Level Design in Genres

Adventure Games

Colossal Cave Adventure – 1976

Features:

1. Puzzles
2. Collecting
3. Story and setting
4. Dialogs
5. Goals, successes

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.run adven


WELCOME TO ADVENTURE!!  WOULD YOU LIKE INSTRUCTIONS?

yes

SOMEWHERE NEARBY IS COLOSSAL CAVE, WHERE OTHERS HAVE FOUND FORTUNES IN
TREASURE AND GOLD, THOUGH IT IS RUMORED THAT SOME WHO ENTER ARE NEVER
SEEN AGAIN.  MAGIC IS SAID TO WORK IN THE CAVE.  I WILL BE YOUR EYES
AND HANDS.  DIRECT ME WITH COMMANDS OF 1 OR 2 WORDS.  I SHOULD WARN
YOU THAT I LOOK AT ONLY THE FIRST FIVE LETTERS OF EACH WORD, SO YOU'LL
HAVE TO ENTER "NORTHEAST" AS "NE" TO DISTINGUISH IT FROM "NORTH".
(SHOULD YOU GET STUCK, TYPE "HELP" FOR SOME GENERAL HINTS.  FOR INFOR-
MATION ON HOW TO END YOUR ADVENTURE, ETC., TYPE "INFO".)
                                - - -
THIS PROGRAM WAS ORIGINALLY DEVELOPED BY WILLIE CROWTHER.  MOST OF THE
FEATURES OF THE CURRENT PROGRAM WERE ADDED BY DON WOODS (DON @ SU-AI).
CONTACT DON IF YOU HAVE ANY QUESTIONS, COMMENTS, ETC.

YOU ARE STANDING AT THE END OF A ROAD BEFORE A SMALL BRICK BUILDING.
AROUND YOU IS A FOREST.  A SMALL STREAM FLOWS OUT OF THE BUILDING AND
DOWN A GULLY.

east

YOU ARE INSIDE A BUILDING, A WELL HOUSE FOR A LARGE SPRING.

THERE ARE SOME KEYS ON THE GROUND HERE.

THERE IS A SHINY BRASS LAMP NEARBY.

THERE IS FOOD HERE.
```

What is the level?

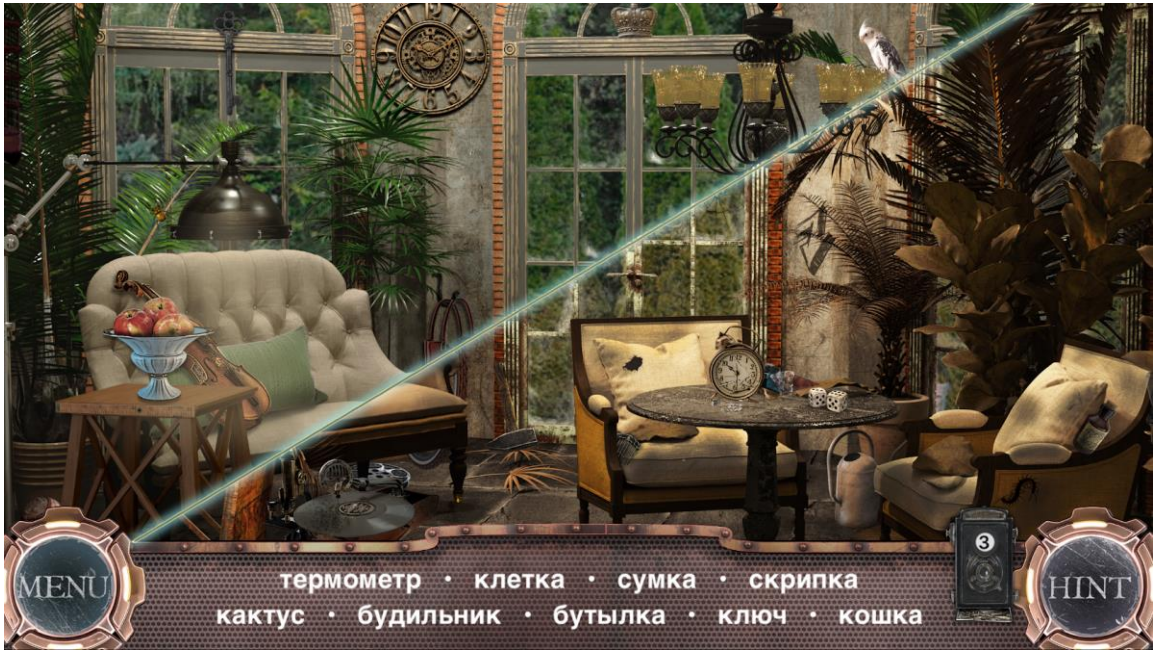
- What logical elements can we extract?

Puzzles

- Blocking content
- Depend on player’s ability
- Easy way to brake narrative
- Can age badly

Collecting

- Interactive objects are important
- No way to understand if all are collected
- Re-watch
- Pixel-hunt
- Separate Genre



Using Items

- Item can wait for its turn
- Brute-force is boring.
- Use not by main purpose but by properties.

Grim Fandango: balloons

Trader makes animals from balloons

We can make dog, worm or horse

Worm is just an empty balloon

Analyses

Worm is a balloon
Balloon is made from rubber => Elastic – can be used in slingshots
Balloon is a vessel for liquids and gases => Can hold water

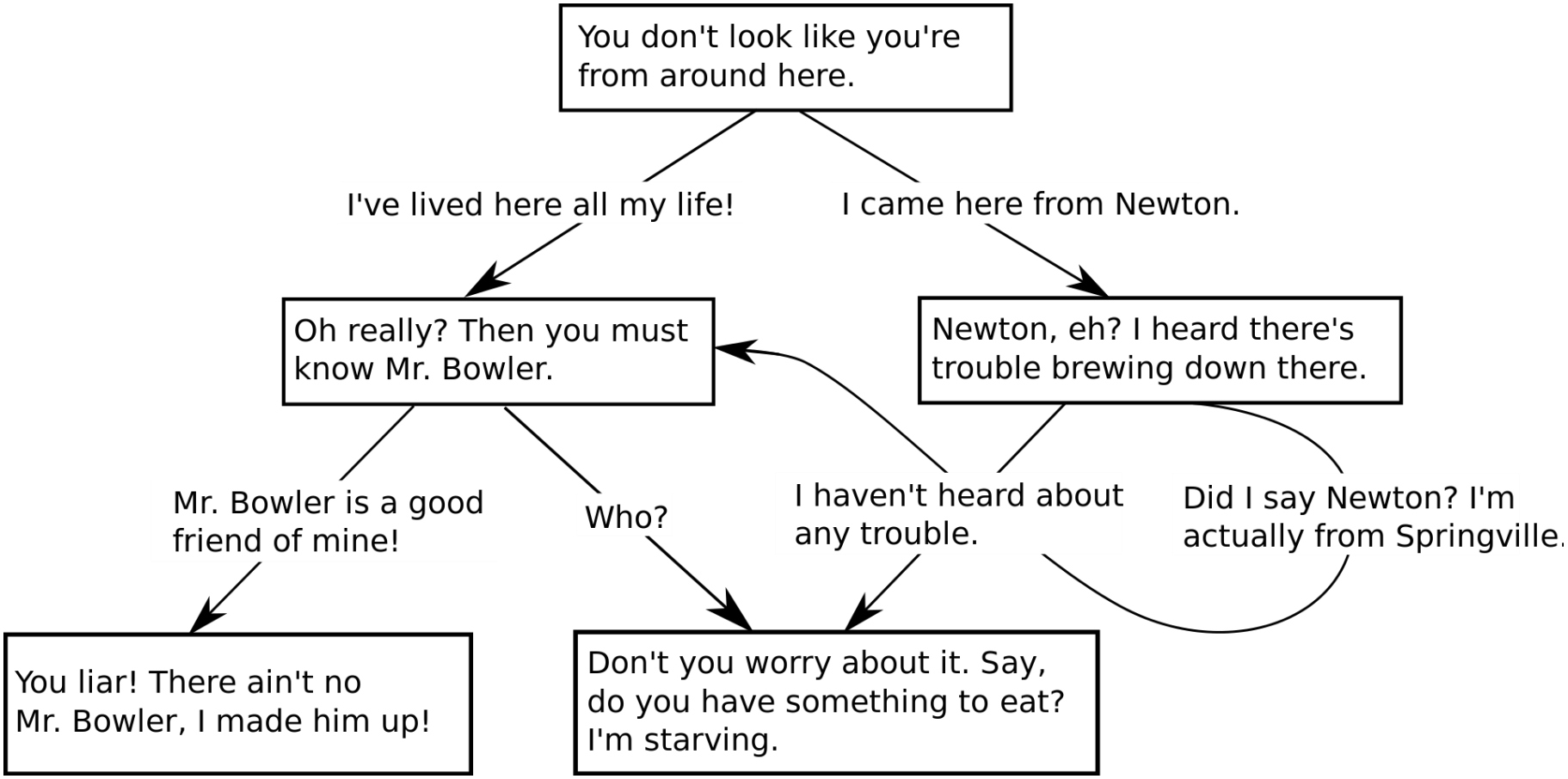
Basic usage: Party!
