



Hello! In this part of the documentation you will find informations about all logics from game.











version: final, author: Pejti

Special thanks: Art00r, Zax (custom ideas for some logics).

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Logics have been marked with different colours:

Colour	Description
	Default decorations
	Additional or custom decorations
	Opponents
	Bosses or logics which are related with bosses
	Sounds
	Elevators/TogglePegs etc.
	Objects with treasures/Powerups e.g. crate
	Treasures or Powerups
	Logic which is not working or which is related with other
	Objects which can hurt Claw
	Other logics

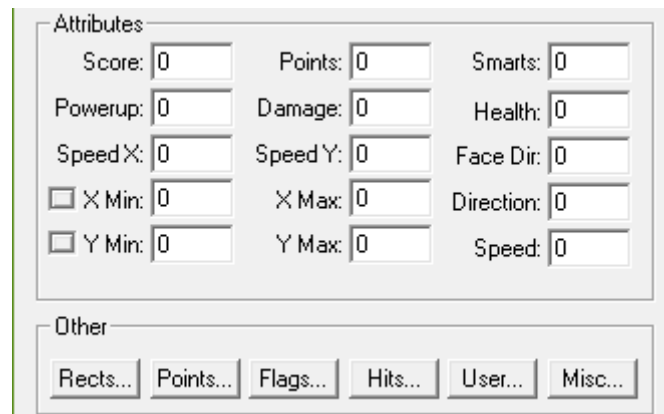
### ATTENTION!

In OneWayTriggerElevator logic, OneWayStartElevator logic and in TriggerElevator logic, StartElevator logic, StopElevator logic the minimum speed for elevators is dependent on FPS. E.g. if you have 60FPS, minimum speed for elevators will be also 60. If speed value is smaller than FPS the elevator will be stay in place.

## 1. Logics - short information

Creating objects and typing logics for these objects is very important. Always do this prudently and check inserted object more than one time. If you make new objects first time, try to remember logics names to add new objects faster in the future.

Remember that you can use all logics in your level but not all can work properly. Besides only some logics in level have graphics. Before adding new object make sure that you have image for this object. You can check available graphics for specific level (e.g. in Retail - original level).

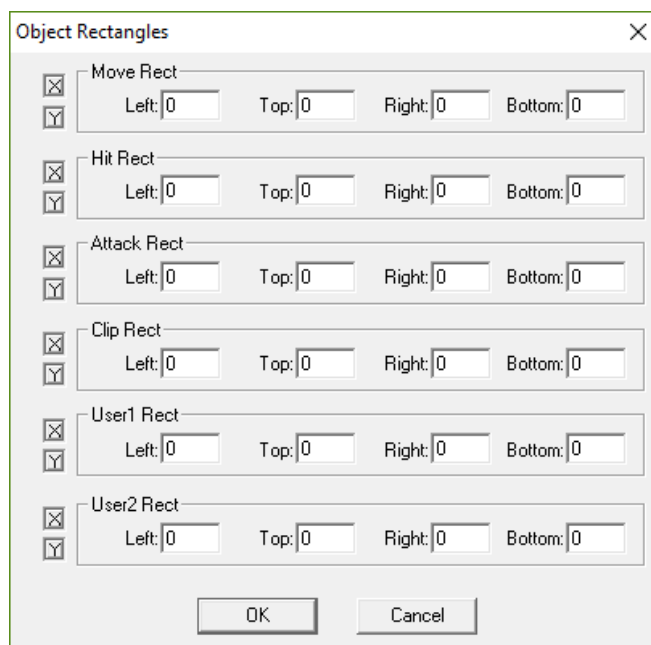


Attributes

Score: 0	Points: 0	Smarts: 0
Powerup: 0	Damage: 0	Health: 0
Speed X: 0	Speed Y: 0	Face Dir: 0
<input type="checkbox"/> X Min: 0	X Max: 0	Direction: 0
<input type="checkbox"/> Y Min: 0	Y Max: 0	Speed: 0

Other

Above you can see a part of object's window when you add new object or edit existing object. In some objects you have to type values in additional fields. Under **Rects...** button and **Flags...** button you can find additional fields.



Object Rectangles

☒ Move Rect  
Left: 0 Top: 0 Right: 0 Bottom: 0

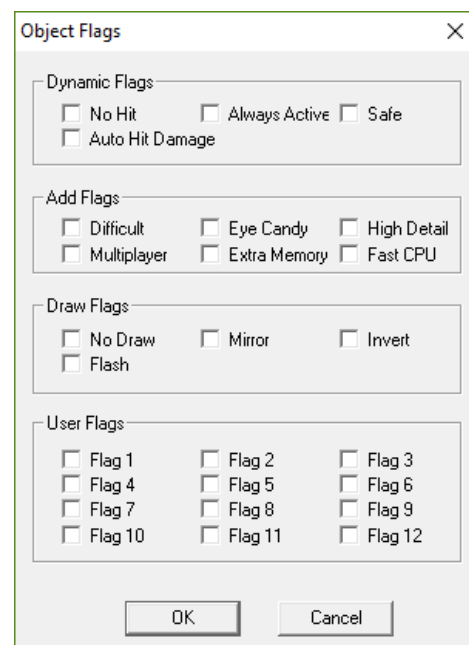
☒ Hit Rect  
Left: 0 Top: 0 Right: 0 Bottom: 0

☒ Attack Rect  
Left: 0 Top: 0 Right: 0 Bottom: 0

☒ Clip Rect  
Left: 0 Top: 0 Right: 0 Bottom: 0

☒ User1 Rect  
Left: 0 Top: 0 Right: 0 Bottom: 0

☒ User2 Rect  
Left: 0 Top: 0 Right: 0 Bottom: 0



Object Flags

Dynamic Flags

☐ No Hit ☐ Always Active ☐ Safe  
☐ Auto Hit Damage

Add Flags

☐ Difficult ☐ Eye Candy ☐ High Detail  
☐ Multiplayer ☐ Extra Memory ☐ Fast CPU

Draw Flags

☐ No Draw ☐ Mirror ☐ Invert  
☐ Flash

User Flags

<input type="checkbox"/> Flag 1	<input type="checkbox"/> Flag 2	<input type="checkbox"/> Flag 3
<input type="checkbox"/> Flag 4	<input type="checkbox"/> Flag 5	<input type="checkbox"/> Flag 6
<input type="checkbox"/> Flag 7	<input type="checkbox"/> Flag 8	<input type="checkbox"/> Flag 9
<input type="checkbox"/> Flag 10	<input type="checkbox"/> Flag 11	<input type="checkbox"/> Flag 12

Above, on the left - Rects... window, on the right - Flags... window.

## a) Logics from A to E

On the next pages you will find informations about logics (some logics are omitted):

2.1 **AmbientPosSound logic** || NOT works or it is a part of other logic

2.2 **AmbientSound logic** || sound which is playing all the time. Logic's range can be customized.

**Animation:** name of sound from sounds table

**XMin:** ??, **XMax:** ?? - horizontal range

**YMin:** ??, **YMax:** ?? - vertical range

**Damage:** ?? - sound volume

In addition we set *Always Active* and *No Draw* in .

Image



Name

GAME\_SOUNDICON

Default Z value

9000

2.3 **AmmoPowerup logic** || pistol and dynamite\* ammunition

**Smarts:** ?? - you can type e.g. 25 - you will get 25 dynamite\* ammunition

Example image



Name

GAME\_AMMO\_SHOTBAG

Default Z value

5000

2.4 **AmuletGemLogic logic** || related with amulet/getting next gems\*

2.5 **AniCycle logic** || animated object

**Animation:** ?? - you can choose animation speed from GAME/ANIS folder or BASE level e.g. GAME\_CYCLE50

2.6 **AniCycleNormal logic** || works the same like *AniCycle* logic, used for big images

**Animation:** ?? - you can choose animation speed from GAME/ANIS folder or BASE level e.g. GAME\_CYCLE50

2.7 **AniRope logic** || rope/chain

**SpeedX:** ?? - speed for rope/chain, the higher speed is equal to slower move. If you type 99 999 value, rope will stay in place.

Example image (Level3)



Name


LEVEL\_ROPE

Default Z value


0

2.8 **Aquatis logic** || sixth Boss, level XII. He has green gem (default).

**SpeedX: ??, SpeedY: ??** - coordinates - in this place you will can get gem when we defeat Boss. If you leave empty fields, gem will be decoration. This Boss stay in one place all the time.


