



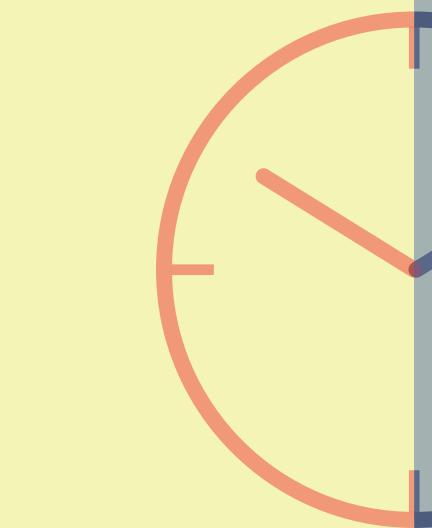
A 2D platformer with  
10 seconds limit

Ludum Dare 51  
*Every 10 Seconds*

Jam version on [ldjam.com](https://ldjam.com)

A puzzle game with  
*a Time Shadow*

traveling back  
*Every 10 Seconds*



Update version on [itch.io](https://itch.io)

# Introduction

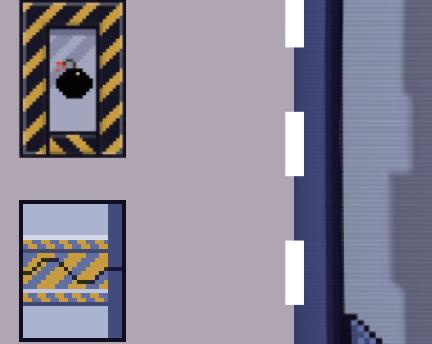
In this multi-timeline game, player will control a ignited bomb to get to target before explosion.

Player would finish a level within several well-planned explosion with its helpful time shadow.

Each level is a challenge in both action and puzzle.

## Rules

 You have **10 seconds** to reach the **Target** before you **explode**.



There are **doors** blocking your way.  
Step on their **buttons** to keep them open.

You will reborn after explosion.  
A **shadow** of you will repeat your last path.

Shadows clone your paths.  
They won't be blocked by doors  
but could step buttons for you.

## Game View



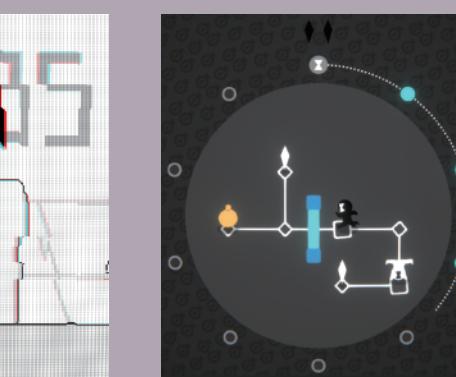
## Inspirations



Braid



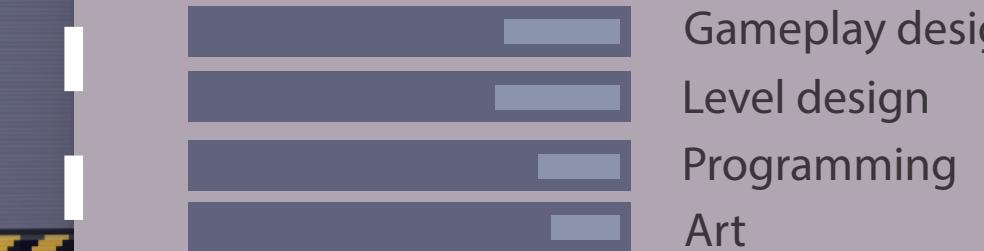
Retro Rift



Glich Loop

## Contributions

in a team of six.



Details of gameplay was discussed collaboratively;  
I delivered an overall analysis of level structure  
and designed 3 levels.

I wrote the codes of game manage and UI event,  
and presented the particle and screen effect.