Logical Usage: as a rubber, as a vessel, by color.
Illogical usage: ignore properties

Objects can have shared properties!

Story and setting

- Story similar to literature
- Linearity is not a problem
- Amnesia is a problem

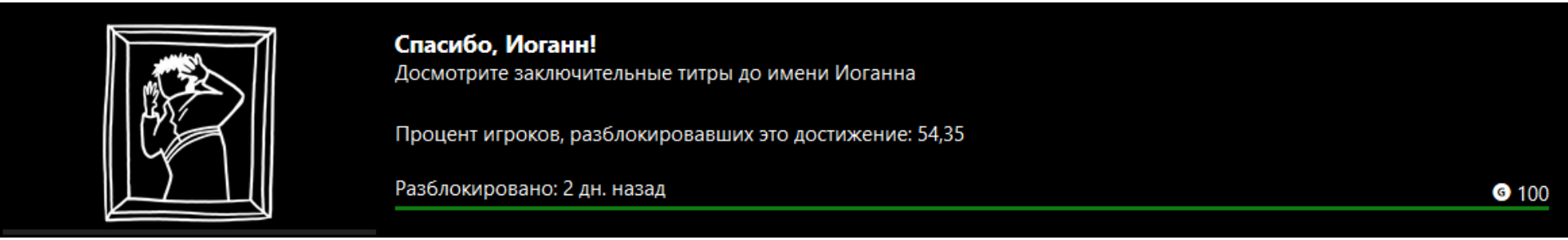
Dialogs

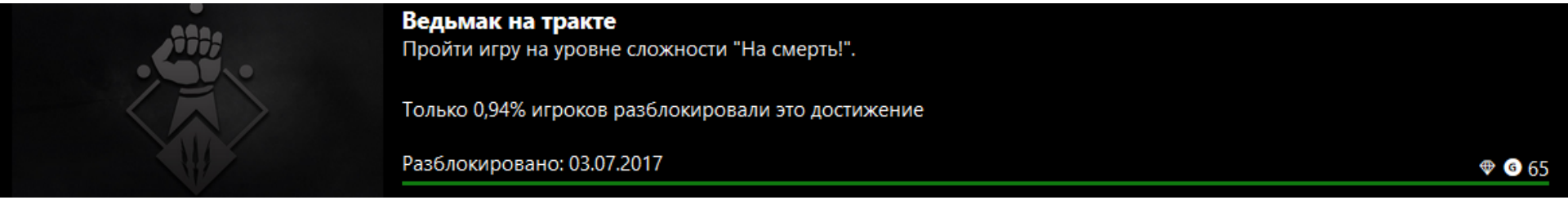

You don't look like you're from around here.
I've lived here all my life!
I came here from Newton.
Oh really? Then you must know Mr. Bowler.
Newton, eh? I heard there's trouble brewing down there.
Mr. Bowler is a good friend of mine!
Who?
I haven't heard about any trouble.
Did I say Newton? I'm actually from Springville.
You liar! There ain't no Mr. Bowler, I made him up!
Don't you worry about it. Say, do you have something to eat? I'm starving.

Goals, successes

- Main goals is in the plot
- Limited secondary goals
- Easy achievements

Really good for achievements





Puzzles

Show problem -> Find Solution

2 categories:

- Independent
- With key

Independent puzzles

1. Interactive
2. Mini-games
3. Riddles

Interactive

- Easy solutions/actions (Door is active!)
- Difficulty depends on your game

Mini-games

- Series of actions
- Popular
- Change the pace

Riddles