Image	Name	Default Z value
	LEVEL_KINGAQUATIS	0

2.9 **AquatisCrack logic** || hole to which you have to throw dynamite to activate stalactites

Image	Name	Default Z value
	LEVEL_AQUATISWALLCRACK	-10

2.10 **AquatisDynamite logic** || dynamite which can respawn when you fight with sixth Boss

**XMin:** -500, **XMax:** 1250, **YMin:** -300, **YMax:** 500 - default values

Image	Name	Default Z value
	GAME_DYNAMITE	0


2.11 **AquatisStalactite logic** || stalactite which will fall and hurt sixth Boss. You have to activate *AquatisCrack* logic first.

**Smarts:** ?? - this value determines which stalactite will fall first, second etc. E.g. if you will type 1, this stalactite will fall first.

You have to type values in **Move Rect:** ??, ??, ??, ??, **Hit Rect:** ??, ??, ??, ??, and **Attack Rect:** ??, ??, ??, ?? to make good logic's work (area in which the Boss is). Field *Left: ??, Top: ??, Right: ??, Bottom: ??*, has to be the same.


Move Rect			
Left: 37791	Top: 3519	Right: 37825	Bottom: 3620
Hit Rect			
Left: 37791	Top: 3519	Right: 37825	Bottom: 3620
Attack Rect			
Left: 37791	Top: 3519	Right: 37825	Bottom: 3620

Example (Retail12):


Image	Name	Default Z value
	LEVEL_PROJECTILES_STALACTITE	1000

2.12 **BackgroundLogic logic** || object with this logic will follow Claw  
**SpeedX:** ??, **SpeedY:** ?? - horizontal speed and vertical speed, 100 is equal to Claw speed


2.13 **BackStackedCrates logic** || insert one and fill fields:  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
 More filled fields = more crates (max=9).

Example image (Level1)	Name	Default Z value
	LEVEL_CRATES	1000


2.14 **BearSailor logic** || you can meet this opponent in some levels  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
 Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
 Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Example image (Level7)	Name	Default Z value
	LEVEL_BEARSAILOR	0


2.15 **BehindAniCandy logic** || animated decoration - if you turn on low detail this object will not displayed

Example image (Level1)	Name	Default Z value
	LEVEL_TORCH	1000


- 2.16 **BehindCandy logic** || decoration - if you turn on low detail this object will not displayed

Example image (Level1)	Name	Default Z value
	LEVEL_SKULL	1000


- 2.17 **BehindCrate logic** || crate  
**Health: 2** - you have to hit 2 times to break crate  
**Health: 999** - you will not able to break crate - better do not use  
**Powerup: ??** - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time

Example image (Level1)	Name	Default Z value
	LEVEL_CRATES	1000

- 2.18 **BehindStatue logic** || statue with treasures (level5)  
**Health: 2** - you have to hit 2 times to break statue  
**Health: 999** - you will not able to break statue - better do not use  
**Powerup: ??** - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time  
**User1 Rect: ??, ??, ??, ??** - type values like above  
**User2 Rect: ??, ??, ??, ??** - type values like above

Image	Name	Default Z value
	LEVEL_STATUE	1000/1010

- 2.19 **BigSoundTrigger logic** || sounds, you can activate their once or more times (range = 125 pixels)  
**Animation:** name of sound from sounds table  
**Smarts: -1** - sound will be always played, 0 - sound will be played once, X - sound will be played X times, this logic will be reset when Claw die  
In addition we set *Always Active* and *No Draw* in **Flags...**.


Image	Name	Default Z value
	GAME_SOUNDICON	9000

- 2.20 **BlinkingEyes logic** || object with this logic will disappear after 1,5s

- 2.21 **BossHealthMeter logic** ||


- 2.22 **BossStager logic** || Claw's dialog with the Boss, when you activate logic. You will see big image "defeat 'name of Boss'".

In addition we set *No Draw* in **Flags...**.

Image	Name	Default Z value
	GAME_SOUNDICON	8000

- 2.23 **BossStagerAttack logic** || Rect for BossStager logic

- 2.24 **BossWarp logic** || it teleports you to the Boss in Retail (or simple warp)  
**SpeedX**: ??, **SpeedY**: ?? - type X coord and Y coord for destination

Image	Name	Default Z value
	GAME_BOSSWARP	1000

- 2.25 **BouncingGoodie logic** || object with this logic can moves and at the same time can be unique logic e.g. moving Catnip or moving treasure etc., if object will touch wall/ground his speed will be smaller

**Smarts**: ?? - time (value) for powerups in ms, 1000ms = 1s

**SpeedX**: ??, **SpeedY**: ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic.


- 2.26 **BreakPlank logic** || planks (level5) or rocks (level11) which can break

**Counter**: ?? - time (value) after which planks/rocks will break, in ms, 1000ms = 1s

**Width**: ?? - 0 - means one plank/rock, e.g. 2 - you will have 3 planks/rocks

**ATTENTION** - you have to insert tile 509 (level5) or tile 39 (level11) at the same place where you added object (check Retail's). 5 objects = 5 tiles next to.

Attributes *Counter* and *Width* you can find in **Misc...** in object's properties.


Example image (Level5)	Name	Default Z value
	LEVEL_BREAKPLANK	1010

- 2.27 **Bullet logic** || object which can moves and if it will touch tile with attribute: Ground/Solid/Climb will disappear

**SpeedX**: ??, **SpeedY**: ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic.

- 2.28 **CannonBall logic** || projectile which is used by other logic

- 2.29 **CannonButton logic** || button which you have to hit when you fight with Gabriel

Image	Name	Default Z value
	LEVEL_CANNONBUTTON	1000



2.30 **CannonSwitch logic** || switch which is used by Gabriel



Name  
LEVEL\_CANNONSWITCH

Default Z value  
1000

2.31 CaptainClaw logic || Captain Claw (our character). It is good to leave this logic alone.

2.32 CaptainClawHit logic ||

2.33 CaptainClawRemoteRacer logic ||

2.34 CaptainClawScreenPosition logic ||

2.35 **Chameleon logic** || you can meet this opponent in XIII and XIV levels

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time

**User1 Rect:** ??, ??, ??, ?? - type values like above

**User2 Rect:** ??, ??, ??, ?? - type values like above

Max treasures = 9.

**XMin:** ??, **XMax:** ?? - patrol area

Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Image



Name  
LEVEL\_CHAMELEON

Default Z value  
0

2.36 Checkpoint logic ||

Image



Name  
GAME\_CHECKPOINTFLAG

Default Z value  
1000

2.37 CheckpointAttack logic || Rect for Checkpoint logic

2.38 CheckpointTimer logic ||

2.39 ChildChar logic ||

2.40 ChildLight logic ||

2.41 ChildRibbon logic ||


2.42 ChildScoreNum logic ||

2.43 **ClawDialogBigSoundTrigger logic** || range = 125 pixels

**Animation:** name of dialog from dialogs table

**Smarts:** 0 - sound will be always played, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in .


Image	Name	Default Z value
	GAME_SOUNDICON	9000

2.44 **ClawDialogHugeSoundTrigger logic** || range = 255 pixels

**Animation:** name of dialog from dialogs table

**Smarts:** 0 - sound will be always played, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	9000

2.45 **ClawDialogSmallSoundTrigger logic** || range = 30 pixels

**Animation:** name of dialog from dialogs table

**Smarts:** 0 - sound will be always played, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	9000

2.46 **ClawDialogSound logic** || NOT works or it is a part of other logic

2.47 **ClawDialogSoundTrigger logic** || range = 60 pixels

**Animation:** name of dialog from dialogs table

**Smarts:** 0 - sound will be always played, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	9000

2.48 **ClawDialogTallSoundTrigger logic** || range = 25 pixels horizontally, 95 pixels vertically

**Animation:** name of dialog from dialogs table

**Smarts:** 0 - sound will be always played, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	9000

2.49 **ClawDialogTinySoundTrigger logic** || range = 10 pixels

**Animation:** name of dialog from dialogs table

**Smarts:** 0 - sound will be always played, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in .



Name  
GAME\_SOUNDICON

Default Z value  
9000

2.50 **ClawDialogWideSoundTrigger logic** || range = 95 pixels horizontally, 25 pixels vertically

**Animation:** name of dialog from dialogs table

**Smarts:** 0 - sound will be always played, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in .



Name  
GAME\_SOUNDICON

Default Z value  
9000

2.51 **ClawMultiRacer logic** ||

2.52 **CoinPowerup logic** || coin which does not have *GLITTER* animation



Name  
GAME\_TREASURE\_COINS

Default Z value  
1000

2.53 **ConveyorBelt logic** || from IX level. It can works in two ways.