# Illustration

## Button & Door

Keep stepping to open

Player

Step 1



Shadow

Step 1



Step 2



Step 2



Step 3

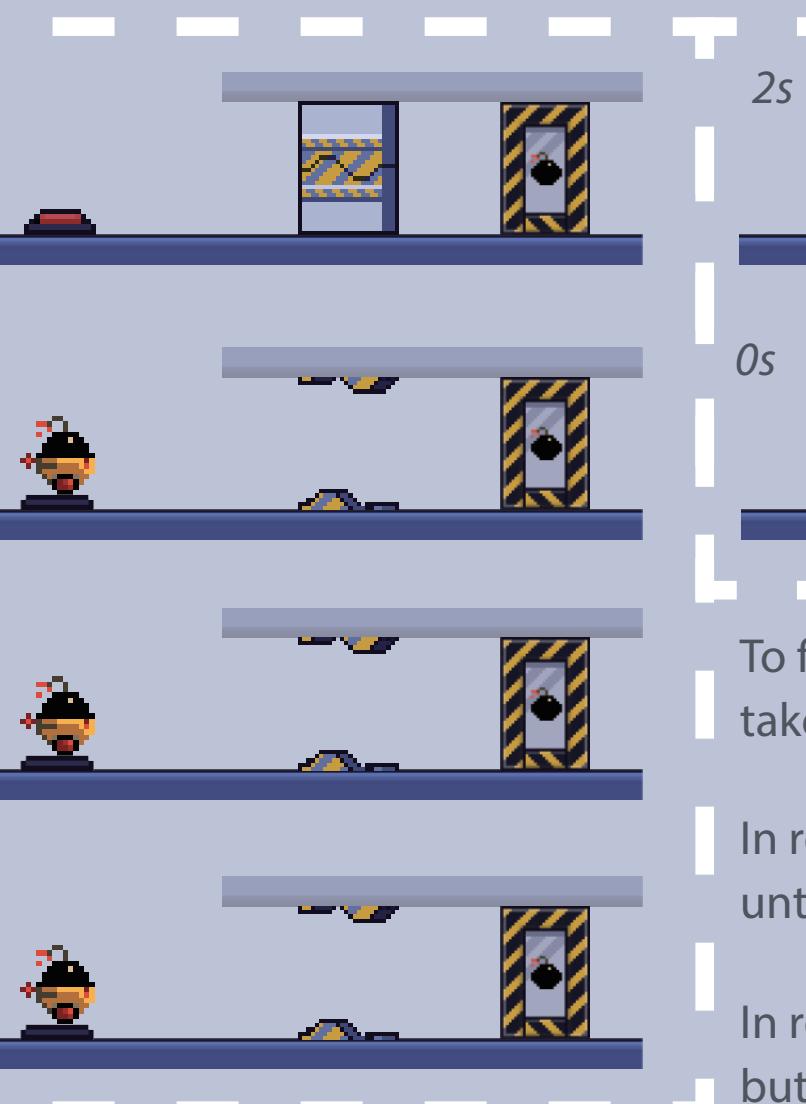


Step 3

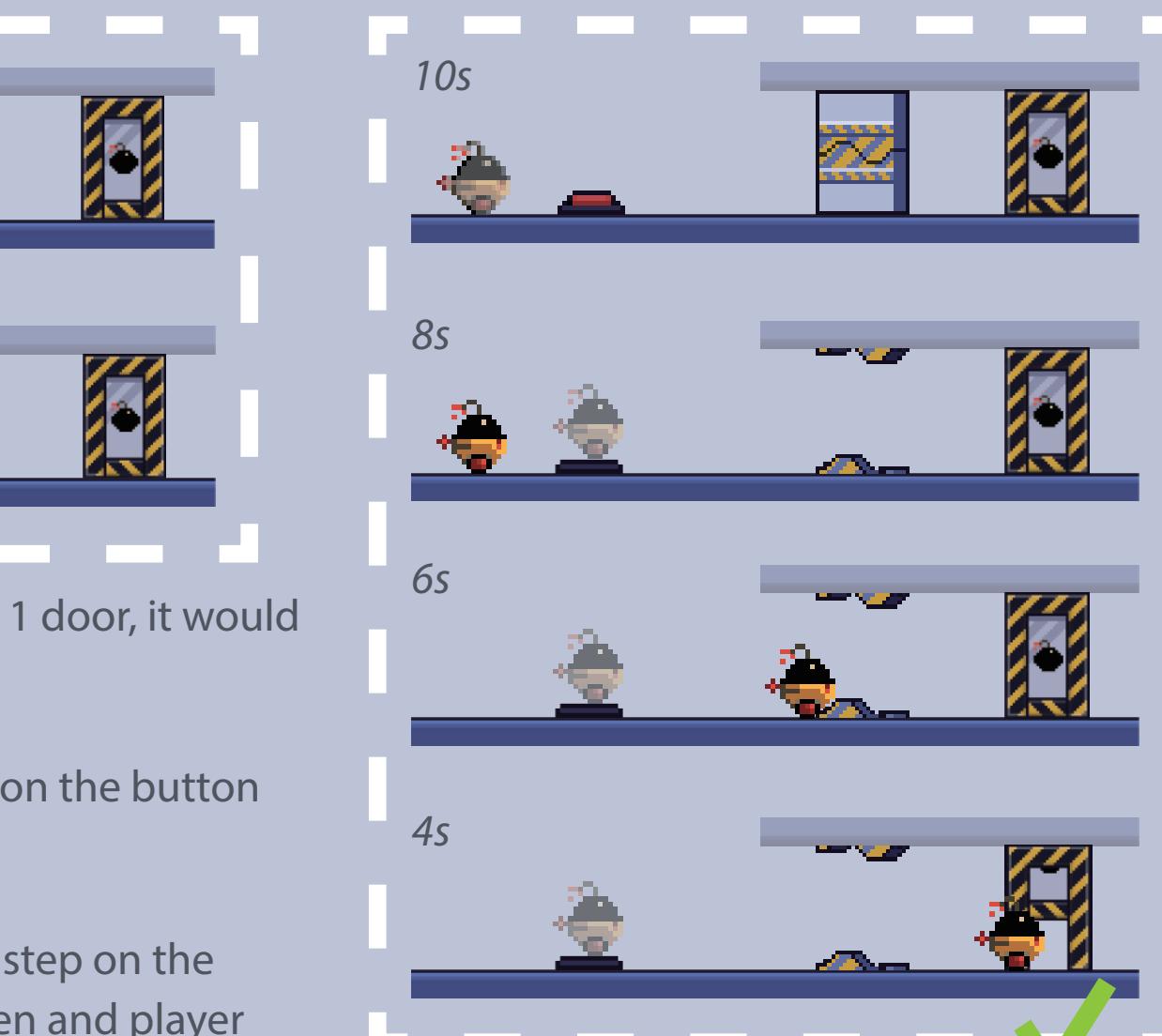


## How to pass a Door ? *The Basic Solution*

### Round 1



### Round 2



To finish a simple level with 1 door, it would take 2 rounds.

In round 1, player standing on the button until explosion.

In round 2, the shadow will step on the button, the door will be open and player could pass.

# Level Structure

How many basic structures?

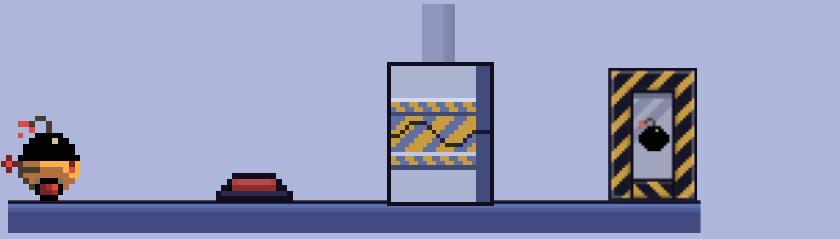
Essentials of a level: player , target  (and barrier: )

Case 0, No Button & Door



**Structure 1**

Case 1, One Button & Door



**Structure 2**

Door block the path.