- Classics
- Set of Answers is limited (Brute-force)

Pros and Cons

- All you need is here
- Many unique situations
- Not connected to other parts of the game

Puzzles with keys

- Puzzles with inventory
- Puzzles with template
- Puzzles with extra dependencies

Puzzles with inventory

Puzzles with template

- Some info is missing
- Only character can solve

  (or not)
- If not, player can remember

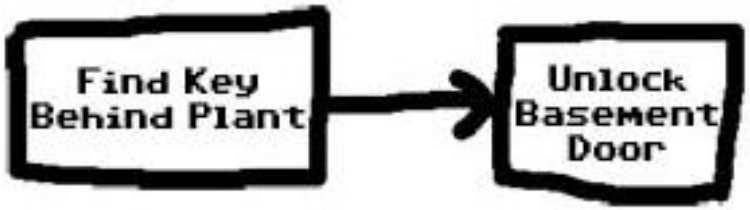
Puzzles with extra dependencies

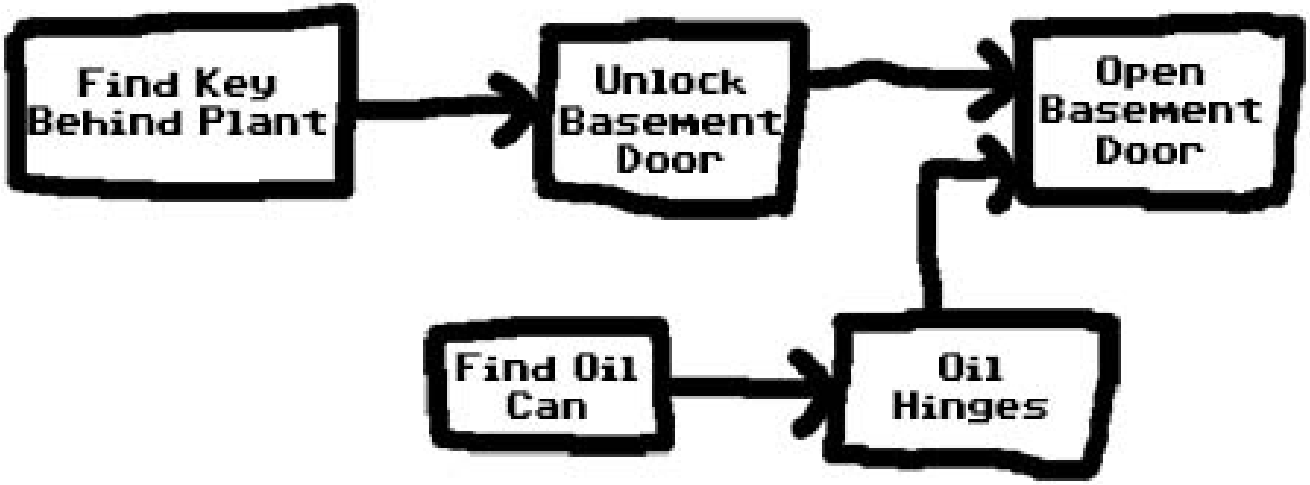
- There is a proper state of the game to solve it
- Detective-like mechanics
- Puzzle can use elements of different types

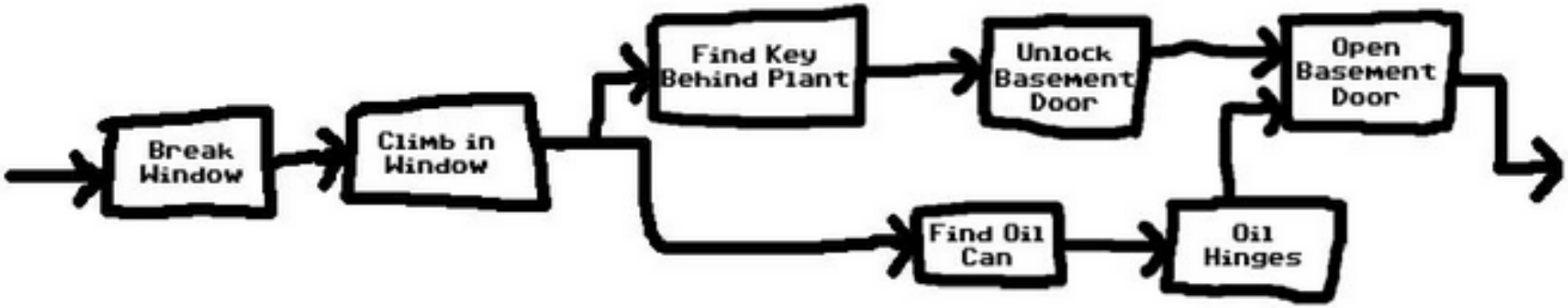
Puzzle Dependency Charts

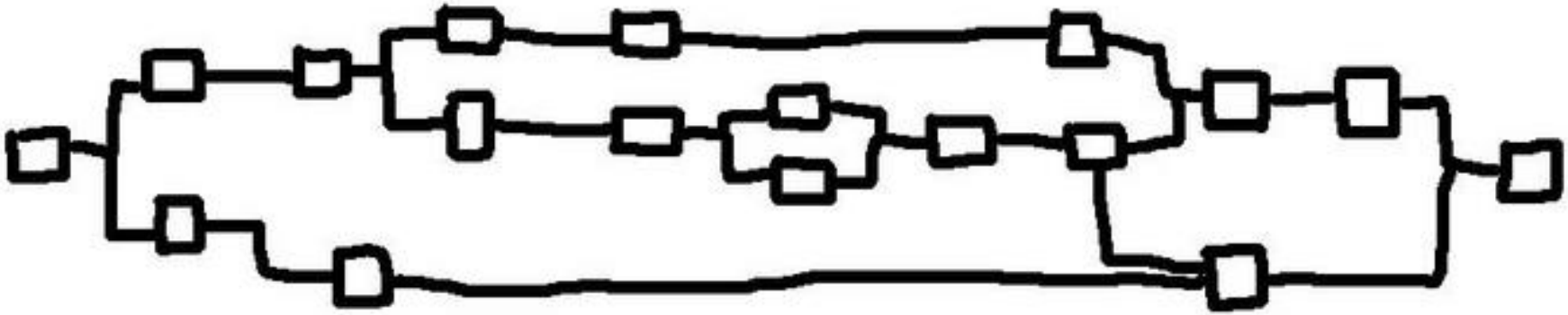
- *Ron Gilbert*

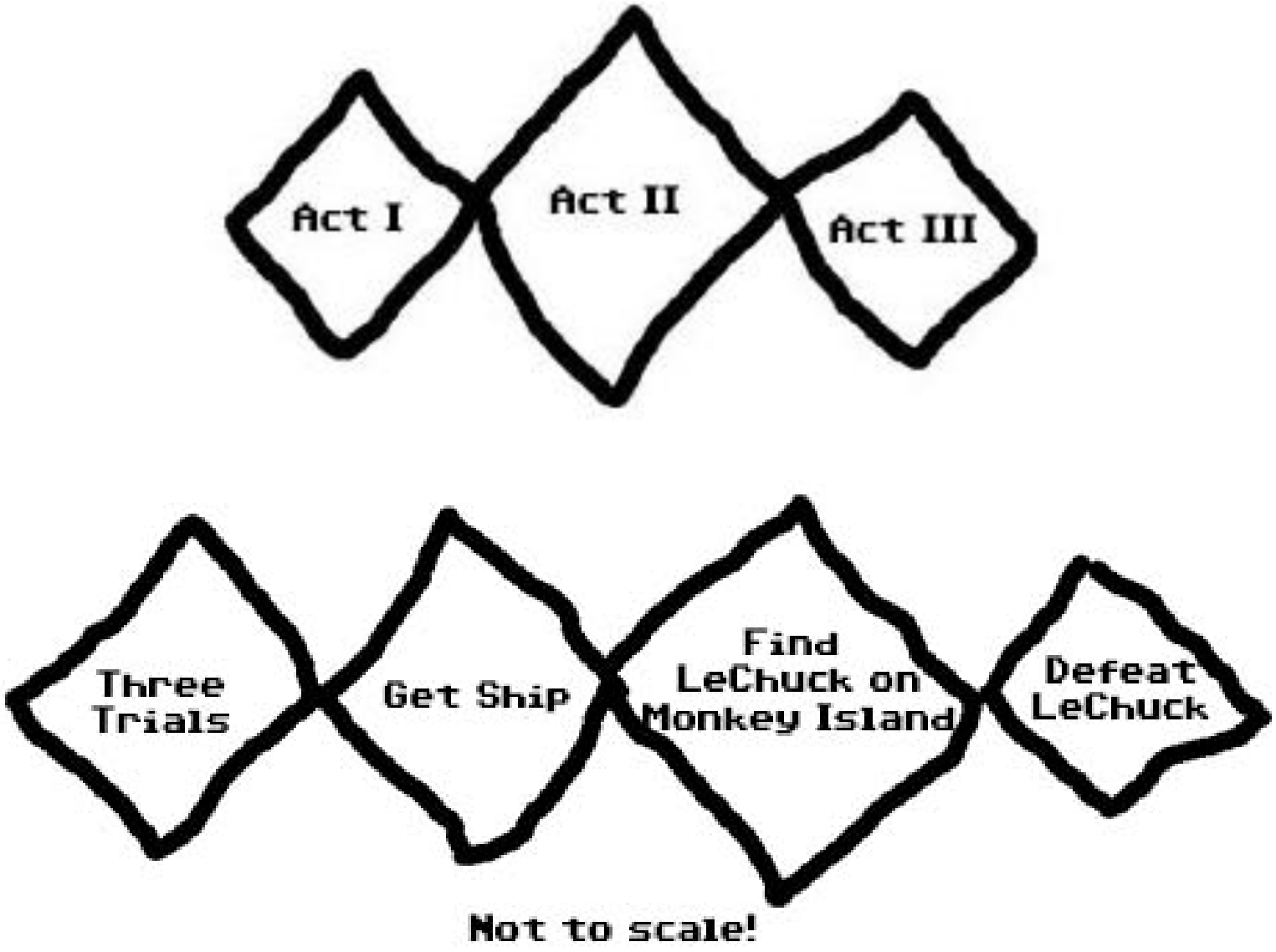
PDC – list of puzzles and dependencies


Find Key Behind Plant
Unlock Basement Door


Find Key Behind Plant
Unlock Basement Door
Open Basement Door
Find Oil Can
Oil Hinges


Break Window
Climb in Window
Find Key Behind Plant
Unlock Basement Door
Open Basement Door
Find Oil Can
Oil Hinges




Act I
Act II
Act III
Three Trials
Get Ship
Find LeChuck on Monkey Island
Defeat LeChuck
Not to scale!