**Speed:** ?? - positive value (moves Claw to the right), negative value (moves Claw to the left)



Name  
LEVEL\_CONVEYMIDDLE

Default Z value  
1000

2.54 **CrabBomb logic** || used by crabs in VII level

2.55 **CrabNest logic** || nest with crabs

In  in **User 1:** ?? - we type number of crabs which will fly out from the nest (max=9, min=1, default value 0=3 crabs). -1 value means 0 crabs.

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time

**User1 Rect:** ??, ??, ??, ?? - value (treasure table)

**User2 Rect:** ??, ??, ??, ?? - value (treasure table)

**ATTENTION** - example for 5 crabs (you can choose), we have 4 available options:

*I* - we do not type any values in fields - 0 treasures

*II* - we type 5 values (5 crabs) - each crab has one treasure

*III* - we type less values in fields e.g. 2 - 2 crabs will have one treasure

*IV* - we type more values in fields e.g. 7 - 5 crabs will have one treasure, rest treasures will fly out from nest

**XMin: ??, XMax: ??, YMin: ??, YMax: ??** - logic activate area



Name  
LEVEL\_SANDHOLE

Default Z value  
0

2.56 **Crate logic** || NOT works or it is a part of other logic

2.57 CrateHit logic || Rect for crate

2.58 CratePowerup logic || responsible for treasure in crate

2.59 **CrazyHook logic** || you can meet this opponent in IX and X levels (different colour)  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
 game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
 Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
 Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Example image (Level9)



Name

LEVEL\_CRAZYHOOK

Default Z value

5000

2.60 **CrumblingPeg logic** || platform which will crumble when we stand on, it will respawn after Claw's dead  
**SpeedX:** ?? - value in ms, you can delay crumbling, eg. type 3000 - platform will crumble after 3 seconds

Example image (Level11)



Name

LEVEL\_CRUMBLINGPEG

Default Z value

0

2.61 **CrumblingPegNoRespawn logic** || platform which will crumble when we stand on, it will not respawn after Claw's dead  
**SpeedX:** ?? - value in ms, you can delay crumbling, eg. type 3000 - platform will crumble after 3 seconds

Example image (Level11)



Name

LEVEL\_CRUMBLINGPEG

Default Z value

0

2.62 **CursePowerup logic** || curse, few types. It will work depending on the chosen image.

Example image



Name

GAME\_CURSES\_TREASURE

Default Z value

0

- 2.63 **CutThroat logic** || you can meet this opponent in III and IV levels (different colour)  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
 game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
 Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
 Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Example image (Level3)



Name

LEVEL\_CUTTHROAT

Default Z value

0

- 2.64 **DoNothing logic** || rest decorations (different than ...Candy) - not animated

Example image (Level1)



Name

LEVEL\_ARROWSIGN\_RIGHT

Default Z value

1000

- 2.65 **DoNothingNormal logic** || works like DoNothing logic - has higher Z value (not always). For larger images.

Example image (Level4)



Name

LEVEL\_BUSH

Default Z value

1000/5000/8000/8500/9000

- 2.66 **Dynamite logic** || falling dynamite. It works like Claw's dynamite.

Image



Name

GAME\_DYNAMITELIT

Default Z value

0

- 2.67 **Elevator logic** || moving platform (you can set 0 value for speed), you can set horizontal range and vertical range  
**XMin:** ??, **XMax:** ?? - horizontal range (XMin < XMax)  
**YMin:** ??, **YMax:** ?? - vertical range (YMin < YMax)  
**SpeedX:** ?? - horizontal speed  
**SpeedY:** ?? - vertical speed

Example image (Level1)



Name  
LEVEL\_ELEVATORS

Default Z value  
2000

2.68 **EndLevelGem logic** || gem (end of level) - image will change when you play Custom Level or in Multiplayer

Image (this will appear)



Name  
GAME\_MAPPIECE  
LEVEL\_GEM

Default Z value  
0

2.69 **EndOfLevelPowerup logic** || map/gem (end of level) - image will change when you play Custom Level or in Multiplayer

Image (this will appear)



Name  
GAME\_MAPPIECE  
LEVEL\_GEM

Default Z value  
0

2.70 EnemyDialogSound logic || responsible for opponents sounds/dialogues

## b) Logics from F to J

2.71 FallingDebris logic ||

2.72 **FireBullet logic** || this object can moves or not (animated decoration) and if it will touch tile with attribute: Ground/Solid/Climb will disappear, additional effect - glow  
**SpeedX**: ??, **SpeedY**: ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. It works similar like Bullet logic.



Name  
GAME\_PROJECTILES\_FIRESWORD

Default Z value  
0

2.73 FirstSuperCheckpoint logic || first save point

Image



Name

GAME\_SUPERCHECKPOINT

Default Z value

1000

2.74 **Fish logic** || you can meet this opponent in XI and XII levels  
**XMin**: ??, **XMax**: ?? - patrol area  
Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Image




Name

LEVEL\_FISH


Default Z value

5000


- 2.75 **Flare logic** || you can use this logic as additional lighting (decoration). It works like lamp. Do not use too many objects with this logic otherwise FPS value will drop down.

Image	Name	Default Z value
	GAME_LIGHTFX_FLARE	0


- 2.76 **FloorSpike logic** || spike in some levels e.g. in Level3  
**SpeedX: ??, SpeedY: ??** - "on" time (X) and "off" time (Y). This object can use default time if you do not type anything.

Example image (Level3)	Name	Default Z value
	LEVEL_FLOORSPIKES1	0


- 2.77 **FloorSpike2 logic** || spike in some levels e.g. in Level3  
**SpeedX: ??, SpeedY: ??** - "on" time (X) and "off" time (Y). This object can use default time if you do not type anything.

Example image (Level3)	Name	Default Z value
	LEVEL_FLOORSPIKES1	0

- 2.78 **FloorSpike3 logic** || spike in some levels e.g. in Level3  
**SpeedX: ??, SpeedY: ??** - "on" time (X) and "off" time (Y). This object can use default time if you do not type anything.

Example image (Level3)	Name	Default Z value
	LEVEL_FLOORSPIKES1	0

- 2.79 **FloorSpike4 logic** || spike in some levels e.g. in Level3  
**SpeedX: ??, SpeedY: ??** - "on" time (X) and "off" time (Y). This object can use default time if you do not type anything.

Example image (Level3)	Name	Default Z value
	LEVEL_FLOORSPIKES1	0

Developers created four logics for spikes which you can use in sequence e.g. FloorSpike3 -> FloorSpike4 -> FloorSpike.

- 2.80 **FrontAniCandy logic** || animated decoration - if you turn on low detail this object will not displayed

Example image (Level1)



Name

LEVEL\_TORCHSTAND

Default Z value

5000

- 2.81 **FrontCandy logic** || decoration - if you turn on low detail this object will not displayed

Example image (Level1)



Name

LEVEL\_WEB1

Default Z value

5000

- 2.82 **FrontCrate logic** || crate

**Health:** 2 - you have to hit 2 times to break crate

**Health:** 999 - you will not able to break crate - better do not use

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
game always sets default time

Example image (Level1)



Name

LEVEL\_CRATES

Default Z value

5000

- 2.83 **FrontStackedCrates logic** || insert one and fill fields:

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
game always sets default time

**User1 Rect:** ??, ??, ??, ?? - type values like above

**User2 Rect:** ??, ??, ??, ?? - type values like above

More filled fields = more crates (max=9).

Example image (Level1)



Name

LEVEL\_CRATES

Default Z value

5000

- 2.84 **FrontStatue logic** || statue with treasures (level5)

**Health:** 2 - you have to hit 2 times to break statue


**Health:** 999 - you will not able to break statue - better do not use

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
game always sets default time


**User1 Rect:** ??, ??, ??, ?? - type values like above

**User2 Rect:** ??, ??, ??, ?? - type values like above




Image	Name	Default Z value
	LEVEL_STATUE	5000

- 2.85 **Gabriel logic** || fourth Boss, VIII level. He has red gem (default).  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
**SpeedX:** ??, **SpeedY:** ?? - coordinates - in this place you will can get gem when we defeat Boss. If you leave empty fields, gem will be decoration. This Boss stay in one place all the time.