**No solution**

Button have to be outside the door.

Case 2, Two Button & Door

Following out logic in Case 2, there are 2 questions we should consider:

*Does a Door block the path to Target? & Is a Button outside a Door?*

There are also some preconditions to make the door and level meaningful:

- (1) The 2nd Door must block the path to Target.
- (2) The 1st Button must be outside every Door;  
the 2nd Button must be outside the 2nd Door.

Thus the situations for 2 questions are:

The 1st Door **BLOCK** the path to Target.

*it must block 2nd Door*

The 1st Door **DON'T BLOCK** the path to Target.

*it must block something*



The 2nd Button **Inside** 1st Door.



The 2nd Button **Outside** 1st Door.

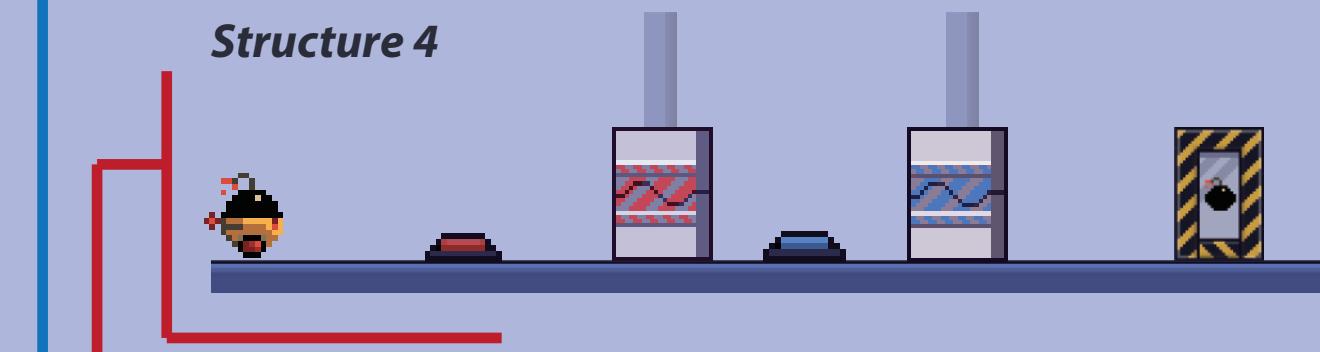


1st Door block nothing, not a new structure.

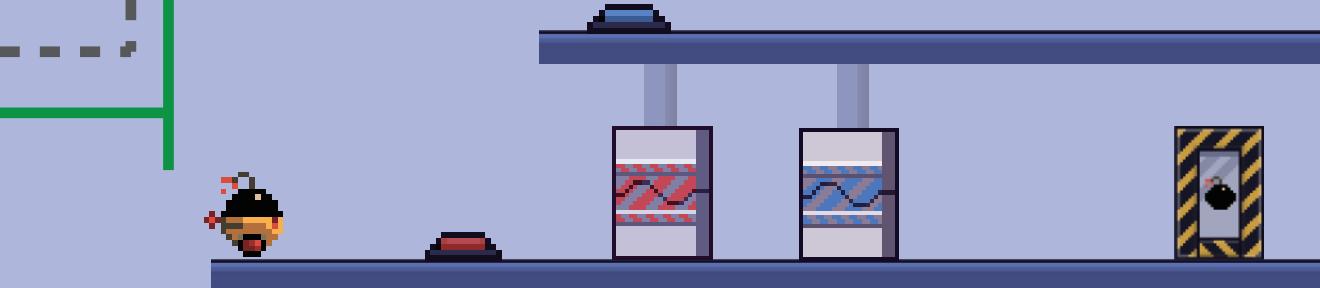


**Structure 3**

**Structure 4**



**Structure 5**



# Level Structure

## Solutions

Solution for **Structure 1** is direct.

Solution for **Structure 2** was the *basic solution* illustrated above.

**Structure 5** is similar to **Structure 2** and has same solutions.

Here we focusing on **Structure 3** and **4**:

### Structure 3

#### Round 1

##### Step 1



##### Step 2

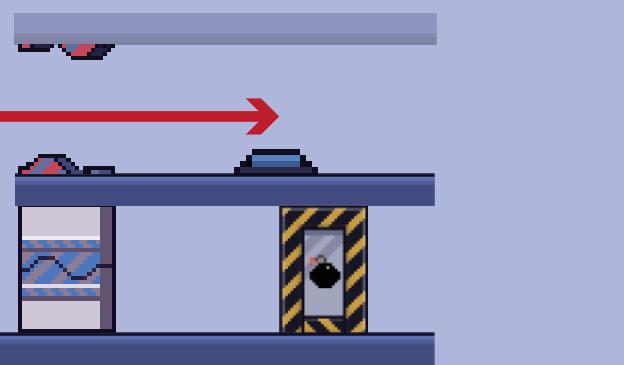


#### Round 2

##### Step 1

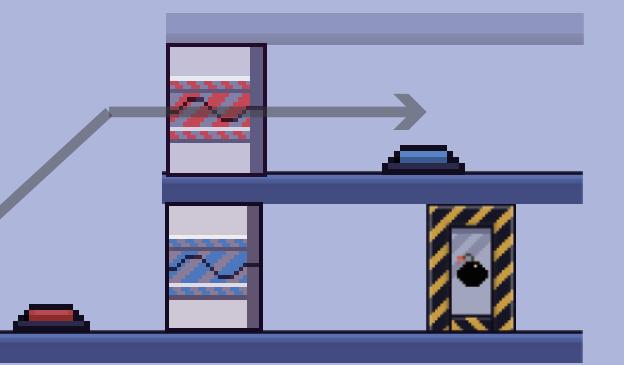


##### Step 2

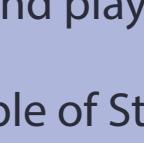
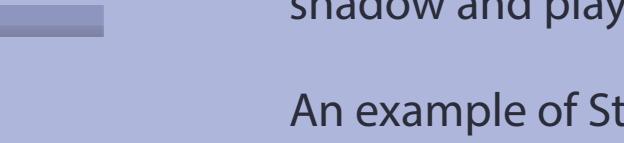
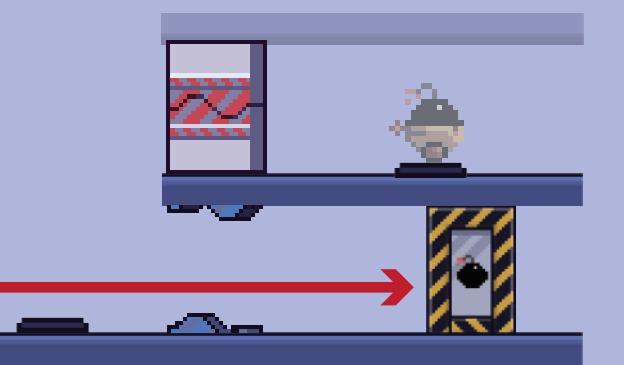


#### Round 3

##### Step 1



##### Step 2



Solution of **Structure 3** could be understand as two successive “*basic solution*” processes.



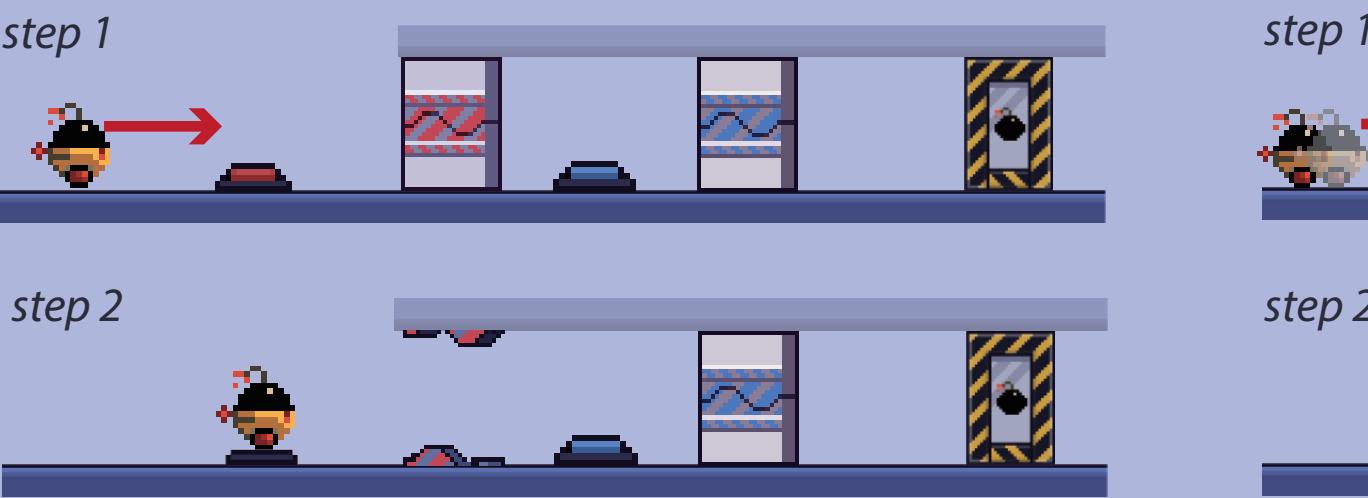
Round 2 is the overlap of both process, when both shadow and player were stepping on buttons.

An example of **Structure 2** in our game is level 5.



## Structure 4

### Round 1



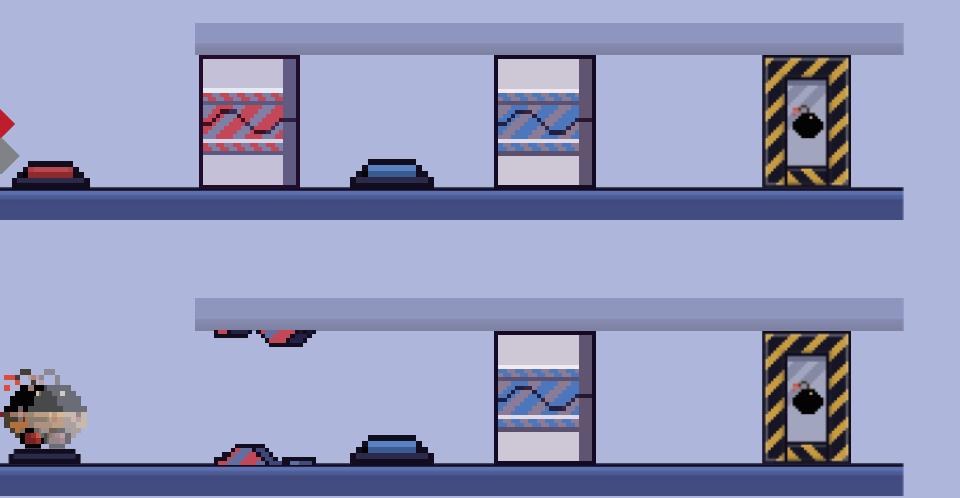
An example of Structure 2 in our game is level 6.



The Player's **waiting** in round 2 step 2 is the key.

Player could pass through the first door in round 3 only when he did this waiting in round 2.