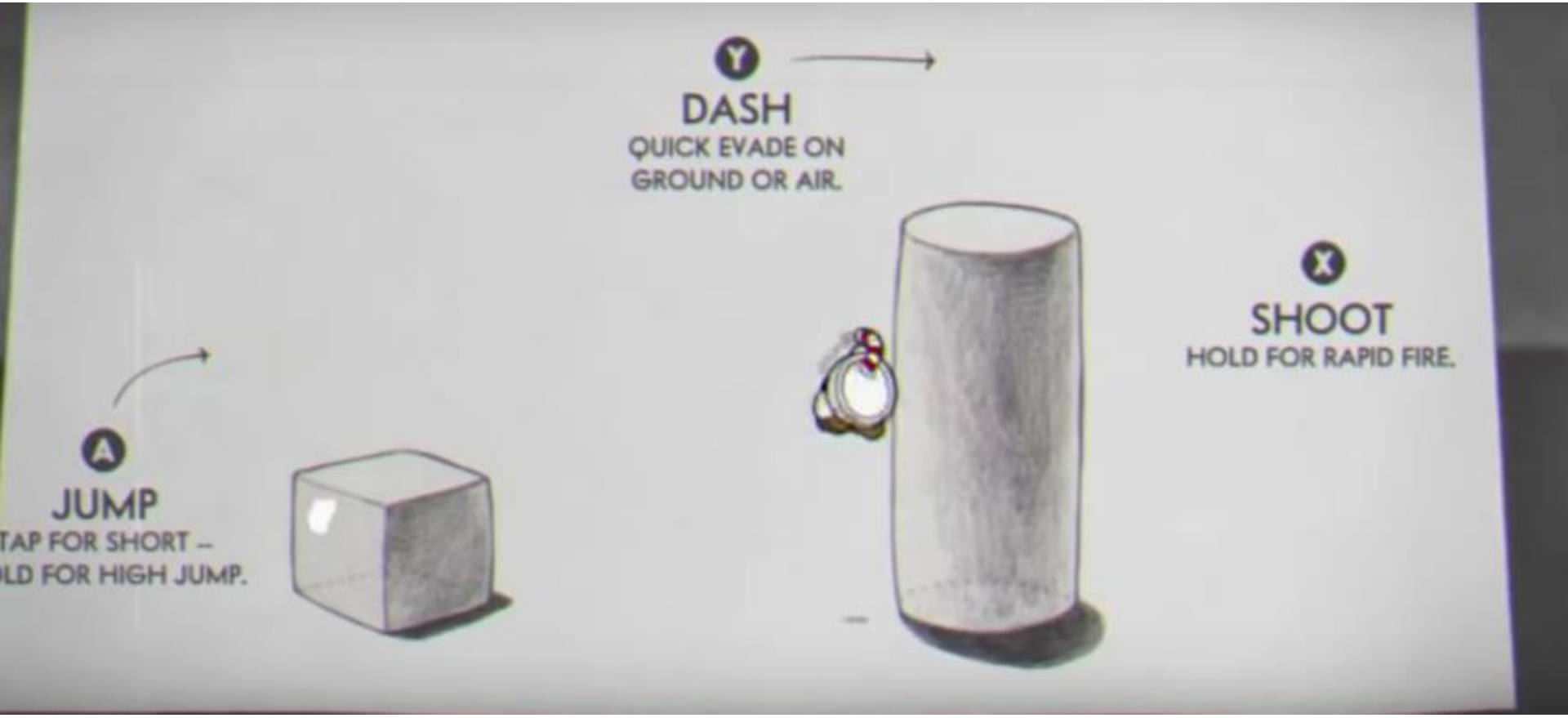
Do PDCs!

- www.christophersacchi.com/unpoint-unclick/#

Platformers

1. Well-designed controls

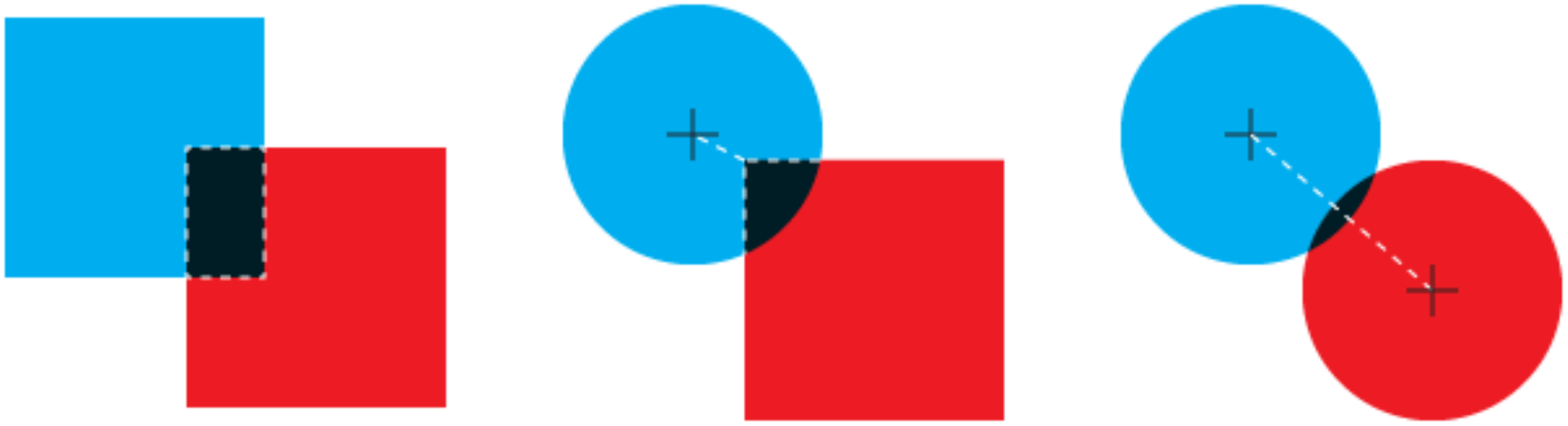
2. Hints!


Y
DASH
QUICK EVADE ON
GROUND OR AIR.
X
SHOOT
HOLD FOR RAPID FIRE.
A
JUMP
TAP FOR SHORT –
LD FOR HIGH JUMP.

3. Information should be easy to read!

- Information should be easy to read!
- No time for reading!

4. CD for the players