Image	Name	Default Z value
	LEVEL_GABRIEL	2000


- 2.86 **GabrielBomb logic** || used by Gabriel when you fight with him. This object can be one-time obstacle. It deals 5HP damage, range ~50px.  
**SpeedX:** ??, **SpeedY:** ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. Object bounce off the ceiling with the same speed. Also it can bounce off the walls, but then speed will decrease. It cannot bounce off the floor.

- 2.87 **GabrielCannon logic** || it shoots in Claw while he fights with Gabriel

Image	Name	Default Z value
	LEVEL_GABRIELCANNON	1000

- 2.88 **GlitterBaby logic** || one-time *SPARKLE* animation

- 2.89 **GlitterlessPowerup logic** || logic for treasure without *GLITTER* animation. It is always used for coins.

Image	Name	Default Z value
	GAME_TREASURE_COINS	1000

- 2.90 **GlitterMother logic** ||

- 2.91 **GlobalAmbientSound logic** || sound which is played all the time in every place in level. In addition you can set volume and set random sound play.

**Damage:** ?? - sound volume

In **Rects...** you can set randomness for sound:

**Move Rect Left:** ??, **Top:** ?? - for how long sound will be "on"

**Move Rect Right:** ??, **Bottom:** ?? - for how long sound will be "off"

Values are in thousands: 1000 = 1s.

**Smarts:** ??

Example:

**Move Rect Left:** 3000, **Top:** 5000, **Right:** 10000, **Bottom:** 25000

Sound will be "on" for 3 to 5 seconds and "off" for 10 to 25 seconds.

In addition we set *Always Active* and *No Draw* in **Flags...**.

Image



Name

GAME\_SOUNDICON

Default Z value

9000

- 2.92 **GoldPowerup logic** || object without *GLITTER* animation

Image



Name

GAME\_TREASURE\_GOLDBARS

Default Z value

1000

- 2.93 **GooBubble logic** || animated object which covers up water/lava etc.

- 2.94 **GooCoverup logic** || object which covers up area below water/swamp/lava etc. it means tiles which kill Claw

Example image



Name

LEVEL\_GOOCOVERUP

Default Z value

5000/9000

- 2.95 **GooVent logic** || sewage which hurt Claw, only in VI level

**Damage:** ?? - damage value (default value: 0 = 1HP)

**Counter:** ?? - "on" time and "off" time for logic, set time in ms, 1000ms = 1s

Image



Name


LEVEL\_GOOVENT

Default Z value

0

- 2.96 **GroundBlower logic** || object which will shoot up Claw


**YMax:** ?? - 0 default value = 450, you can type own value e.g. 300. It means object will shoot up Claw 300 pixels up.

Example image (Level6)	Name	Default Z value
	LEVEL_BLOWING1	5000

2.97 GroundCannon logic ||

2.98 HealthFrame logic || health animation

2.99 **HealthPowerup logic** || food (heals 5 HP)/ medical vial (heals 10/15/25HP). You can use food images from other levels, then food will heal 100HP. Catnip\* - white (duration of powerup - 15s) or red (duration of powerup - 30s). If you want set own duration of powerup, use *Smarts* attribute.  
**Smarts\***: ?? - time for Catnip, e.g. if you want 20s duration for Catnip, type 20000

Example image (Level1*)	Name	Default Z value
	LEVEL_HEALTH	1000
	GAME_HEALTH_POTION3	
	GAME_CATNIPS_NIP1	5000

2.100 **HermitCrab logic** || you can meet this opponent in VII level

**Powerup**: ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time


This opponent can has only one treasure/powerup.

You can change simple Crab for Crab which throws bombs. In  type 1 in **User 1**: .

**Damage**: ?? - damage value

**XMin**: ??, **XMax**: ?? - patrol area

Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Image	Name	Default Z value
	LEVEL_HERMITCRAB	0


2.101 HitBurst logic ||

2.102 **HugeSoundTrigger logic** || sounds, you can activate their once or more times (range = 255 pixels).


**Animation**: name of sound from sounds table

**Smarts**: -1 - sound will be always played, 0 - sound will be played once, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	9000


- 2.103 **IceBullet logic** || this object can moves or not (animated decoration) and if it will touch tile with attribute: Ground/Solid/Climb will disappear, additional effect - glow  
**SpeedX**: ??, **SpeedY**: ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. It works similar like Bullet logic.

Image	Name	Default Z value
	GAME_PROJECTILES_ICESWORD	0

- 2.104 **JumpSwitch logic** || if opponent will enter to the logic's area, will jump to new place in XMin, XMax, YMin, YMax. Opponent can use this logic many times (even infinite times).

**XMin**: ??, **XMax**: ??, **YMin**: ??, **YMax**: ?? - new place for opponent after jump

In addition we set *No Draw* in **Flags...**.

Image	Name	Default Z value
	GAME_SOUNDICON	0

### c) Logics from K to O

- 2.105 **Katherine logic** || second Boss, IV level. She has green gem (default).


**Powerup**: ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time

**User1 Rect**: ??, ??, ??, ?? - type values like above

**User2 Rect**: ??, ??, ??, ?? - type values like above

**SpeedX**: ??, **SpeedY**: ?? - coordinates - in this place you will can get gem when we defeat Boss. If you leave empty fields, gem will be decoration.


**XMin**: ??, **XMax**: ?? - patrol area

Image	Name	Default Z value
	LEVEL_KATHERINE	0

- 2.106 **Laser logic** || laser in XI level

**Counter**: ?? - "on" time and "off" time in ms, 1000ms = 1s

**Damage**: ?? - damage value, default value 0 = 1

Image	Name	Default Z value
	LEVEL_LASER	0

2.107 **LavaGeyser logic** || this object can hurts Claw, XIV level

**Speed:** ?? - time delay. You can set time e.g. for 3s=3000ms, after this time Geyser will work.

Image



Name

LEVEL\_LAVAGEYSER

Default Z value

8005

2.108 **LavaHand logic** || this object throws fireballs - XIV level

**Speed:** ?? - time between next throw in ms, 1000ms = 1s

**XMin:** ??, **XMax:** ??, **YMin:** ??, **YMax:** ?? - logic's activate area

**Smarts:** ?? - number of throws

Image



Name

LEVEL\_LAVAHAND

Default Z value

8005

2.109 **LavaHandProjectile logic** || *LavaHand* frames

2.110 **LavaMouth logic** || lava which is flowing down, can hurts Claw, XIV level

**Speed:** ?? - time delay. You can set time e.g. for 2s=2000ms, after this time LavaMouth will work.

Image



Name

LEVEL\_LAVAMOUTH

Default Z value

0

2.111 **LightningBullet logic** || this object can moves or not (animated decoration) and if it will touch tile with attribute: Ground/Solid/Climb will disappear, additional effect - glow

**SpeedX:** ??, **SpeedY:** ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. It works similar like Bullet logic.

Image



Name

GAME\_PROJECTILES\_LIGHTNINGWORD

Default Z value

0

2.112 **LivesFrame logic** || lifes animation

2.113 LogicAttack logic || logic's Attack Rect

2.114 LogicHit logic || logic's Hit Rect

2.115 **MagicBullet logic** || this object can moves or not (animated decoration) and if it will touch tile with attribute: Ground/Solid/Climb will disappear, additional effect - glow  
**SpeedX**: ??, **SpeedY**: ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. It works similar like Bullet logic.



Image	Name	Default Z value
	GAME_MAGICCLAW	0

2.116 **MagicPowerup logic** || magic ammunition



Image	Name	Default Z value
	GAME_MAGIC_GLOW	0

2.117 MapPieceLogic logic || responsible for mappiece logic

2.118 MapProgressLogic logic || responsible for getting next parts of map, animation after finished level

2.119 **Marrow logic** || fifth Boss, X level. He has blue gem (default).

**Powerup**: ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time

**User1 Rect**: ??, ??, ??, ?? - type values like above

**User2 Rect**: ??, ??, ??, ?? - type values like above

**SpeedX**: ??, **SpeedY**: ?? - coordinates - in this place you will can get gem when we defeat Boss. If you leave empty fields, gem will be decoration.

