

# ARCADE GAME GDD

Game Name:

Genre: Co-op Platformer/ Lightgun shooter

Game Elements:

The player who has the platformer gameplay will be trying to reach the end of the level while the player with the shooter gameplay will be assisting them by creating platforms and various other obstacles.

Players:

2 Players (Single player not optional)

## TECHNICAL SPECS

Technical Form:

2D Graphics

View:

Third person 2D

Platform:

PC

Language:

C#

Device:

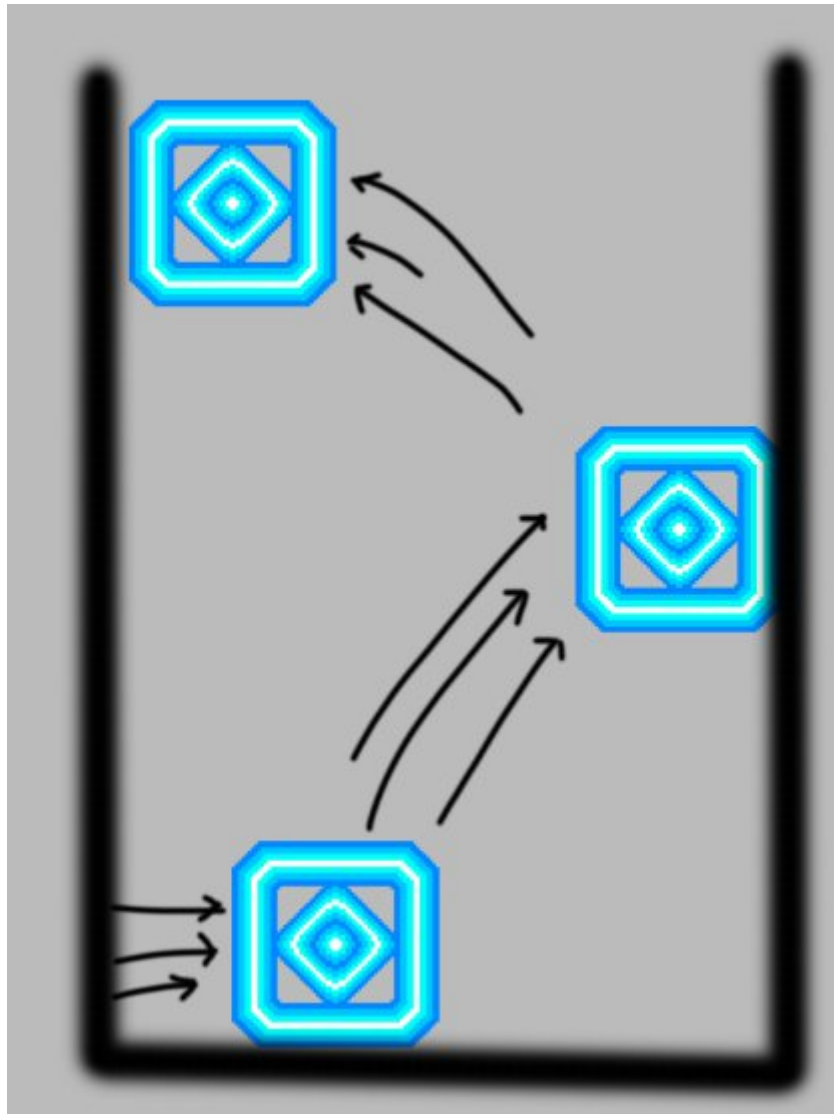
PC

## DESIGN DOCUMENT

### Player Controls

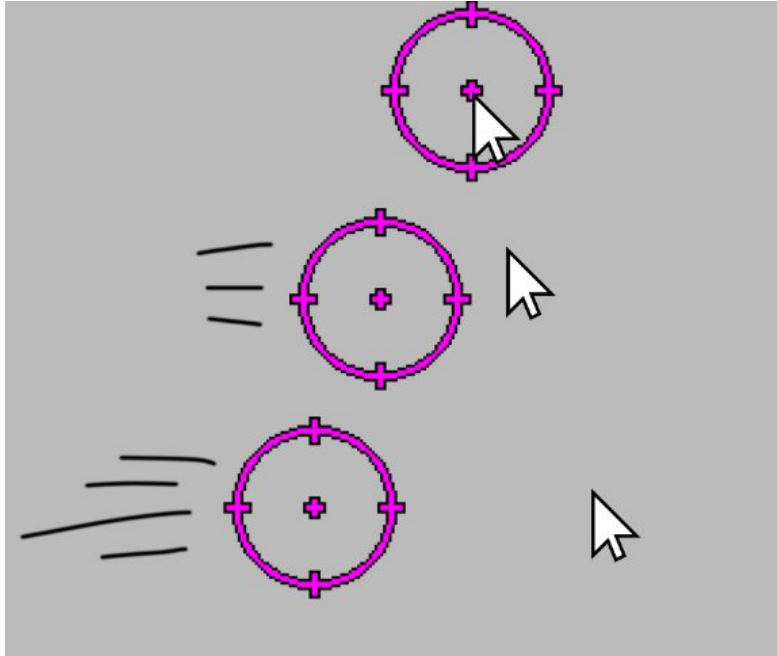
#### Player 1 - Character

Player 1 will be using an arcade stick controller with at least one button. The stick will be able to control left and right momentum. This will be for walking on the ground and influencing air speed. The button will be used to jump. Additionally, player 1 will be able to wall slide from holding the control stick towards a wall, which will slow down the falling speed as they