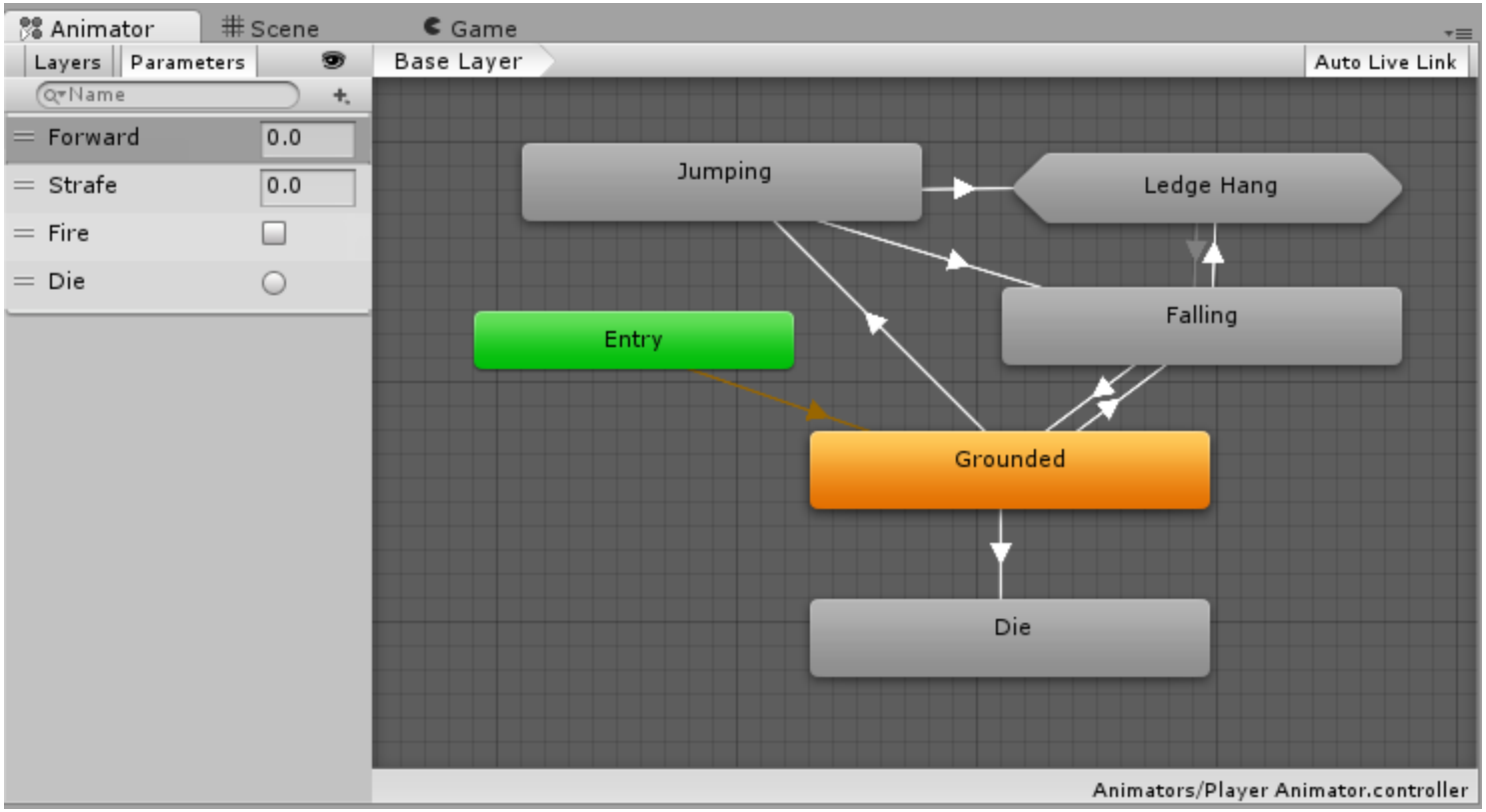


5. Control the jump

- Double Jump/Dash
- Jump after the fall

6. Animation control

- Controls > Animations
- Any states



7. Collectables

- Replay
- Difficulty

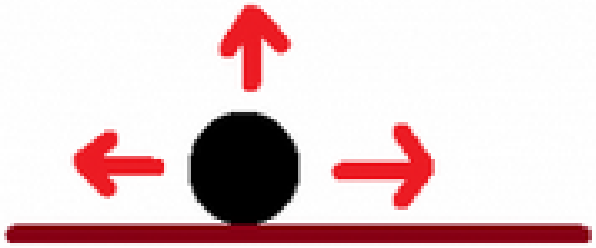
8. AI and Difficulty

HP	Speed	Jump	Attack
0 – 1 Hits	0 – Doesn’t move	0 – No	0 - no
1 – 2 Hits	1 – Slow	1 – Low	1 – close range
2 – 3 Hits	2 – Meduim	2 – Medium	2 – medium range