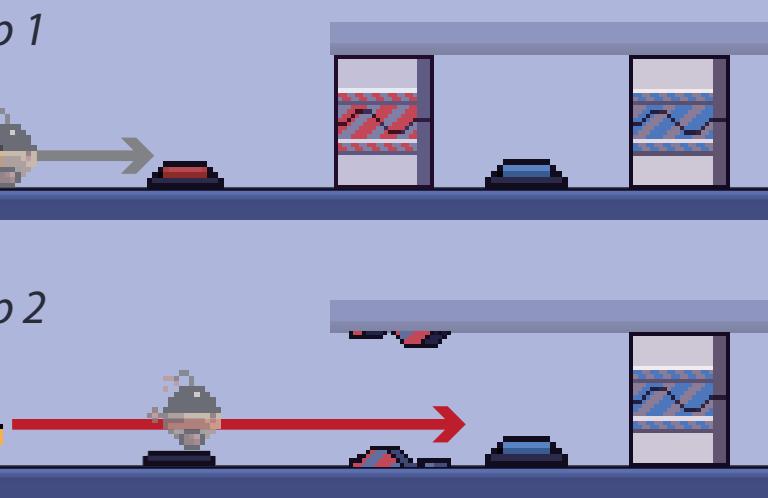
### Round 2



The Player's **waiting** in round 2 step 2 is the key.

Player could pass through the first door in round 3 only when he did this waiting in round 2.

### Round 3



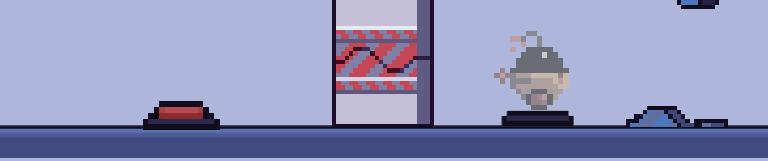
step 3



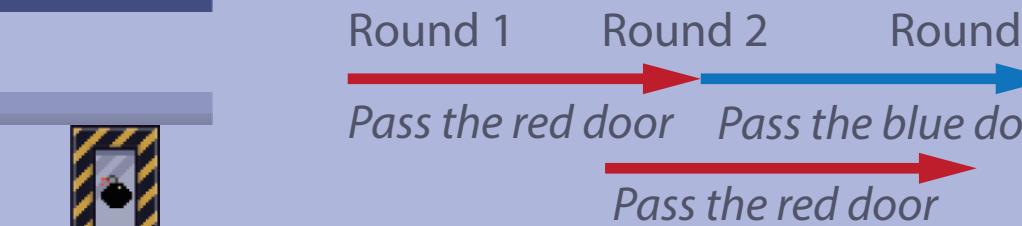
step 4



step 5



Solution of Structure 3 could be understood as three "basic solution" processes.



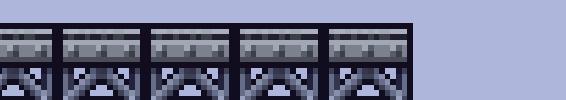
There is still a successive relationship as above. And the 3rd process started early in round 2.

In round 2, player have to step on both buttons successively. The time of stepping on each button will be depended on level specifics.

# Levels

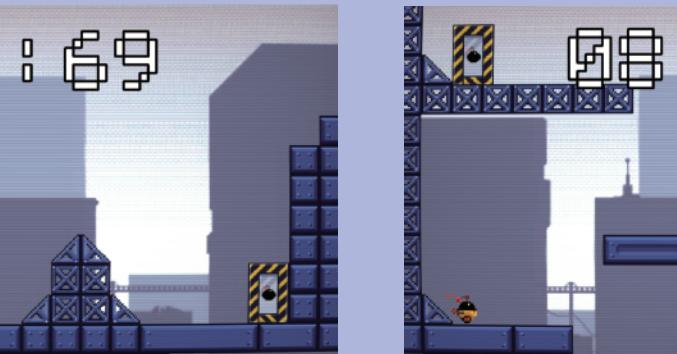
We delivered 10 levels during LD51. We only used at 2 two Button & Doors in our levels. Reasons are:

- (1) Player could only affect 2 buttons at the same time with only 1 shadow. Because of this, structures with more button & doors are basically combination of and nesting of structure 3 & 4, and their solutions will be cumbersome and repetitive.
- (2) Only 10 seconds of one round. Too many operations would be difficult in a round.
- (3) Don't take too many rounds. More rounds means more mistake opportunities and more repeat to finish level.



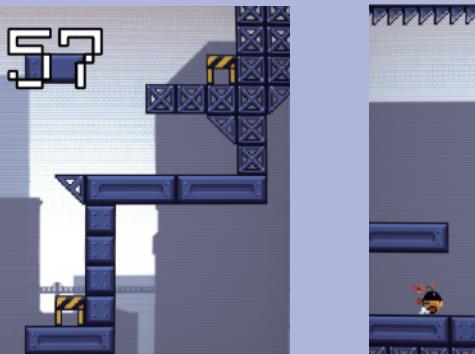
By bringing in small mechanisms like *spike*, *crumbling platform* and *moving platform*, we presented levels with more challenges on acting and timing.