Image



Name

LEVEL\_MARROW

Default Z value

0

2.120 **MarrowFloor logic** || platform which works in specific rules when you fight with this boss

**SpeedX**: ?? - horizontal speed

**XMin**: ??, **XMax**: ?? - range for platform when it is "on" and "off"

Image



Name

LEVEL\_TRAPELEVATOR

Default Z value

2000/2500

2.121 MenuClaw logic || responsible for Claw's animation in Main Menu

2.122 MenuSparkle logic || responsible for Sparkle animation in Main Menu

2.123 **Mercat logic** || you can meet this opponent in XI and XII levels (different colour)  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Example image (Level11)

Name

Default Z value



LEVEL\_MERCAT

0

2.124 Message logic ||

2.125 MultiStats logic || game interface (lives, health, etc.)

2.126 **Officer logic** || you can meet this opponent in I and II levels  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Image

Name

Default Z value



LEVEL\_OFFICER

4000

2.127 **Omar logic** || eighth, last Boss, XIV level. He has last gem (default).

**SpeedX:** ??, **SpeedY:** ?? - coordinates - in this place you will can get gem when we defeat Boss. If you leave empty fields, gem will be decoration.

Image

Name

Default Z value



LEVEL\_OMAR

0

- 2.128 **OmarBullet logic** || used by Omar logic. Boss shoot in Claw while they fight. This object can moves or not (animated decoration) and if it will touch tile with attribute: Solid will disappear



**Damage:** ?? - damage value (default value 0 = 1HP)

**SpeedX:** ??, **SpeedY:** ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. It works similar like Bullet logic.

Image	Name	Default Z value
	LEVEL_OMARPROJECTILE	0

- 2.129 **OmarShield logic** || fireballs and ice balls circling around the Omar

**Damage:** ?? - damage value (default value 0 = 1HP)

Image	Name	Default Z value
	LEVEL_FIRESHIELD	0
	LEVEL_ICESHIELD	0

- 2.130 **OneTimeStartSteppingStone logic** || one-time platform, if Claw will jump at the platform, it will dip into the swamp (other)

Example image (Level4)	Name	Default Z value
	LEVEL_STEPPINGSTONE	4000

- 2.131 **OneWayStartElevator logic** || platform which will move when Claw will stand on it. It works one-time. To platform moves in good way, type good values e.g. X value for platform = 1000, so if it must moves to the right (direction: 6) - XMin: 1000, XMax: 1200 <- example.


**XMin:** ??, **XMax:** ?? - horizontal range (XMin < XMax)

**YMin:** ??, **YMax:** ?? - vertical range (YMin < YMax)

**SpeedX:** ??, **SpeedY:** ?? - horizontal speed/vertical speed

**Direction:** ?? - direction value (not works\*)

7 - top left	8 - up	9 - top right*
4 - left	5 - stay in place	6 - right
1 - bottom left*	2 - down	3 - bottom right

Example image (Level1)	Name	Default Z value
	LEVEL_ELEVATORS	2000

- 2.132 **OneWayTriggerElevator logic** || you have to jump at the platform once, then it will move (with or without Claw). It is one-time move. To platform moves in good way, type good values e.g. Y value for platform = 2000, so if it must moves up (direction: 8) - YMin: 1000, YMax: 2000 <- example.

**XMin:** ??, **XMax:** ?? - horizontal range (XMin < XMax)

**YMin:** ??, **YMax:** ?? - vertical range (YMin < YMax)

**SpeedX:** ??, **SpeedY:** ?? - horizontal speed/vertical speed

**Direction:** ?? - direction value (not works\*)



7 - top left  
4 - left  
1 - bottom left\*

8 - up  
5 - stay in place  
2 - down

9 - top right\*  
6 - right  
3 - bottom right

Example image (Level1)



Name  
LEVEL\_ELEVATORS

Default Z value  
2000

#### d) Logics from P to S

- 2.133 **Parrot logic** || parrot which attacks Claw when he fights with fifth Boss  
**XMin: ??, XMax: ??, YMin: ??, YMax: ??** - area in which parrot flies, attacks Claw and rest

Image



Name  
LEVEL\_PARROT

Default Z value  
0

- 2.134 **PathElevator logic** || platform which moves along the path which you can set in **Rects...**. You can set direction with numbers from 1 to 9.

<input checked="" type="checkbox"/>	Move Rect
<input checked="" type="checkbox"/>	Left: 0 X Top: 0 Y Right: 0 X Bottom: 0 Y
<input checked="" type="checkbox"/>	Hit Rect
<input checked="" type="checkbox"/>	Left: 0 X Top: 0 Y Right: 0 X Bottom: 0 Y
<input checked="" type="checkbox"/>	Attack Rect
<input checked="" type="checkbox"/>	Left: 0 X Top: 0 Y Right: 0 X Bottom: 0 Y
<input checked="" type="checkbox"/>	Clip Rect
<input checked="" type="checkbox"/>	Left: 0 X Top: 0 Y Right: 0 X Bottom: 0 Y

Fields **Left: ??, Right: ??** - direction

Fields **Top: ??, Bottom: ??** - responsible for platform move distance

**Speed: ??** - speed value

Directions:

7 - top left  
4 - left  
1 - bottom left

8 - up  
5 - stay in place  
2 - down

9 - top right  
6 - right  
3 - bottom right

Example image (Level1)




Name  
LEVEL\_ELEVATORS


Default Z value  
2000

- 2.135 **PegLeg logic** || you can meet this opponent in IX and X (different colour)  
**Powerup: ??** - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time  
**User1 Rect: ??, ??, ??, ??** - type values like above  
**User2 Rect: ??, ??, ??, ??** - type values like above  
Max treasures = 9.

**XMin: ??, XMax: ??** - patrol area  
 Always XMin < XMax e.g. XMin: 1000, XMax: 1500.


Example image (Level9)	Name	Default Z value
	LEVEL_PEGLEG	5000

- 2.136 **PistolBullet logic** || this object can moves or not (it does not have animation) and if it will touch tile with attribute: Ground/Solid/Climb will disappear  
**SpeedX: ??, SpeedY: ??** - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. It works similar like Bullet logic.


Image	Name	Default Z value
	GAME_BULLETS	0

- 2.137 **PointsIcon logic** || it works like treasure points, it means object will appear, moves up for few pixels and disappear (no animation)


- 2.138 **PowderKeg logic** || you can pick up powder keg and throw it

Example image (Level1)	Name	Default Z value
	LEVEL_POWDERKEG	5000

- 2.139 **PowerupGlitter logic** || animated object. You can use it like decoration.

Image	Name	Default Z value
	GAME_GLITTER	0

- 2.140 **PunkRat logic** || rat on the cannon. This logic combine two objects: PUNKRAT and CANNON. You can meet this opponent in some levels. This opponent cannot have any treasures/powerups.

Example image (Level2)	Name	Default Z value
	LEVEL_PUNKRAT	0

- 2.141 **Rat logic** || You can meet this opponent in some levels. This opponent cannot have any treasures/powerups.  
**XMin: ??, XMax: ??** - patrol area

Example image (Level1)



Name  
LEVEL\_RAT

Default Z value  
0

- 2.142 **RatBomb logic** || it explodes when will touch tile with attribute: Solid/Ground/Climb. It deals 15HP damage.  
**SpeedX**: ??, **SpeedY**: ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic.

Image



Name  
LEVEL\_RATBOMB

Default Z value  
0

- 2.143 **Raux logic** || first Boss, II level. He has blue gem (default).  
**Powerup**: ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time  
**User1 Rect**: ??, ??, ??, ?? - type values like above  
**User2 Rect**: ??, ??, ??, ?? - type values like above  
**SpeedX**: ??, **SpeedY**: ?? - coordinates - in this place you will can get gem when we defeat Boss. If you leave empty fields, gem will be decoration.  
**XMin**: ??, **XMax**: ?? - patrol area

Image



Name  
LEVEL\_RAUX

Default Z value  
0

- 2.144 **RedTail logic** || seventh Boss, XIII level. He has red gem and blue gem (default).  
**SpeedX**: ??, **SpeedY**: ?? - coordinates - in this place you will can get gems when we defeat Boss. If you leave empty fields, gems will be decoration.

Image




Name  
LEVEL\_REDTAIL


Default Z value  
9000

- 2.145 **RedTailBullet logic** || used by RedTail. You can use this logic to deals damage (any image). Object will disappear if it will touch tile with attribute: Solid/Ground/Climb. If it will touch Claw, it will be in this place all the time (still can deals damage).  
**SpeedX**: ??, **SpeedY**: ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic.  
**Damage**: ?? - damage value
- 2.146 **RedTailKnife logic** || used by RedTail logic


- 2.147 **RedTailPirate logic** || you can meet this opponent in some levels  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Example image (Level7)	Name	Default Z value
	LEVEL_REDTAILPIRATE	30


- 2.148 **RedTailSpikes logic** || spikes which can hurt Claw when he fights with RedTail.  
They deal 20HP damage.