	3 – Fast	3 – Hi	3 - shoots
	4 – Changes Speed	4 – Hi, by conditions	

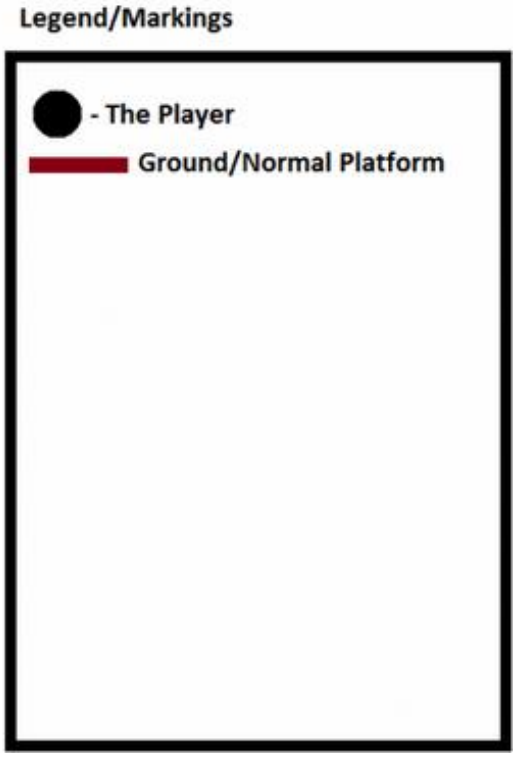
9. Setting and Story

- Mechanics + Story

Designing a level: mechanics

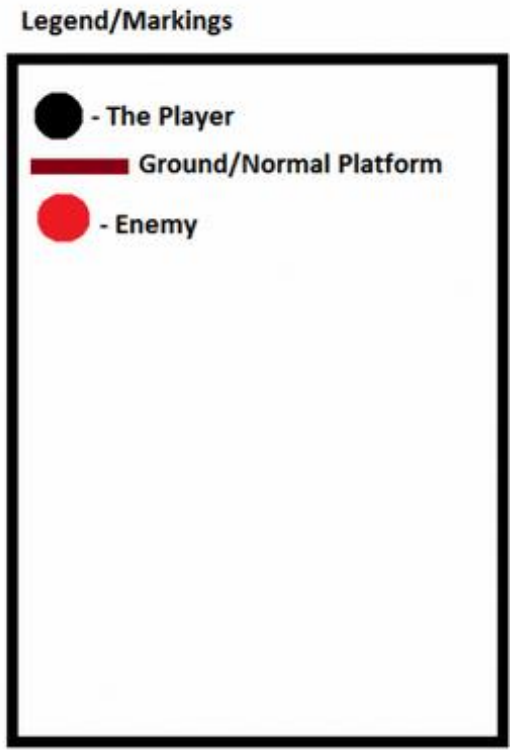


Goal

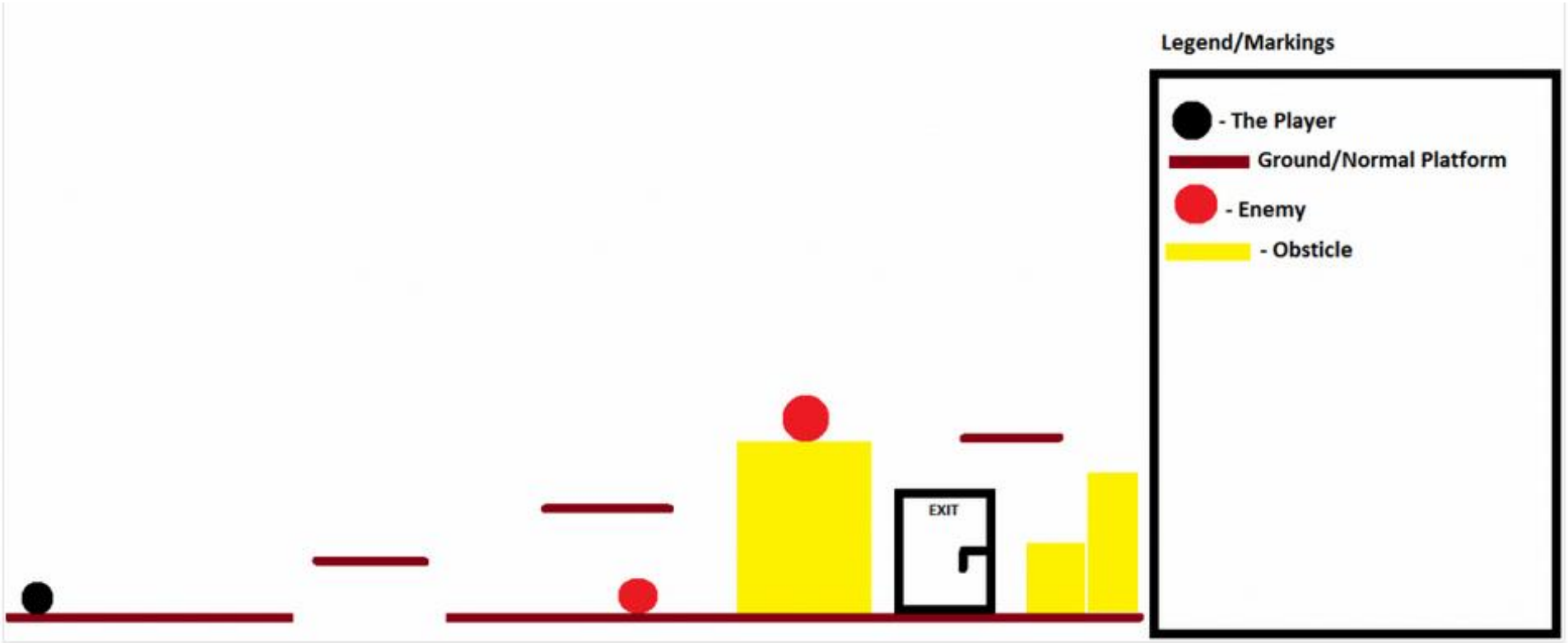


Obstacles

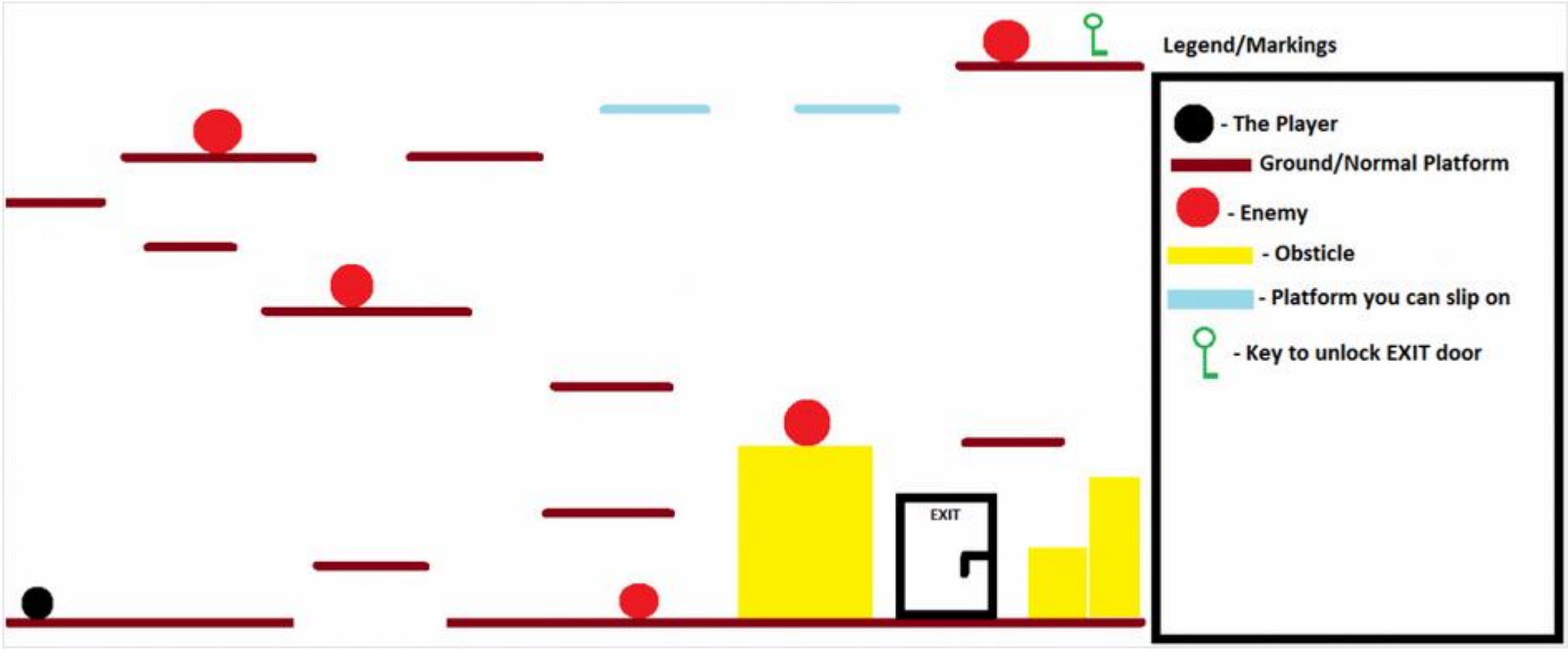
EXIT


Legend/Markings
- The Player
Ground/Normal Platform
- Enemy

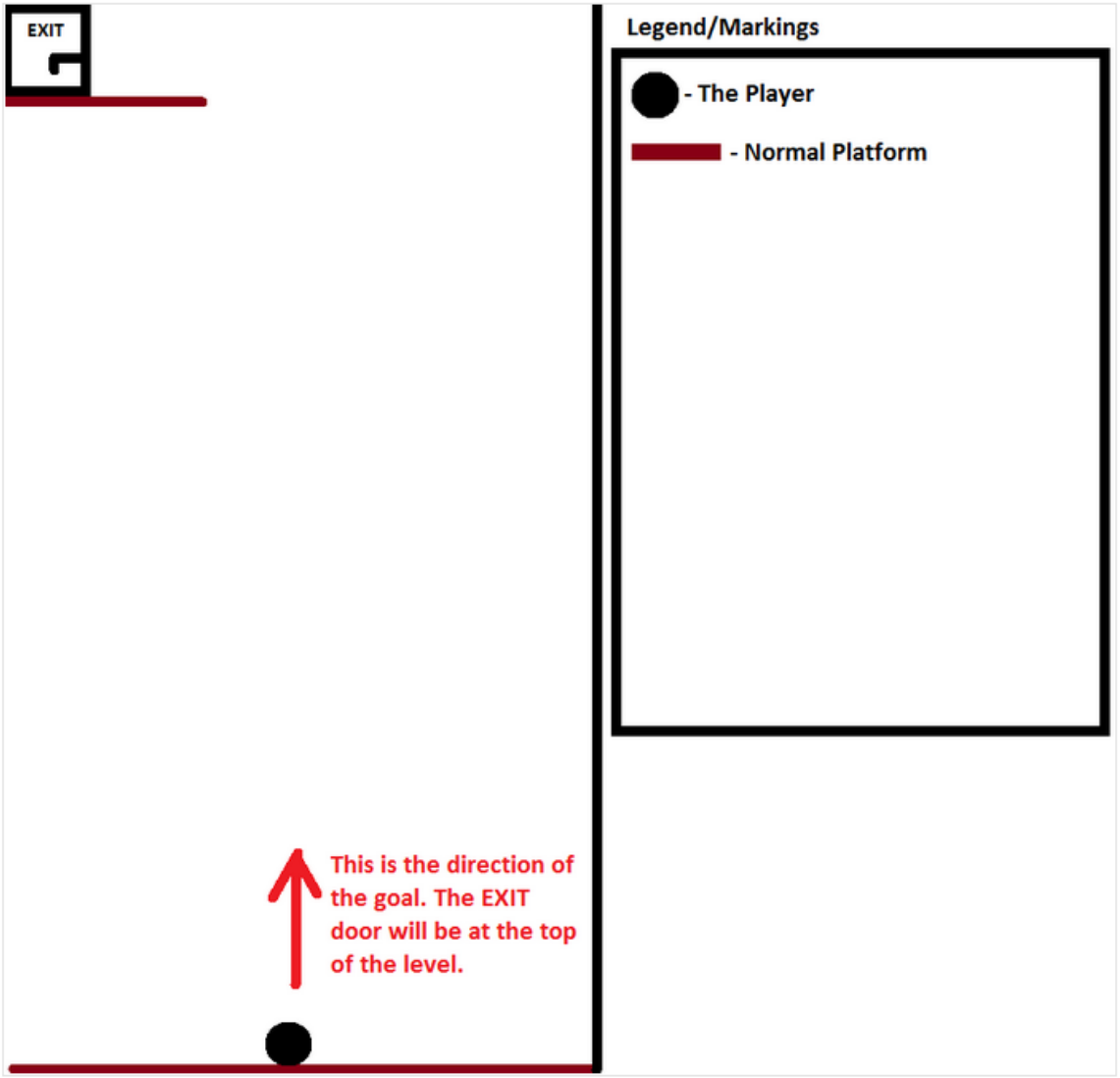
More!