Level 1



Structure 1  
*Introducing Move and Target*

Level 2



Structure 1  
*Practicing*

Level 3



Structure 2  
*Introducing Shadow, Button & Doors*

Level 4



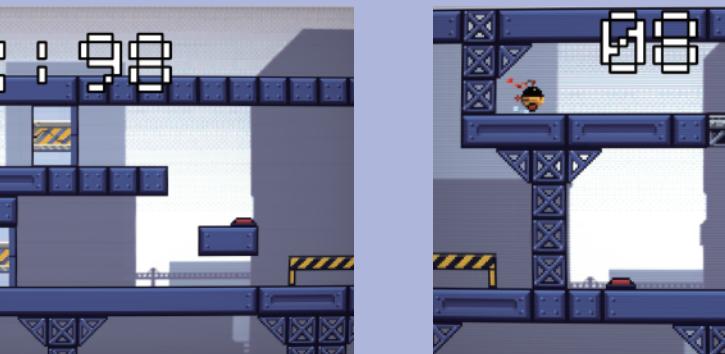
Structure 2  
*Practicing*

Level 5



Structure 3  
*Introducing Two Button & Doors*

Level 6



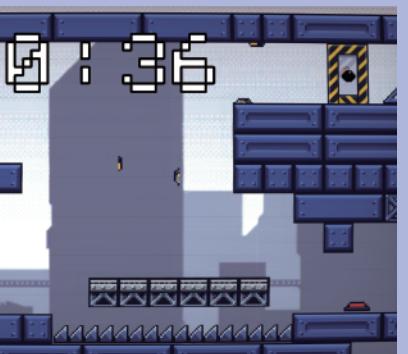
Structure 4  
*Developing*

Level 7



Structure 3  
*Practicing*

Level 8



Structure 3  
*Developing*  
1 Button, More Doors

Level 9



Structure 3  
*Developing*

Level 10

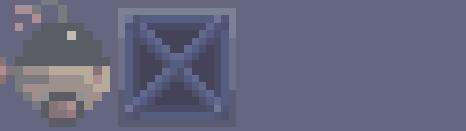


Ending  
*Challenge in Timing*

# After Jam

After LD51, we adjust levels' arrangement and reduced previous levels to 8 as the first division.

We introduced a new mechanisms, **Shadow Box**, and bring 4 new levels as the second division.



The Box could also generate a shadow repeating its path in last round. Both box and its shadow could affect button.



Now player could affect at most 4 buttons at the same time, which brings us more possibilities of level design.

Level 2-1



Level 2-2



Besides generating time shadows, box also have other functions:

*as a stepping stone:*

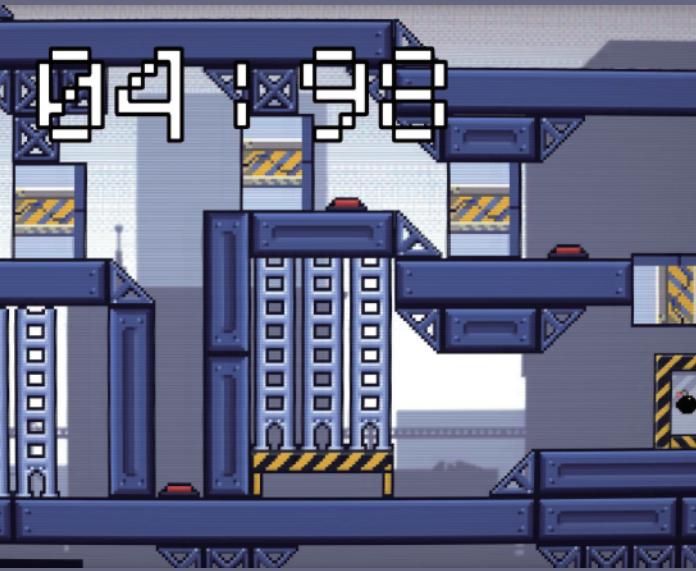
- (1) for player jump higher: level 2-2
- (2) blocking Spikes: level 2-1, level 2-2



Level 2-3



Level 2-4



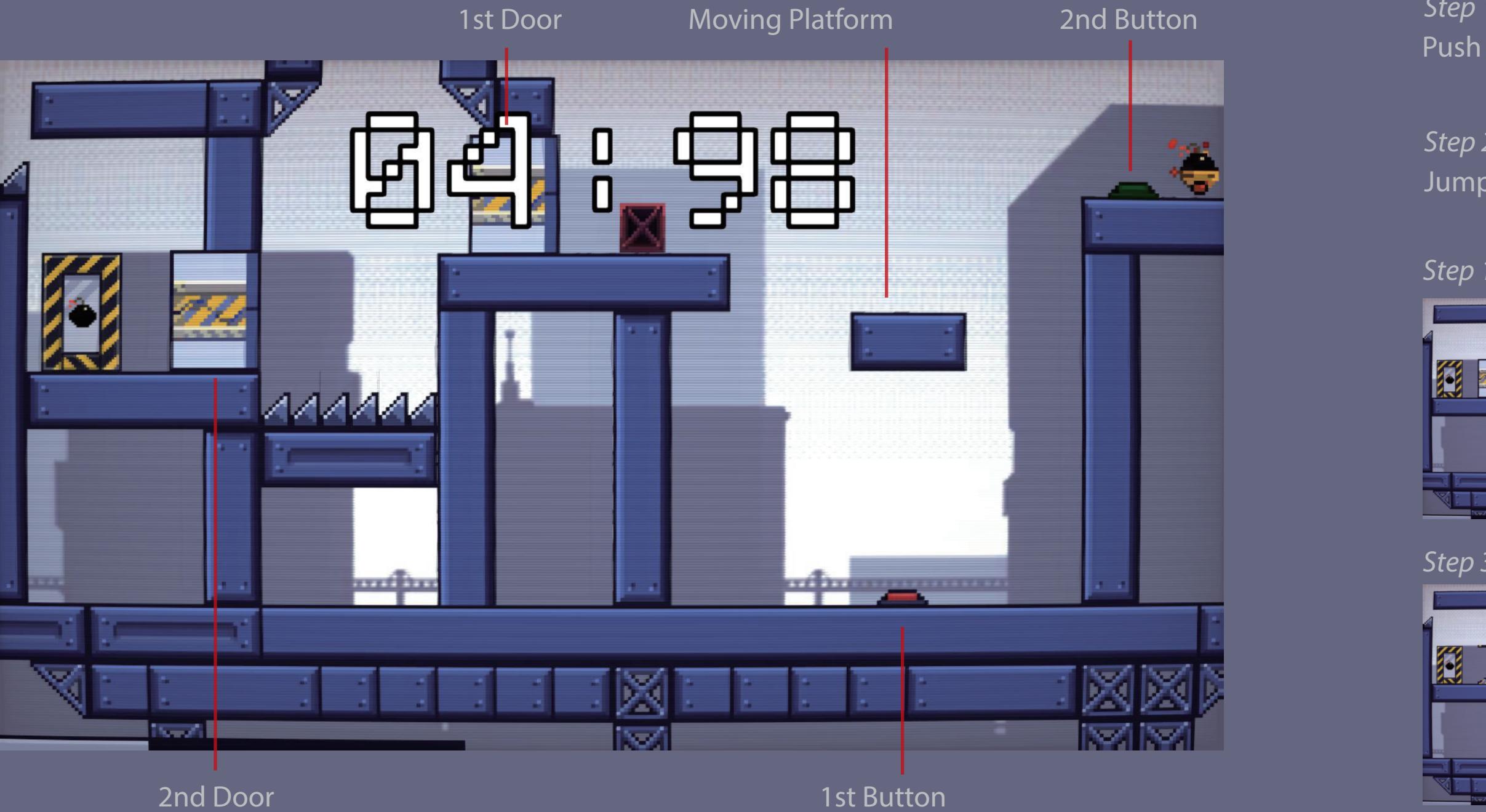
*or go to places player can't go or can't get back:*