are using the wall as friction. When the character is wall sliding, they will be able to press the jump button to launch diagonally-upwards in the direction away from the wall - to wall jump. The final piece of tech that the player can do is regarding wall jumps. If the player is holding towards the wall when they wall jump, they will be sent out further than if they hold no direction at all.



## Player 2 - Gun

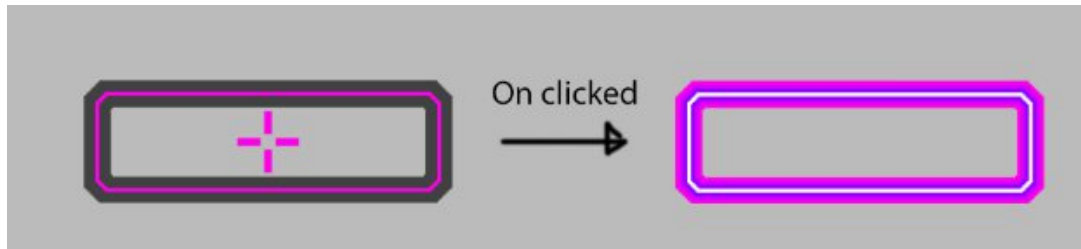
Player 2 will be using a SINDEN Light Gun and will be using the camera from the nozzle and the trigger. Aiming the gun will also move the camera so when aimed at the stick it controls the mouse which will appear as a gun reticule in game. When the gun trigger is pressed, it triggers an event which can be used to interact with different game objects. This will aid Player 1 when traversing through the game and in some instances will be required for progression. A list of interactable objects will be provided next in the document.