Legend/Markings
- The Player
Ground/Normal Platform
- Enemy
- Obsticle
EXIT

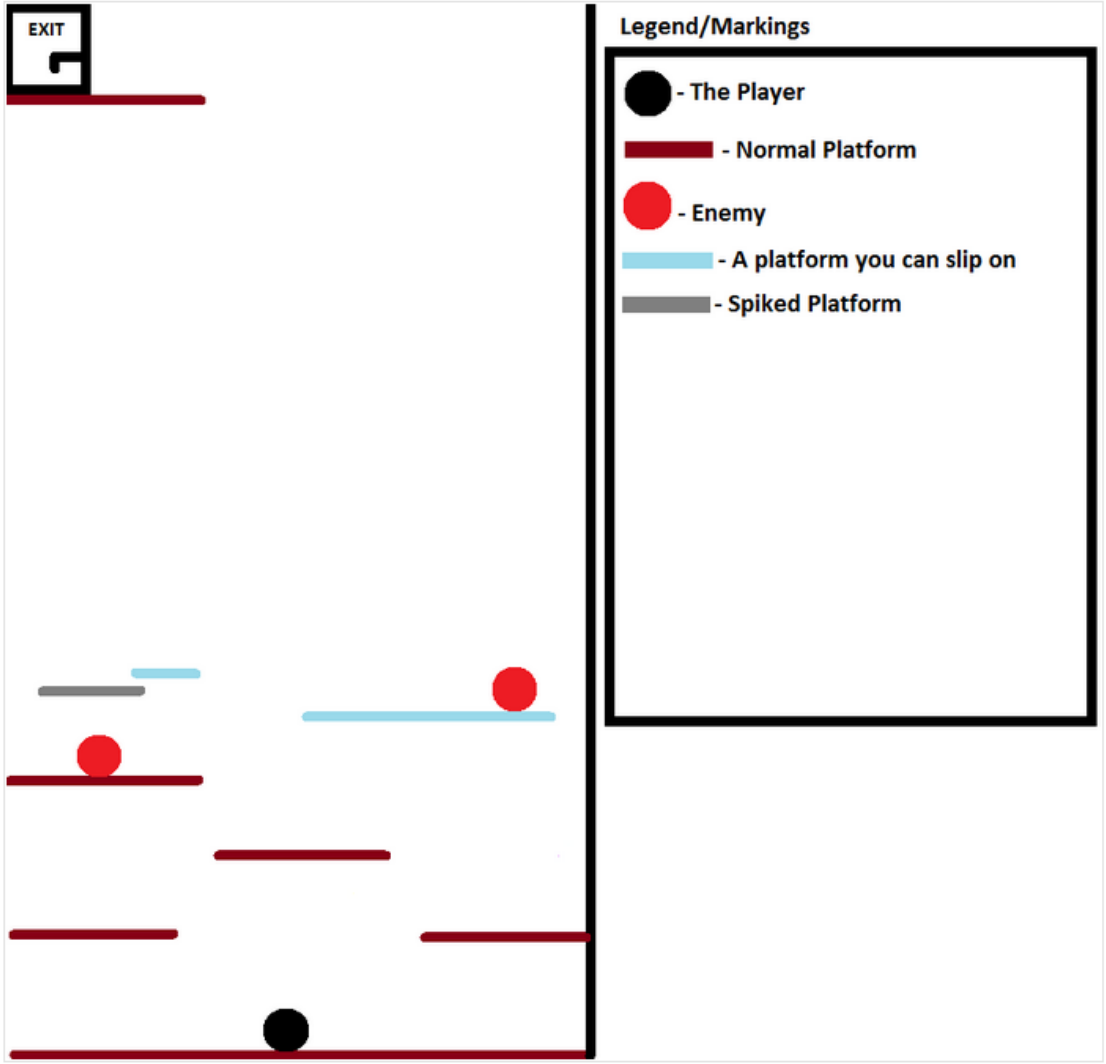
Two Goals


Legend/Markings
- The Player
Ground/Normal Platform
- Enemy
- Obsticle
- Platform you can slip on
- Key to unlock EXIT door
EXIT

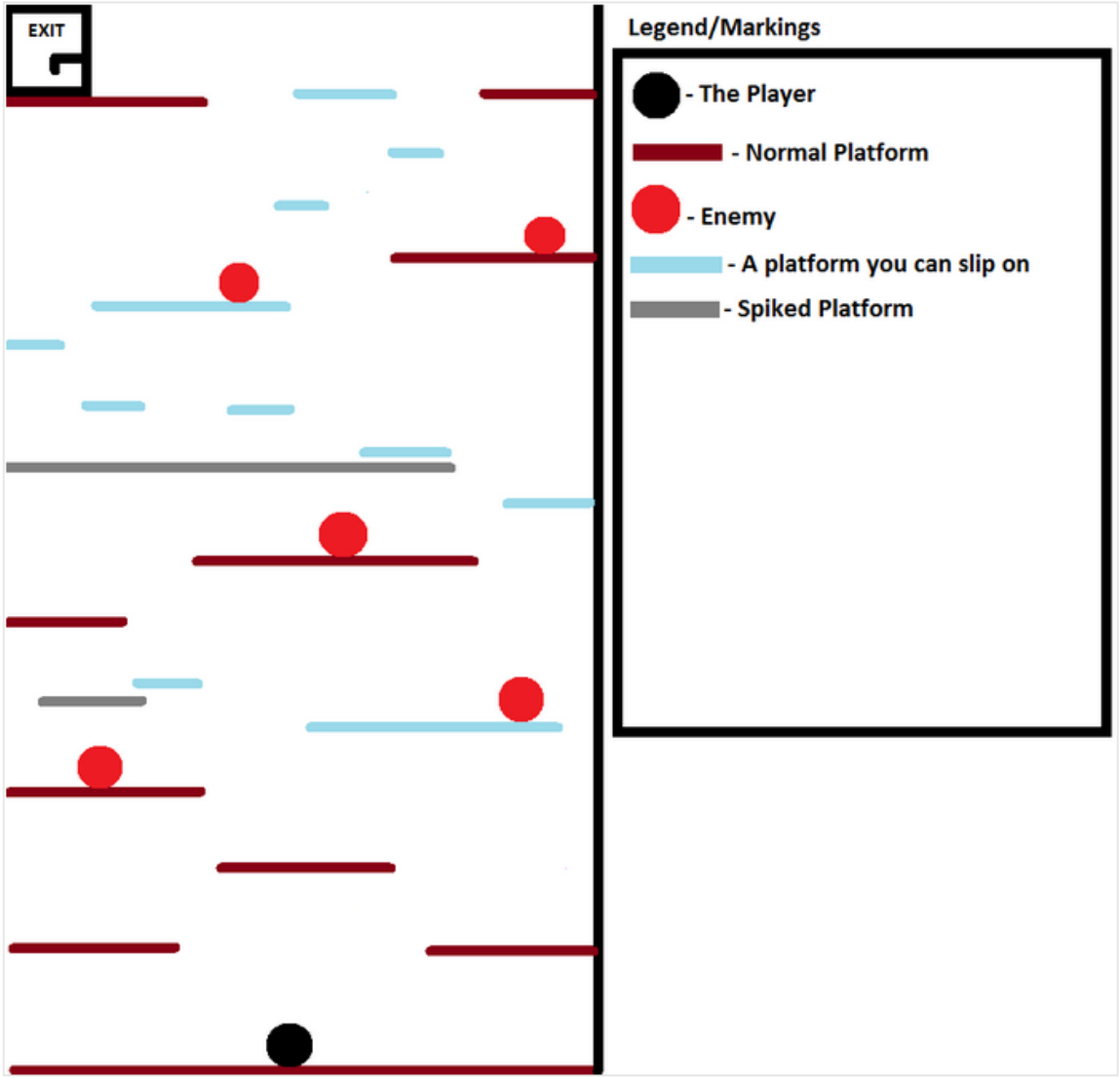
Vertical


EXIT
Legend/Markings
- The Player
- Normal Platform
This is the direction of the goal. The EXIT door will be at the top of the level.