Image	Name	Default Z value
	LEVEL_BOSSPIKES	1000


- 2.149 **RedTailWind logic** || wind which pushes Claw  
In addition we set *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	10000


- 2.150 **RobberThief logic** || you can meet this opponent in III and IV (different colour)  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Example image (Level3)	Name	Default Z value
	LEVEL_ROBBERTHIEF	0


- 2.151 **SawBlade logic** || it can hurts Claw  
**SpeedX:** ?? - "on" time in ms, 1000ms = 1s  
**SpeedY:** ?? - "off" time in ms, 1000ms = 1s  
**Speed:** ?? - time delay relative to SawBlade2/3/4

Image	Name	Default Z value
	LEVEL_FLOORSAW	0


- 2.152 **SawBlade2 logic** || it can hurts Claw  
**SpeedX:** ?? - "on" time in ms, 1000ms = 1s  
**SpeedY:** ?? - "off" time in ms, 1000ms = 1s  
**Speed:** ?? - time delay relative to SawBlade/3/4

Image	Name	Default Z value
	LEVEL_FLOORSAW	0

- 2.153 **SawBlade3 logic** || it can hurts Claw  
**SpeedX:** ?? - "on" time in ms, 1000ms = 1s  
**SpeedY:** ?? - "off" time in ms, 1000ms = 1s  
**Speed:** ?? - time delay relative to SawBlade/2/4

Image	Name	Default Z value
	LEVEL_FLOORSAW	0


- 2.154 **SawBlade4 logic** || it can hurts Claw  
**SpeedX:** ?? - "on" time in ms, 1000ms = 1s  
**SpeedY:** ?? - "off" time in ms, 1000ms = 1s  
**Speed:** ?? - time delay relative to SawBlade/2/3

Image	Name	Default Z value
	LEVEL_FLOORSAW	0


- 2.155 ScoreFrame logic || points animation

- 2.156 ScoreRibbon logic ||

- 2.157 **Seagull logic** || You can meet this opponent in some levels. This opponent sees Claw when he is invisible.  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Image	Name	Default Z value
	LEVEL_SEAGULL	0


2.158 SecondSuperCheckpoint logic || second save point

Image	Name	Default Z value
	GAME_SUPERCHECKPOINT	1000

2.159 Shake logic || screen shake

**Attack Rect:** ??, ??, ??, ?? - logic's activate area

In addition we set *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	0

2.160 SimpleAnimation logic ||

2.161 SingleFrameMessage logic ||

2.162 SinglePlank logic ||

2.163 **Siren logic** || you can meet this opponent in XI and XII (different colour)

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
game always sets default time


**User1 Rect:** ??, ??, ??, ?? - type values like above

**User2 Rect:** ??, ??, ??, ?? - type values like above

Max treasures = 9.

**XMin:** ??, **XMax:** ?? - patrol area

Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Example image (Level11)	Name	Default Z value
	LEVEL_SIREN	5000

2.164 SirenBullet logic || used by Siren logic. It paralyzes Claw for 3 seconds.

2.165 **SkullCannon logic** || cannon which shoots in Claw

**SpeedX:** ?? - horizontal speed (number of pixels/second)

**SpeedY:** ?? - vertical speed (number of pixels/second)

Fields above allow to set angle for bullet. Default speed is equal to 500px/s. Below, in table you can see some angles and speeds. If you want to set x2 speed, multiply value by 2 in *SpeedX* field and in *SpeedY* field. First and second table shows values for cannon which shoots **to the right**. Third and fourth table shows values for cannon which shoots **to the left**:


Angle	Speed	SpeedX	SpeedY
15	250	241	64
30	250	216	125
45	250	152	152
60	250	75	130
75	250	19	71
90	250	1	250

Angle	Speed	SpeedX	SpeedY
270	250	1	-250
285	250	64	-241
300	250	124	-216
315	250	176	-176
330	250	216	-125
345	250	241	-64

Angle	Speed	SpeedX	SpeedY
15	250	241	-64
30	250	216	-125
45	250	176	-176
60	250	124	-216
75	250	64	-241
90	250	1	-250

Angle	Speed	SpeedX	SpeedY
270	250	1	250
285	250	64	241
300	250	124	216
315	250	176	176
330	250	216	125
345	250	241	64

The angles are added to the start angle (0°) clockwise. Cannon default shoots to the right, so if you want other option, use Mirror flag in .

Image	Name	Default Z value
	LEVEL_SKULLCANNON	0

2.166 **SlidingElevator logic** || platform which appears and disappears  
**SpeedX**: ?? - time in ms, (1000ms = 1s), 0 = default

Example image (Level2)



Name  
LEVEL\_PEGSLIDER

Default Z value  
2000

2.167 **SmallSoundTrigger logic** || sounds, you can activate their once or more times (range = 30 pixels)

**Animation:** name of sound from sounds table

**Smarts:** -1 - sound will be always played, 0 - sound will be played once, X - sound will be played X times, this logic will be reset when Claw die

In addition we set *Always Active* and *No Draw* in **Flags...**

Image



Name  
GAME\_SOUNDICON

Default Z value  
9000

2.168 **Soldier logic** || you can meet this opponent in I and II levels

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time

**User1 Rect:** ??, ??, ??, ?? - type values like above

**User2 Rect:** ??, ??, ??, ?? - type values like above

Max treasures = 9.

**XMin:** ??, **XMax:** ?? - patrol area

Always XMin < XMax e.g. XMin: 1000, XMax: 1500.

Image



Name

LEVEL\_SOLDIER

Default Z value

4000

2.169 **SoundTrigger logic** || sounds, you can activate their once or more times (range = 65 pixels)

**Animation:** name of sound from sounds table

**Smarts:** -1 - sound will be always played, 0 - sound will be played once, X - sound will be played X times, this logic will be reset when Claw die

**Damage:** ?? - sound volume e.g. 150

In addition we set *Always Active* and *No Draw* in **Flags...**

Image



Name  
GAME\_SOUNDICON

Default Z value  
9000




2.170 **SpecialPowerup logic** || extra life, invisibility\*, inviolability\*, frost sword\*, fire sword\*, lightning sword\*, mappiece, flag (end of level), gem (end of level), warp\*\*

**Smarts\*:** ?? - Powerup time in ms, 1000ms = 1s

**Damage:** 0/1 - not respawning/respawning fire/frost/lightning sword

**SpeedX\*\*:** ??, **SpeedY\*\*:** ?? - type X coord and Y coord for destination, in addition you can set *Smarts:* 0/1 - works once/works infinite times




Image	Name	Default Z value
	GAME_POWERUPS_EXTRALIFE	1000
	GAME_POWERUPS_INVULNERABLE	0
	GAME_WARP	0


2.171 **Splash logic** || one-time Splash animation (decoration effect), just *Splash*

2.172 **SpotAmbientSound logic** || sound which is playing all the time, range = ~635 pixels  
**Animation:** name of sound from sounds table


In addition we set *Always Active* and *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	9000

2.173 **SpringBoard logic** || springboard/fountain. Object which will shoot up Claw.  
**YMax:** ?? - 0 default value = 450, you can type own value e.g. 300. It means object will shoot up Claw 300 pixels up.

Example image	Name	Default Z value
	LEVEL_SPRINGYFERN	2000

2.174 **Stalactite logic** || this object will fall and hurt Claw  
**User1 Rect:** ??, ??, ??, ?? - logic's activate area

Image	Name	Default Z value
	LEVEL_PROJECTILES_STALACTITE	1010

2.175 **StandardElevator logic** || this logic will work even if you do not type any values in fields. Default speed = 125pixels/s, horizontal range = 200 pixels. I advise against use this logic.

**XMin:** ?? - horizontal distance, if you use only this field, platform will be move in horizontal range

**XMax:** ?? - distance in pixels, if you use only this field, platform will move in top left direction, then down, then up, then down and so on

**XMin:** ??, **XMax:** ?? - the same values in both fields - platform is moving to the top left -> bottom right direction and so on

- different values - parallelogram path

**YMin:** ?? - example: Y min - 2000, object's Y = 2500. If you will use only this field, platform will move in parallelogram path. Higher difference - more "vertical" parallelogram path.

