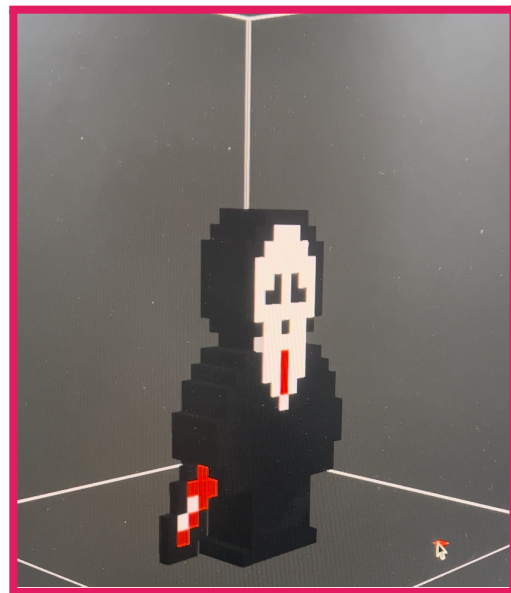
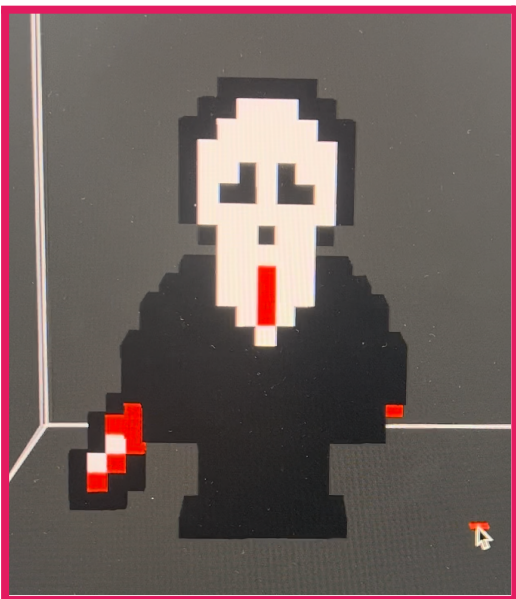


Figure 6: Ghostface

UI Panels:

- A login screen for the users to enter the IP for the network connection and to choose to be a host or a client



Figure 7: LogIn Scene

- A lobby screen added for the users to pick their team either to be a hunter or a prop and also to allow the host/server to start the game for all the clients



Figure 8: Lobby

- A customised cursor with a visual smoky effects



Figure 9: Start Menu

- An instructions screen to inform the players about the controllers of the game whether they are a prop or a hunter. All the clients have to confirm that they are ready so the host/server can start the game



Figure 10: Game Cotrols

- UI screens added to the main game scene to visualise the timer of the round, the score of either the hunter or the prop depending on the player's choice, and if the player is a prop then they will have three additional UI screens. They are the representation for the values of the health, possible cloning and duplication



Figure 11: HUD and Round Statistics