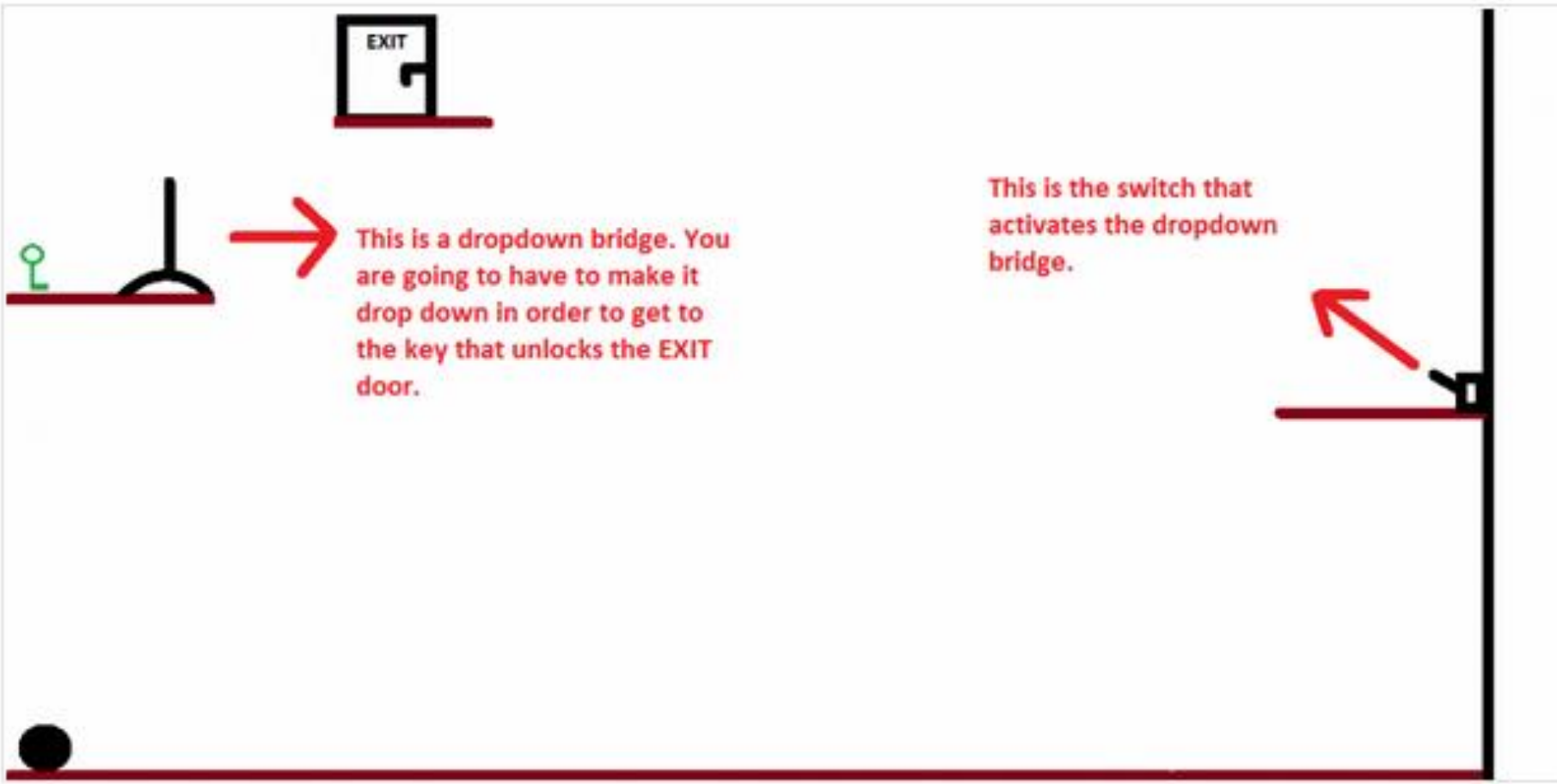
Extra objects



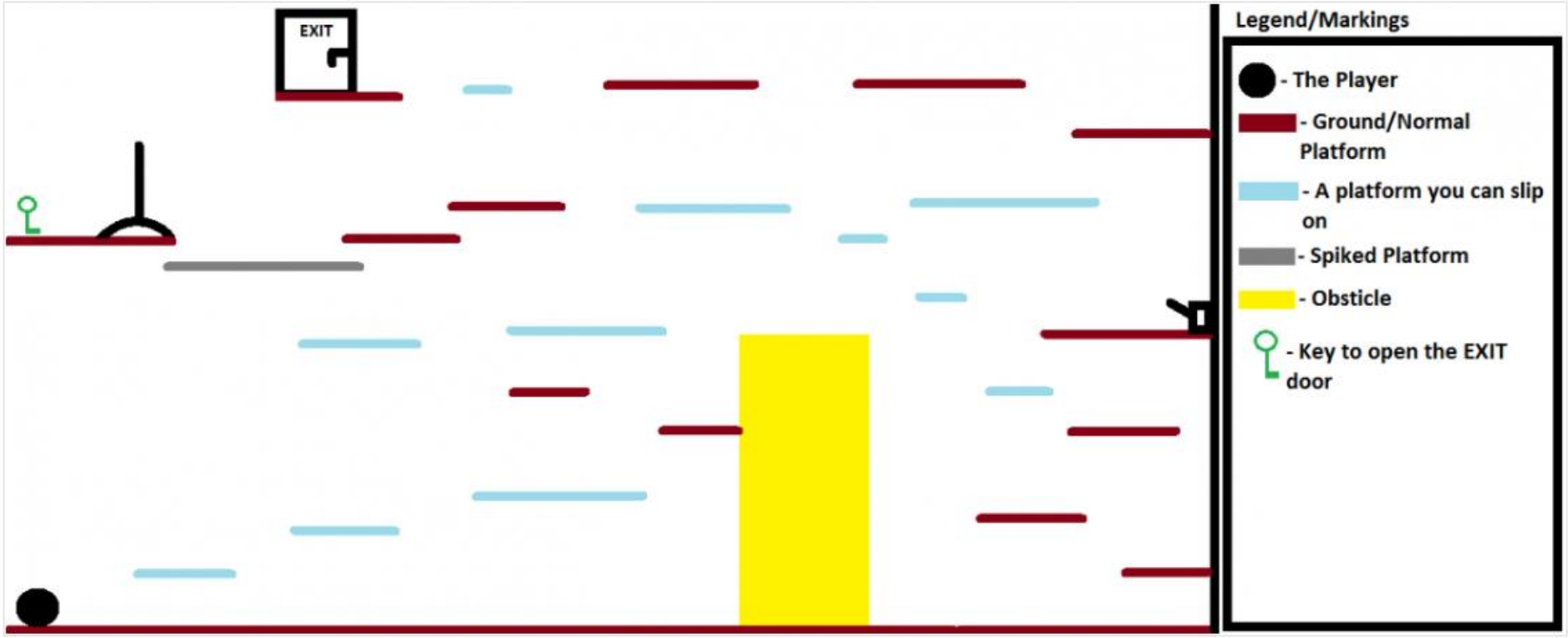
Safe fall


EXIT
Legend/Markings
- The Player
- Normal Platform
- Enemy
- A platform you can slip on
- Spiked Platform

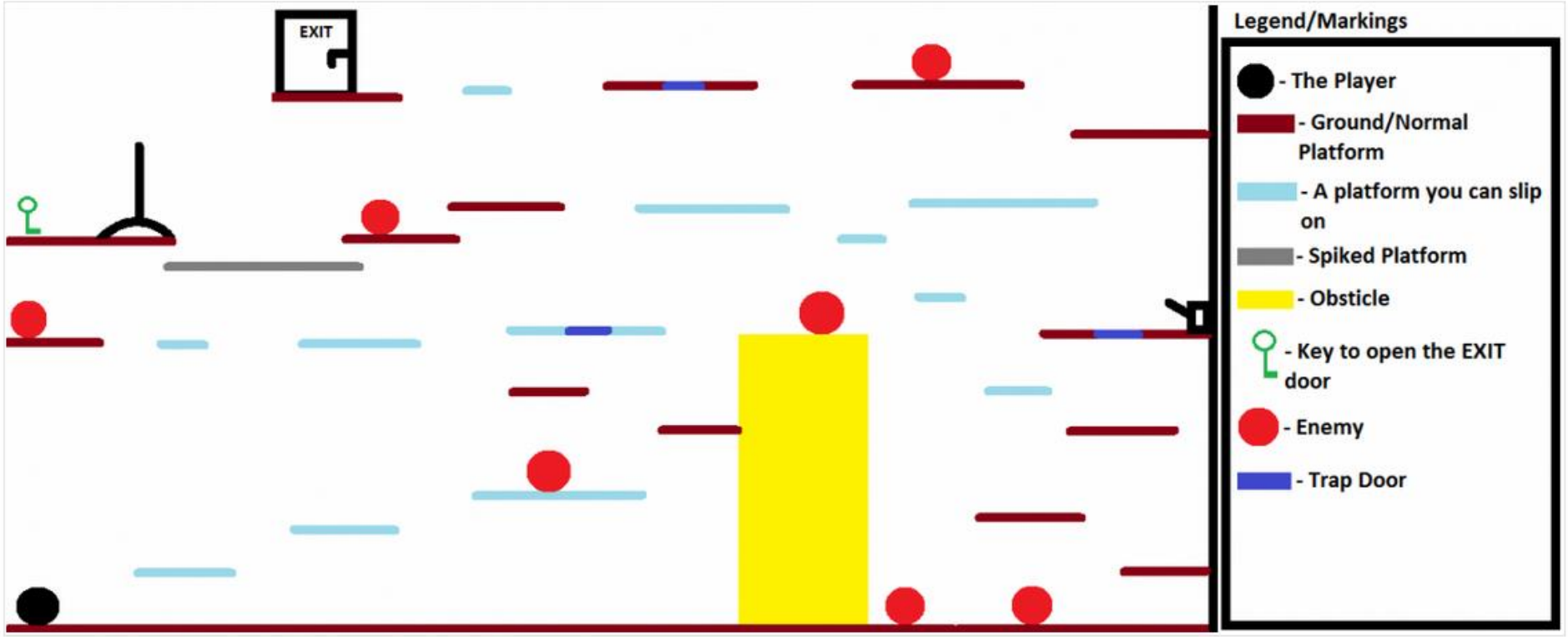
Interactive objects



Playtest!


EXIT
Legend/Markings
- The Player
- Ground/Normal Platform
- A platform you can slip on
- Spiked Platform
- Obsticle
- Key to open the EXIT door

Add enemies


EXIT
Legend/Markings
- The Player
- Ground/Normal Platform
- A platform you can slip on
- Spiked Platform
- Obsticle
- Key to open the EXIT door
- Enemy
- Trap Door

Sources

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