## Interactables

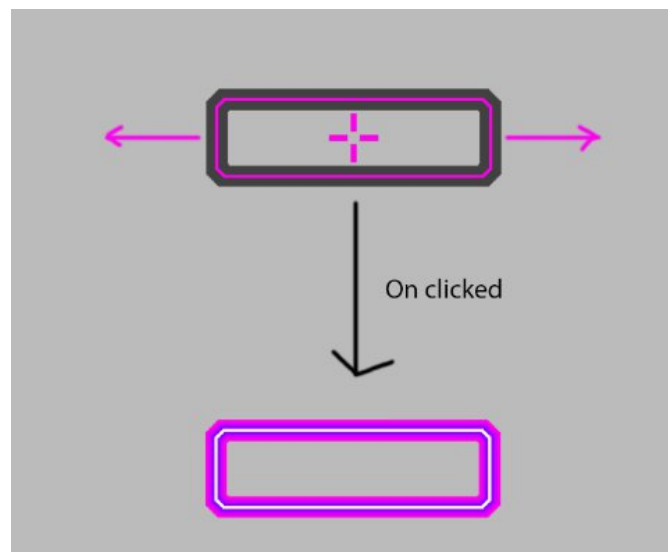
### Appearing platform

The appearing platform is a platform where Player 1 cannot collide with it until Player 2 shoots it. When shot, the platform will change colour to signify that it has been activated and for the next few seconds, Player 1 will be able to walk upon and jump off. When the few seconds are up, the platform will lose its collision once again and will change colour back to what it was originally.



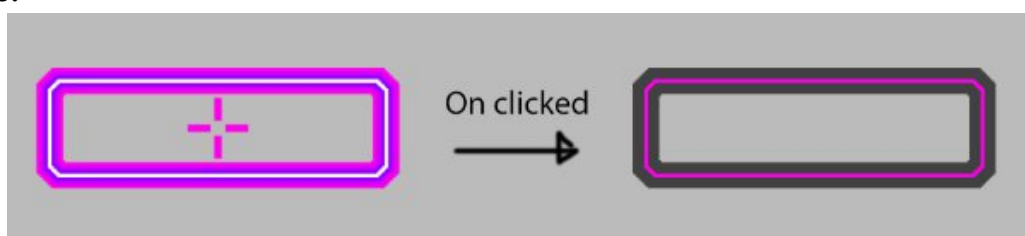
### Appearing platform (Moving)

The appearing platform (moving) is a variation of the appearing platform which will be constantly moving making it harder for Player 2 to shoot. When shot, the platform will change colour and gain collision but also, it will stop moving for the duration of its activation.



### Disappearing platform

The disappearing platform is the opposite of the appearing platform. It has the colours of a platform which is activated and can be collided with. When Player 2 shoots it, the platform will turn to the deactivated colour and lose collision for a few seconds.



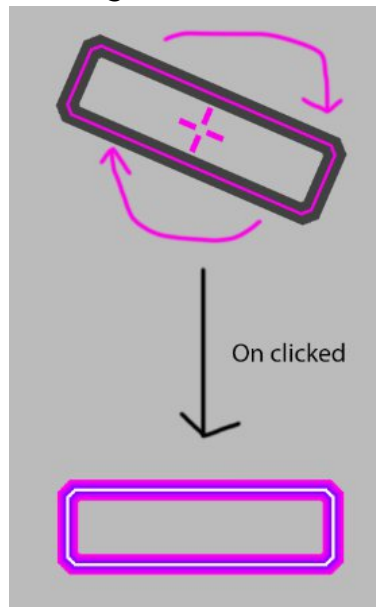
### Disappearing harmful obstacle

The disappearing harmful obstacle is a variation of the disappearing platform as it behaves the same way as the platform, however, it is not a platform and instead, it is an obstacle which will kill Player 1 when they touch it. Player 2 must deactivate it for a few seconds to make it safe for Player 1 to progress. Killing the player will be explained in base harmful obstacle



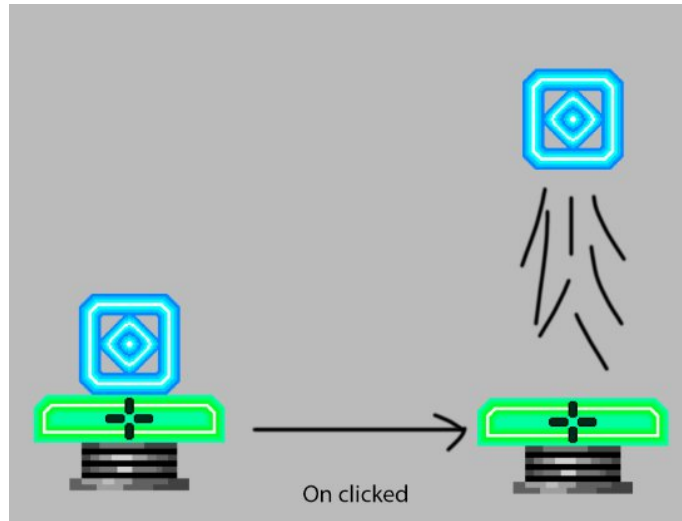
### Appearing platform (rotating)

The rotating platform will function like the moving platform except will rotate instead of move and will stop rotating when shot.