- (3) Passing through Spikes: level 2-2, level 2-3
- (4) Going deep down: level 2-1, level 2-4



I designed level 2-1 and level 2-4.

## Illustration of level 2-1: challenge in timing and jumping.



## Round 1

Step 1  
Push Box to 1st Button.

### Step 1

Push Box to 1st Button.  
Jump back to step 2nd Button.

### Step 1

Push Box to 1st Button.  
Jump back to step 2nd Button.

### Step 3

Player Shadow step on 2nd Button.  
Reach the Target.

### Step 1

Push Box to 1st Button.  
Jump back to step 2nd Button.

### Step 2

Box shadow press 1st Button.  
Push Box through 1st Door;  
Box land on the Spikes;  
Jump on Box.

### Step 2

Box shadow press 1st Button.  
Push Box through 1st Door;  
Box land on the Spikes;  
Jump on Box.

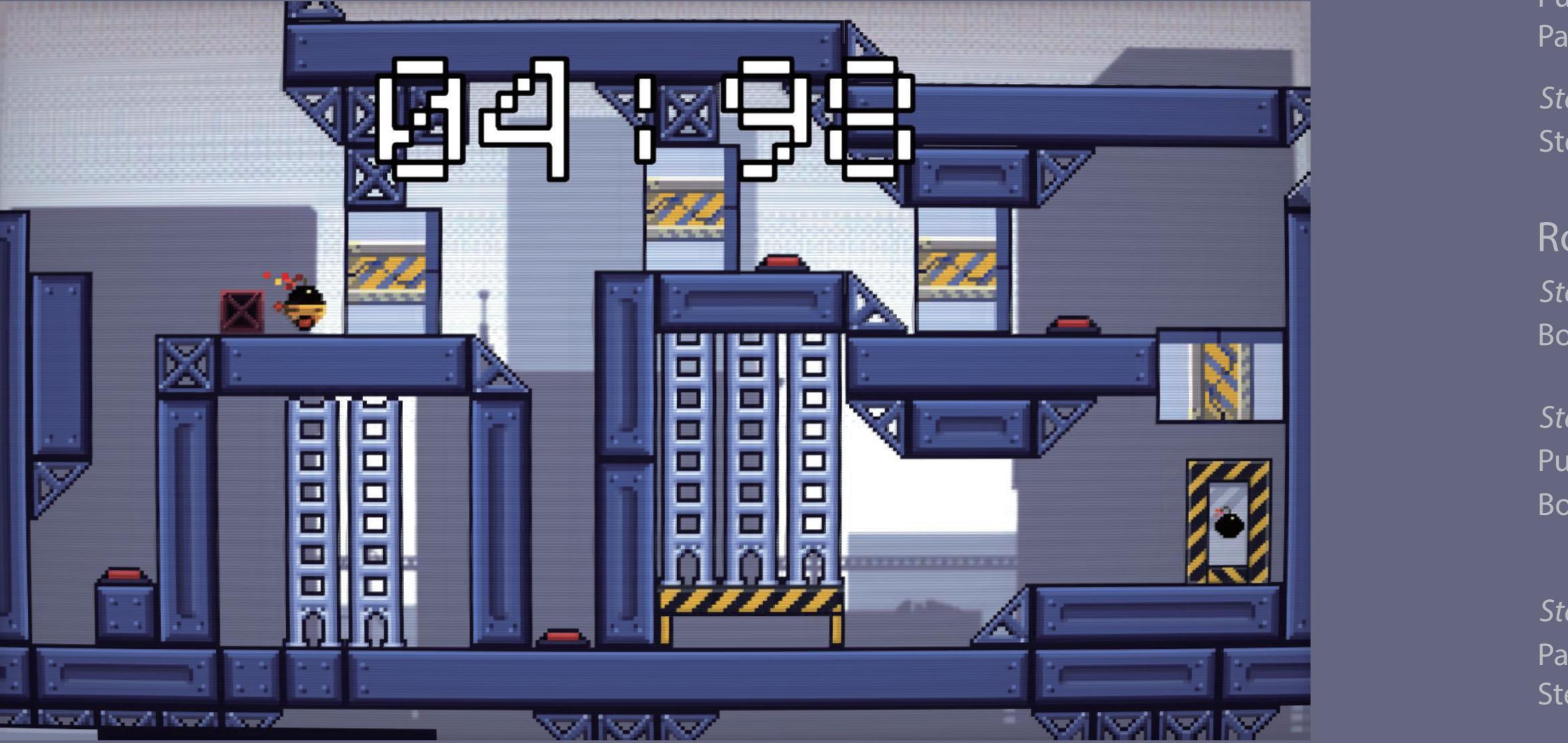
### Step 3

Player Shadow step on 2nd Button.  
Reach the Target.

