



This is a programming test for Phat Loot Studios (<https://untamedisles.com/about/>)

Please submit a link to your code. We will require a git repo for evaluation.

Label your repo “your name” + “Breakout Clone”

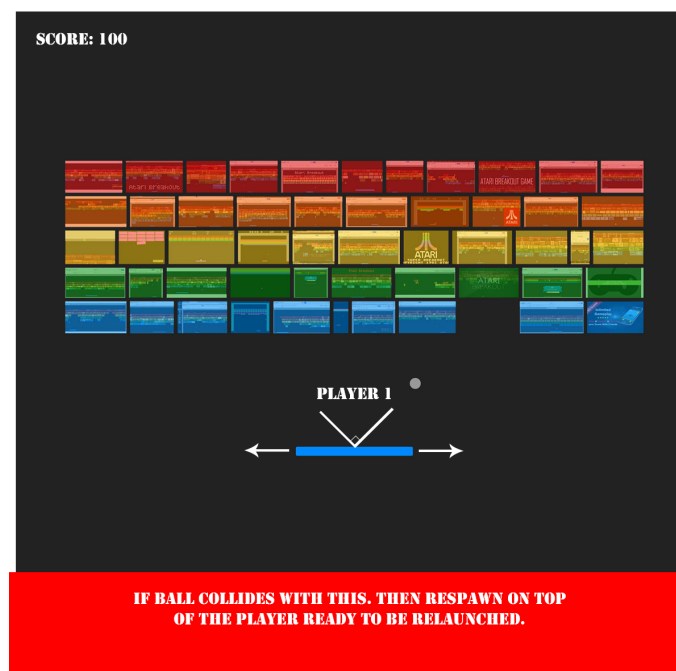
### Programming Test

If you don't have multiplayer networking skills you can still apply with a single player version of breakout. Although we recommend giving the multiplayer a go.

### Single Player Component

The requirements are:

- Make this in Unity 2020.3 LTS and onward. Don't use Unity 2021, This will be a 3D game with a 2D view.
- At least 5 layers of different colour bricks 10 across.
- A player controlled paddle that moves left and right but doesn't go off screen.
- The ball starts on the center of the paddle.
- When the player presses space with the ball on the paddle it will then launch up in a Random direction within the 90 degree angle shown below.
- If the ball falls into the red zone below the players this zone should not be visible in game then the ball must respawn on the player that lost it.
- There should be walls on the top, left, and right sides of the screen so the ball can continue to bounce off them.
- When the ball collides with a brick it should destroy the brick and bounce the ball
- Show a Score counter at the top of the level to display how many blocks you have destroyed. Award 100 points per block destroyed.
- Graphically the game can look however you want. The polishing stage is up to you.



### Multiplayer Component:

You will have to complete the single player programming test first to be able to complete this.

The requirements are:

- Using the Mirror API. Both links give you the same asset. The third link is for an extra tool to help with multiplayer development.
  - <https://github.com/vis2k/Mirror>
  - <https://assetstore.unity.com/packages/tools/network/mirror-129321>
  - <https://github.com/VeriorPies/ParrelSync>
- No lobby required. Use the Network Manager HUD to let two players join a level.
- Have the player movement sync for both clients with each client controlling their own paddle.
- Have a score that is synced to both players.
- Have a ball for each player.
- When the ball collides with the red surface, spawn it back on the player that launched it.