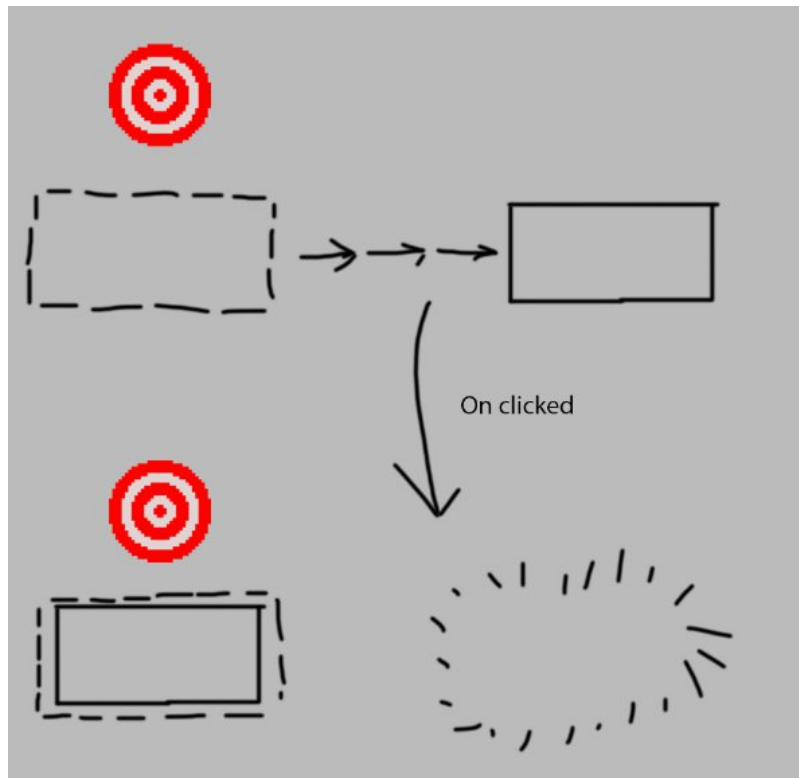
### Spring

The spring will launch the player upwards when shot while the player is standing on it. The player wont be able to jump while stood on it.



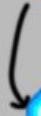
### Moving Platform Reset

This object is a target that when shot, resets the platform to its start position so the player doesn't have to wait for it to come back if the platform has a long distance to cover.



### Bullet time button

When shot by the gun, the entire world will slow down for a set amount of time and a timer will play. When the timer resets, everything goes back to normal. On death, reaching checkpoints or the end of the level, time will go back to normal as well.



On clicked slow down custom amount



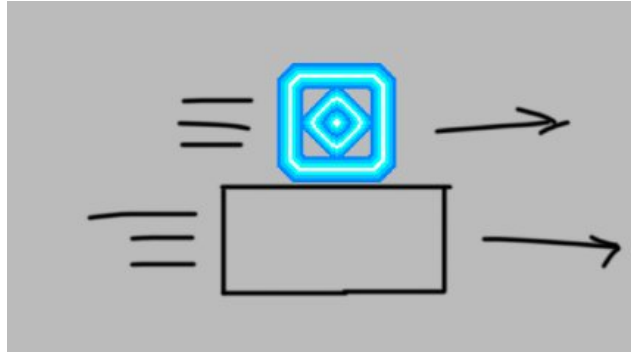
## Other world objects

### Basic Platform

This is a regular platform that is not interactable by player 2. It can be walked upon and jumped/ wall jumped off.