### Step 4

Player Shadow step on 2nd Button.  
Reach the Target.

## Illustration of level 2-4: challenge in puzzle solving



Buttons and doors are arranged in order from left to right.

### Round 1

#### Step 1

Push Box to 1st Button;  
Pass through 1st Door.

#### Step 2

Step 2nd Button.

### Step 1



### Step 2



### Round 2

#### Step 1

Box shadow press 1st Button.

#### Step 2

Push Box through 1st Door;  
Box Land on 2nd Button

#### Step 3

Pass through 2nd Door.  
Step on 3rd Button.

### Step 1



### Step 2



Player could step 1st Button in Round 1.  
The purpose of first 2 rounds is to let player reach 3rd Button.

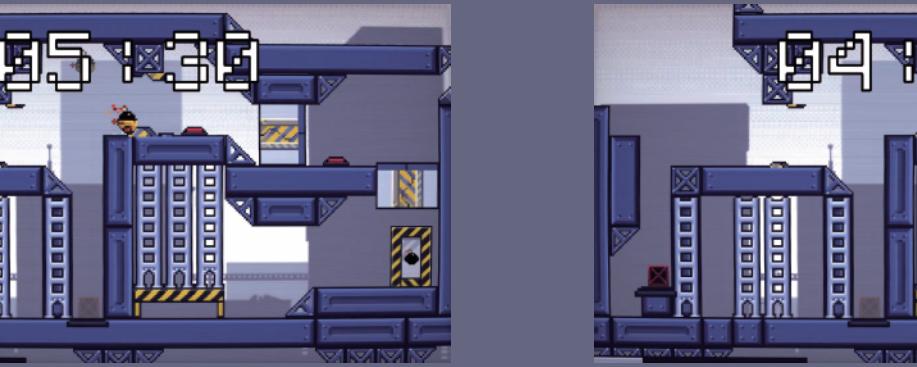
## Round 3

### Step 1



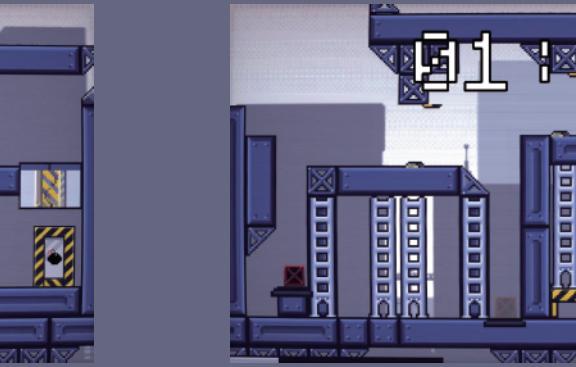
Push Box to land on 1st Button.

### Step 2



Box Shadow land on 2nd Button;  
Pass 1st and 2nd Doors.

### Step 3



Step on 3rd Button, and wait;  
Shadow Step on 3rd Button.

### Step 4



Pass through 3rd Door;  
Step on 4th Button.

In round 3, all four objects (player, player's shadow, box and box's shadow) are stepping on a button.

The movements in round 3 and 4 are basically certain, because the 1st and 2nd buttons have to be pressed by box and the 3rd and 4th buttons can only be stepped by player.

The waiting in step 3 of round 3 is similar as the waiting in *structure 4*. After solving previous levels, this obstacle won't be too complex for players.

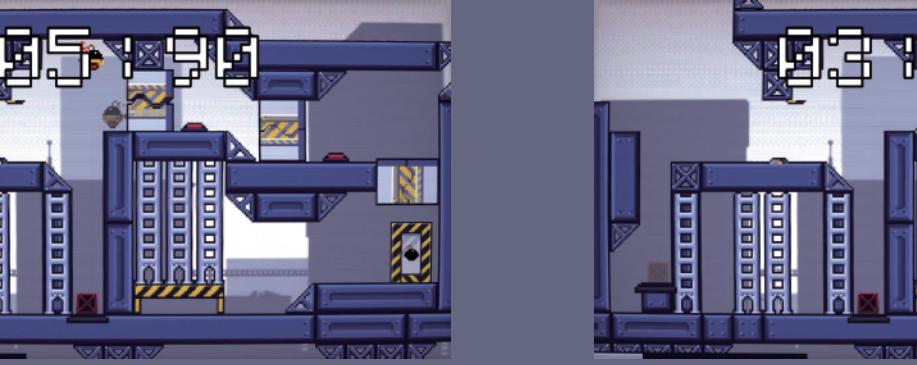
## Round 4

### Step 1



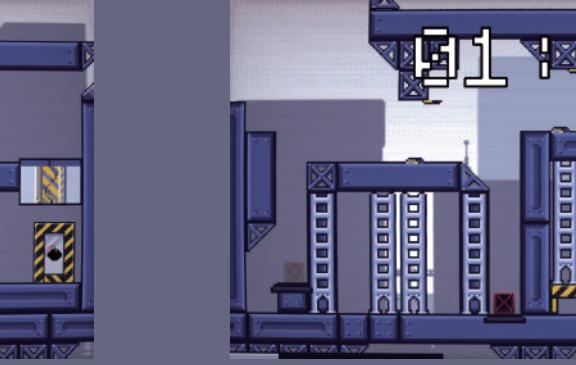
Shadow Box land on 1st Button.

### Step 2



Pass through 1st Door;  
Push Box to land on 2nd Button;  
Pass through 2nd Door.

### Step 3



Shadow Step on 3rd Button;  
Pass through 3rd Door.

### Step 4



Shadow Step on 4th Button;  
Pass through 4th Door.



Level 2-4 is our only level requiring 4 rounds to finish.  
Thus we kept other elements in level 2-4 to be simple.