

Tyler Gemora 31672308
Eisah Jones 13728047
Khoa Nguyen 43498533
Changchuan Shen 83371717

Block Party Design Document

General

Block Party is a two player cooperative game where players must traverse a treacherous landscape in order to reach the highest point in the map. All teammates can manipulate objects (i.e. boxes, ladders, etc.) in order to traverse around the map and reach the final destination. It is up to the team to move throughout the level while bringing objects that can help them get from place to place. When all teammates reach the goal, the level will randomly generate and the player will start again with a new random selection of objects to help them on their journey.

Game Loop



- **Spawn:** Players will always spawn in the middle of the map in a small, flat area. This allows players a common place to meet up, view the objects they have access to, and begin to plan a route to the finish.
- **Evaluate:** The process of evaluating includes evaluating the objects that are made available to the players, evaluating all possible routes out from the starting area, and evaluating the skill or aptitude of your teammate. It is important to get your bearings and familiarize yourself with the environment you will be interacting with during the level.
- **Explore:** Traversing the map can be daunting, but it is necessary to explore the map in order to find the goal and plot a path towards victory.
- **Teamwork:** While teamwork isn't really a stage in the game loop per se, it is important to remind the player that teamwork is a very important aspect of this game, since it is nearly impossible to finish a level without assistance from your teammate.
- **Goal:** Once all players have reached the goal, the level resets and the loop continues!

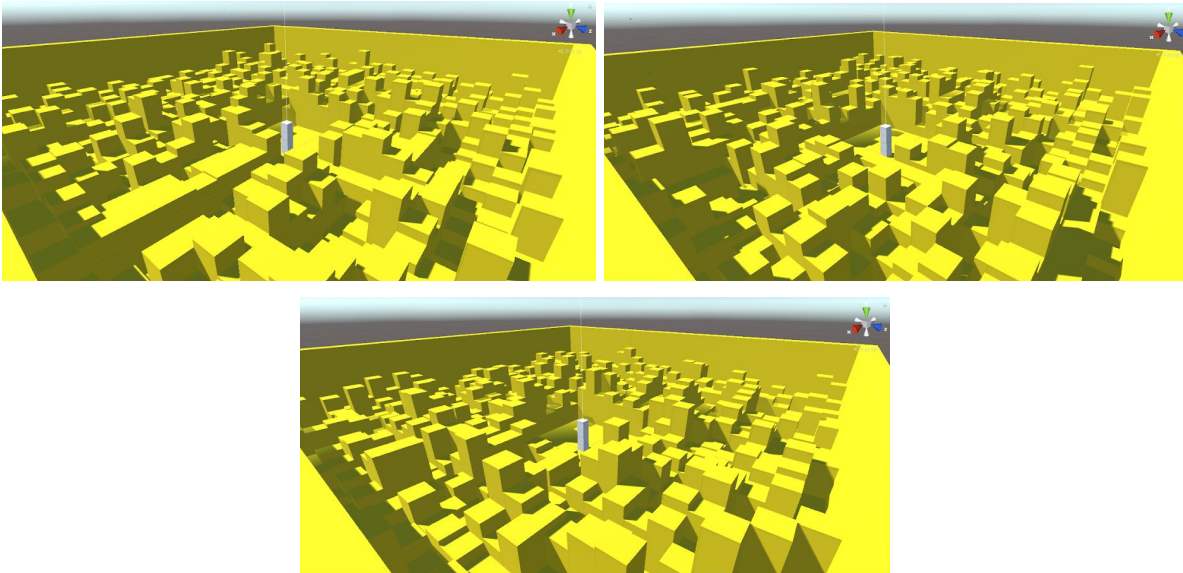
Mechanics

Basic controls consist of using WASD to move the player and moving the mouse to rotate the camera.

Each team will be composed of two players of each of the two classes:

- The Thrower: Can pick-up and place non-player objects
 - The F key picks up objects
 - Left-Click to throw object
 - Hold Q - to rotate object counterclockwise
 - Hold E - to rotate object clockwise
 - Hold Left Shift - to lift the object upward
 - Mouse Scroll - control angle of throwing
- The Levitator: Can pick-up and throw player objects a certain distance
 - Press C key to pull object towards player position

Each level is also randomly generated, so players will never play the same level over again



Design Decisions

We wanted this game to rely heavily on player communication and cooperation. One of the most important design decisions in regard to this was level generation. We had to make sure that it was impossible to finish the level without assistance from your teammate. By designing the level in this way, it encourages players to work together in order to reach the goal, instead of splitting up and finding unique ways to reach the goal separately; a large part of the gameplay is dictated by the design of the level. Another way we wanted to facilitate teamwork was through the division of tasks or skills. By giving players unique and disjoint sets of moves, this requires them to ask for teammate assistance in certain situations where their abilities do not allow them to traverse through the level any further.

Future Improvements

Given more time to fully flesh out this game, there are many improvements we would like to make.

- Include a timer, or make something like lava rise from the floor in order to incentivize players to move quicker.
- Introduce hidden bonuses around the map so that teams have to consider the amount of risk in retrieving these bonuses
- Create bigger teams with more unique abilities, adds diversity and choice into the game
- Allow levels to handle multiple teams and have them indirectly compete with each other
- Create more obstacles for teams to use in traversing the level