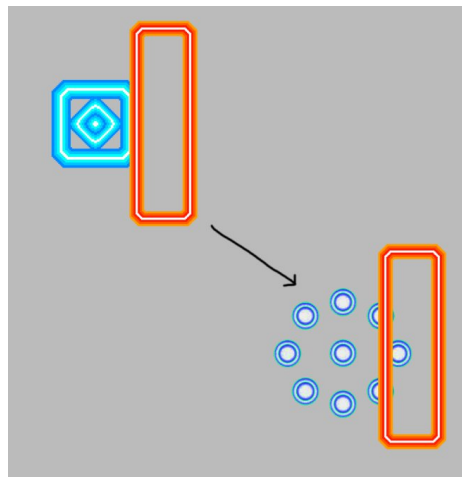
### Moving Platform

This is the basic platform that is constantly moving, when the player is stood on the platform, they move with it.



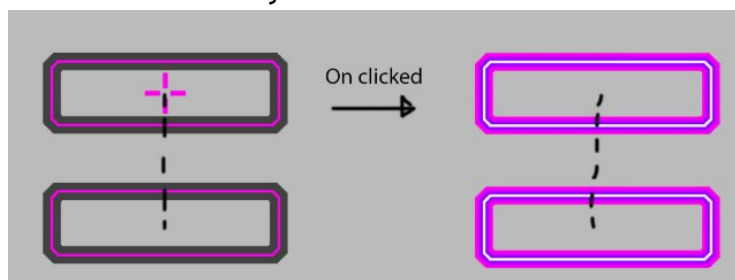
### Harmful obstacle

The regular harmful obstacle cannot be interacted with by Player 2 but has collision and will kill Player 1 if they touch it. Killing the player will send the player back to their last spawn point.



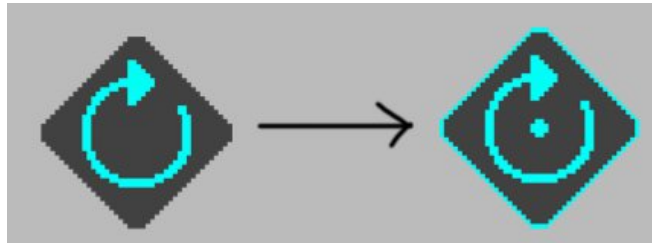
### Empty Appearing/ Disappearing platforms

These platforms work the same as other appearing/ disappearing platforms but instead of being shot, they wait for one that they are connected to, to be shot instead. These platforms are visually linked to the other ones via a dotted line.



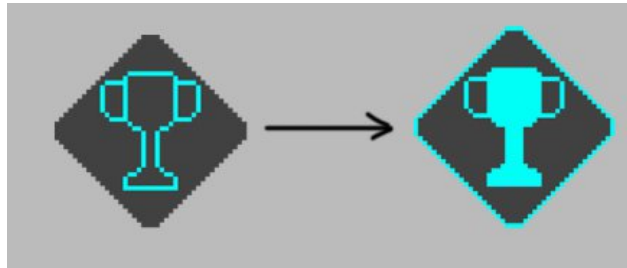
## Checkpoint

Checkpoints will update the spawn point of the player when walked into the range of.



## End level

The end level will act the same as the checkpoint but will load the next level instead.



## Camera

The camera will be locked to a 2d view and will try to prioritise the player in the centre. This can be stopped by full walls such as at the beginning of the level. The camera will follow the player with a slight delay and will catch up once the player has stopped moving.

## Reticule

The reticule will be a visible sprite on the screen which follows the movement of the gun controller (the mouse). The middle of the sprite is the centre of the shot being fired and the sprite will follow the mouse with a slight delay and will catch up once the mouse has stopped moving. The mouse cursor will not be visible in game.

## User Interface (UI)

### Start Menu

The start menu will be a dark screen with the game logo and two lines of text flashing. One, telling player 1 to press any button, while the other tells player 2 to shoot the gun (click). Once both have been done, the game will begin.