**YMax:** ?? - example: Y max - 2800, object's Y = 2600. If you will use only this field, platform will move in parallelogram path. Higher difference - more "vertical" parallelogram path.

**YMin:** ??, **YMax:** ?? - the same/different values - parallelogram path for platform

**SpeedX:** ??, **SpeedY:** ?? -a) X = 200, Y = 500 - "horizontal" parallelogram path

-b) X = 500, Y = 200 - "vertical" parallelogram path

-c) X,Y = 300 - 7-3 directions for path

Example image (Level1)



Name  
LEVEL\_ELEVATORS

Default Z value  
2000

2.176 **StartElevator logic** || platform moves only if Claw stands on it

**XMin:** ??, **XMax:** ?? - horizontal range (XMin < XMax)

**YMin:** ??, **YMax:** ?? - vertical range (YMin < YMax)

**SpeedX:** ??, **SpeedY:** ?? - horizontal speed/vertical speed

Example image (Level1)



Name  
LEVEL\_ELEVATORS

Default Z value  
2000

2.177 **StartSteppingStone logic** || this platform will disappear for 2 seconds if Claw will jump on it

Example image (Level4)



Name  
LEVEL\_STEPPINGSTONE

Default Z value  
4000

2.178 **StationaryLight logic** || object will disappear after 2 seconds

2.179 **StatusNumberDigit logic** ||

2.180 **SteppingStone logic** || this platform will disappear for X seconds if Claw will jump on it

**SpeedX:** ??, **SpeedY:** ?? - "on" time and "off" time in ms, 1000ms = 1s

Example image (Level4)



Name  
LEVEL\_STEPPINGSTONE

Default Z value  
2000

2.181 **SteppingStone2 logic** || this platform will disappear for X seconds if Claw will jump on it

**SpeedX:** ??, **SpeedY:** ?? - "on" time and "off" time in ms, 1000ms = 1s

Example image (Level4)



Name  
LEVEL\_STEPPINGSTONE

Default Z value  
2000

2.182 **SteppingStone3 logic** || this platform will disappear for X seconds if Claw will jump on it

**SpeedX:** ??, **SpeedY:** ?? - "on" time and "off" time in ms, 1000ms = 1s


Example image (Level4)	Name	Default Z value
	LEVEL_STEPPINGSTONE	2000

- 2.183 **SteppingStone4 logic** || this platform will disappear for X seconds if Claw will jump on it  
**SpeedX**: ??, **SpeedY**: ?? - "on" time and "off" time in ms, 1000ms = 1s

Example image (Level4)	Name	Default Z value
	LEVEL_STEPPINGSTONE	2000

Developers created four logics for SteppingStones which you can use in sequence e.g. SteppingStone3 -> SteppingStone4 -> SteppingStone.

- 2.184 **StopElevator logic** || platform which is moving. If Claw will jump on it, platform will stop move.  
**XMin**: ??, **XMax**: ?? - horizontal range (XMin < XMax)  
**YMin**: ??, **YMax**: ?? - vertical range (YMin < YMax)  
**SpeedX**: ??, **SpeedY**: ?? - horizontal speed/vertical speed


Example image (Level1)	Name	Default Z value
	LEVEL_ELEVATORS	2000

- 2.185 SuperCheckpointAttack logic || Rect for save point 1 and save point 2


- 2.186 SuperPowerup logic ||

## e) Logics from T to Z


- 2.187 **TallSoundTrigger logic** || sounds, you can activate their once or more times (horizontal range = 25 pixels, vertical range = 95 pixels)  
**Animation**: name of sound from sounds table  
**Smarts**: -1 - sound will be always played, 0 - sound will be played once, X - sound will be played X times, this logic will be reset when Claw die  
In addition we set *Always Active* and *No Draw* in **Flags...**.

Image	Name	Default Z value
	GAME_SOUNDICON	9000

- 2.188 **Tentacle logic** || this object can catches Claw or hurts him


Image	Name	Default Z value
	LEVEL_AQUATISTENTACLE	0

- 2.189 **TigerGuard logic** || You can meet this opponent in XIV level. Istnieją dwie odmiany.  
**Powerup**: ?? - type value (number) for treasure (treasures table), for Catnip etc.  
 game always sets default time  
**User1 Rect**: ??, ??, ??, ?? - type values like above  
**User2 Rect**: ??, ??, ??, ?? - type values like above  
 Max treasures = 9.  
**XMin**: ??, **XMax**: ?? - patrol area  
 Always XMin < XMax e.g. XMin: 1000, XMax: 1500.  
 If you want to change from orange tiger to white tiger type 1 in *Smarts* field.


Example image	Name	Default Z value
	LEVEL_TIGER	0

- 2.190 **TimerFrame logic** || time/clock animation


- 2.191 **TinySoundTrigger logic** || sounds, you can activate their once or more times (range = 10 pixels)  
**Animation**: name of sound from sounds table  
**Smarts**: -1 - sound will be always played, 0 - sound will be played once, X - sound will be played X times, this logic will be reset when Claw die  
 In addition we set *Always Active* and *No Draw* in **Flags...**.

Image	Name	Default Z value
	GAME_SOUNDICON	9000

- 2.192 **TogglePeg logic** || platform which appears and disappears. It also works without any typed values.  
**SpeedX**: ?? - "on" time in ms, 1000ms = 1s  
**SpeedY**: ?? - "off" time in ms, 1000ms = 1s  
**Speed**: ?? - time delay relative to TogglePeg2/3/4

Example image (Level1)	Name	Default Z value
	LEVEL_PEG	0

- 2.193 **TogglePeg2 logic** || platform which appears and disappears. It also works without any typed values.  
**SpeedX**: ?? - "on" time in ms, 1000ms = 1s  
**SpeedY**: ?? - "off" time in ms, 1000ms = 1s  
**Speed**: ?? - time delay relative to TogglePeg/3/4

Example image (Level1)	Name	Default Z value
	LEVEL_PEG	0

2.194 **TogglePeg3 logic** || platform which appears and disappears. It also works without any typed values.

**SpeedX:** ?? - "on" time in ms, 1000ms = 1s

**SpeedY:** ?? - "off" time in ms, 1000ms = 1s

**Speed:** ?? - time delay relative to TogglePeg/2/4

Example image (Level1)



Name  
LEVEL\_PEG

Default Z value  
0

2.195 **TogglePeg4 logic** || platform which appears and disappears. It also works without any typed values.

**SpeedX:** ?? - "on" time in ms, 1000ms = 1s

**SpeedY:** ?? - "off" time in ms, 1000ms = 1s

**Speed:** ?? - opóznienie time delay relative to TogglePeg/2/3

Example image (Level1)



Name  
LEVEL\_PEG

Default Z value  
0

Developers created four logics for TogglePegs which you can use in sequence e.g. TogglePeg3 -> TogglePeg4 -> TogglePeg.

2.196 **TowerCannonLeft logic** || wall cannon which shoots to the left. It deals 10HP damage.

**SpeedX:** ??, **SpeedY:** ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic.

Image



Name

LEVEL\_TOWERCANNONLEFT

Default Z value

0

2.197 **TowerCannonRight logic** || wall cannon which shoots to the right. It deals 10HP damage.

**SpeedX:** ??, **SpeedY:** ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic.

Image



Name

LEVEL\_TOWERCANNONRIGHT

Default Z value

0

2.198 **TownGuard1 logic** || you can meet this opponent in V and VI levels

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time

**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
 Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
 Always XMin < XMax e.g. XMin: 1000, XMax: 1500.




Image	Name	Default Z value
	LEVEL_TOWNGUARD1	0

- 2.199 **TownGuard2 logic** || you can meet this opponent in V and VI levels  
**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc.  
 game always sets default time  
**User1 Rect:** ??, ??, ??, ?? - type values like above  
**User2 Rect:** ??, ??, ??, ?? - type values like above  
 Max treasures = 9.  
**XMin:** ??, **XMax:** ?? - patrol area  
 Always XMin < XMax e.g. XMin: 1000, XMax: 1500.



Image	Name	Default Z value
	LEVEL_TOWNGUARD2	0


- 2.200 **TProjectile logic** || arrows which deal damage e.g. in IX level  
**Animation:** ?? - animation for arrow. The same name like in *Image Set* field:.  
**XMin:** ??, **XMax:** ??, **YMin:** ??, **YMax:** ?? - logic's activate area  
**Direction:** ?? -  
 2: down, 4: left, 6: right, 8: up  
**SpeedX:** ??, **SpeedY:** ?? - horizontal speed/vertical speed in ms, 1000ms = 1s  
**Speed:** ?? - time delay between next arrow  
 In  in **User 1:** ?? - value for direction. Direction has to be the same like in *Direction* field. Values:  
 1: right, 2: left, 3: down, 4: up

Example image (Level9)	Name	Default Z value
	LEVEL_SHOOTERS_PUFFDARTRIGHT	0

- 2.201 TreasureCounter logic ||

- 2.202 TreasureLogic logic ||

- 2.203 **TreasurePowerup logic** || They have *GLITTER* animation. You can use *Mirror* flag (  ) when you add scepters.

Example image	Name	Default Z value
	GAME_TREASURE_SCEPTERS_GREEN	1000

- 2.204 **TridentBullet logic** || bullet "from" Mercat. This object can moves or not. If it will touch tile with attribute: Ground/Solid/Climb will disappear. If it will touch Claw will deal damage and disappear. Additional effect - glow.

**SpeedX**: ??, **SpeedY**: ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. It works similar like *Bullet* logic.

**Damage**: ?? - damage value


You can use any image or image from XI level.

- 2.205 **TriggerElevator logic** || platform which will move only if you will "on" it. Then, it will move even if you will not stand on it.

**XMin**: ??, **XMax**: ?? - horizontal range ( $XMin < XMax$ )


**YMin**: ??, **YMax**: ?? - vertical range ( $YMin < YMax$ )

**SpeedX**: ??, **SpeedY**: ?? - horizontal speed/vertical speed

Example image (Level1)	Name	Default Z value
	LEVEL_ELEVATORS	2000

- 2.206 **WaterRock logic** || fountain. Object which will shoot up Claw.

**YMax**: ?? - 0 default value = 450, you can type own value e.g. 300. It means object will shoot up Claw 300 pixels up.

Image	Name	Default Z value
	LEVEL_WATERROCK	0

- 2.207 **WeaponFrame logic** || weapon animation

- 2.208 **WideSoundTrigger logic** || sounds, you can activate their once or more times (horizontal range = 95 pixels, vertical range = 25 pixels)

**Animation**: name of sound from sounds table

**Smarts**: -1 - sound will be always played, 0 - sound will be played once, X - sound will be played X times, this logic will be reset when Claw die



In addition we set *Always Active* and *No Draw* in .

Image	Name	Default Z value
	GAME_SOUNDICON	9000

- 2.209 **WindDebris logic** ||



2.210 **Wolvington logic** || third Boss, VI level. He has blue gem (default).

**Powerup:** ?? - type value (number) for treasure (treasures table), for Catnip etc. game always sets default time

**User1 Rect:** ??, ??, ??, ?? - type values like above

**User2 Rect:** ??, ??, ??, ?? - type values like above

**SpeedX:** ??, **SpeedY:** ?? - coordinates - in this place you will can get gem when we defeat Boss. If you leave empty fields, gem will be decoration.

**XMin:** ??, **XMax:** ?? - patrol area



Image	Name	Default Z value
	LEVEL_WOLVINGTON	0

2.211 **WolvingtonBullet logic** || bullet "from" Wolvington. This object can moves or not. If it will touch tile with attribute: Ground/Solid/Climb will disappear. This object also will disappear when will touch Claw. Additional effect - glow.

**SpeedX:** ??, **SpeedY:** ?? - horizontal speed, vertical speed and angle. For more details check *SkullCannon* logic. It works similar like Bullet logic.

**Damage:** ?? - damage value

You can use any image or image from VI level.

2.212 **WolvingtonLFX logic** || glow effect for WolvingtonBullet logic in VI level. This object has default image.

## f) Custom logics use

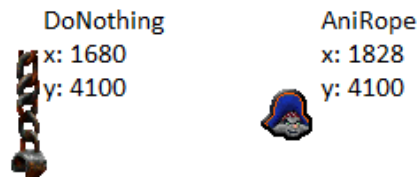
Custom logics use - this is additional option which you can use when you create your level. You should know that custom solutions demands more attention so treat last point as something extra, not necessary.

**AniCycle/AniCycleNormal** logic - you can insert new object which can be animated. Animation can be played once or infinite times with default speed or chosen speed (type name of animation in *Animation:* field). Below you will find description about animations which you can use (other animations are related to other logics):

Name	Description
GAME_BACKWARD50	Animation will be played once, from backward in 0,05s speed
GAME_BACKWARD100	Animation will be played once, from backward in 0,1s speed
GAME_CYCLE50	Animation will be played infinite times in 0,05s speed
GAME_CYCLE100	Animation will be played infinite times in 0,1s speed
GAME_CYCLE200	Animation will be played infinite times 0,2s speed
GAME_CYCLE500	Animation will be played infinite times 0,5s speed
GAME_FORWARD50	Animation will be played once in 0,05s speed
GAME_FORWARD100	Animation will be played once in 0,1s speed
GAME_REVERSECYCLE50	Ani will be played infinite times, from backward in 0,05s speed
GAME_REVERSECYCLE100	Ani will be played infinite times, from backward in 0,1s speed
GAME_REVERSECYCLE200	Ani will be played infinite times, from backward in 0,2s speed
GAME_REVERSECYCLE500	Ani will be played infinite times, from backward in 0,5s speed



**AniRope** logic - you can insert new object and make it like a rope. Claw will catch this but object will not move. Graphics for ropes are only in few levels so in other levels rope not move. When you want add new object with rope logic it is hard to evaluate where Claw will catch this object. Below you have example how to set "rope" object in level.



On the left there is an object which Claw will catch in game. This object has *DoNothing* logic, but you can also set *AniCycle* logic. On the right there is an object which has *AniRope* logic - animation for rope starts from left side, so this why your object is on the left side. Object with rope logic can has any image because it will has set **NoDraw** flag in **Flags...**. In game you will see:



You have to type 99 999 in **SpeedX**, for not moving rope. This is security for not catching invisible rope in other places.

We can use all opponents logics in level but we will not able to use their graphics. Remember that object in this example will not be animated.

**ConveyorBelt** logic - also you can use this logic in your level without any problems. Images for this logic are only in IX level so in other levels we use invisible objects with this logic.

**DoNothing/DoNothingNormal** logic - we can use default object's frames or even layers images.

First example - officer's frame as new decoration:



Number of this frame = 104. If you want to use this frame, type 104 in **I: ??** field, when you edit object (next to X,Y,Z coordinates). You can check available frames/images in folder **LEVELX → IMAGES → OPPONENTNAME**.

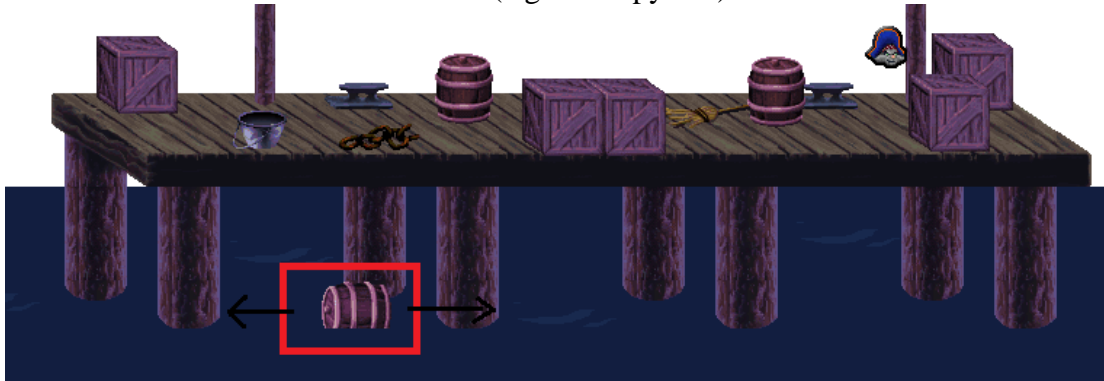
Second example - images from ACTION layer (you can also use images from BACK layer or FRONT layer):



I added 4 images from ACTION layer. You can check ID (I field) of layer's image in editor what is very helpful.

In first example I typed LEVEL\_OFFICER in ImageSet, in second example I typed ACTION in ImageSet.

Also elevators can be decorations in level (e.g. in Shipyards):



In this example 14th frame of Powderkeg is moving like floating keg.

**SpringBoard/WaterRock** logic - you can use SPLASH animation for this object in level or make invisible springboard.