

SFMB BY NEOARC



MAP EDITOR GUIDE

BY JOHANNA

- OPEN LETTER TO NEO -

Neo, you gave me a chance to become a beta-tester, even though you knew I ran a leak. You even scouted me and let me be a part of your creation. Since then I have started and finished multiple projects, have become a Stage Moderator, Stage Creator and even a Mod on the public server. I've contributed lots of sprites for the NSMB style too and..

Without you and this amazing project, I probably wouldn't even be alive anymore. Its the first and last thing I think about when I go to work, come home from work and go to bed. Please never stop being awesome and never give up, even if you sometimes feel like you're not doing enough.

It will always be enough for me and countless others. - Johanna 

WHAT AND WHO IS THIS GUIDE FOR?

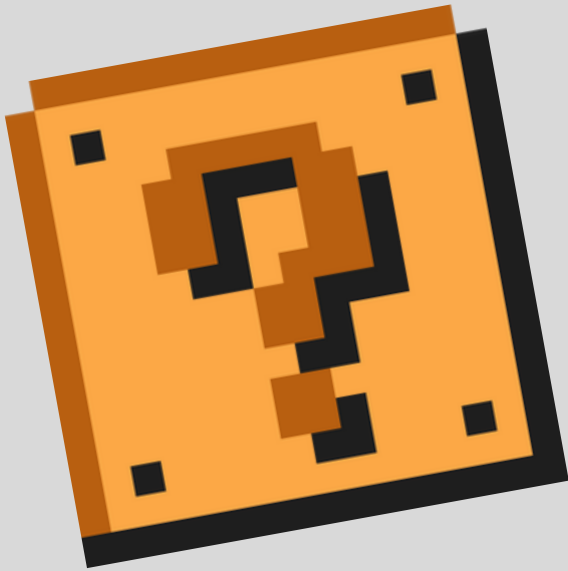
Hello there reader!

This guide is for all those people that are relatively new to the game and still feel a bit disoriented.

This guide will teach you the basics, or if those are boring to you, more specific, in-depth things like playing around with PixelArt, custom NPCs and the properties window.

In any case, I hope this guide can help you or even just as much as entertain you! I put quite a lot of effort into this and I hope it is appreciated by at least some people.

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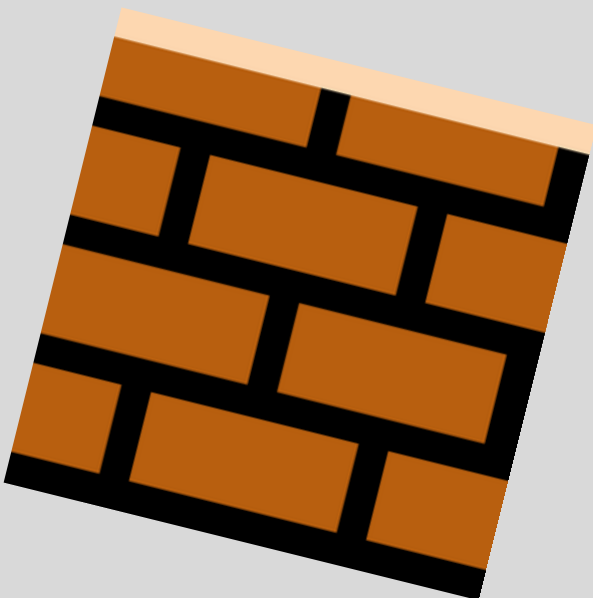
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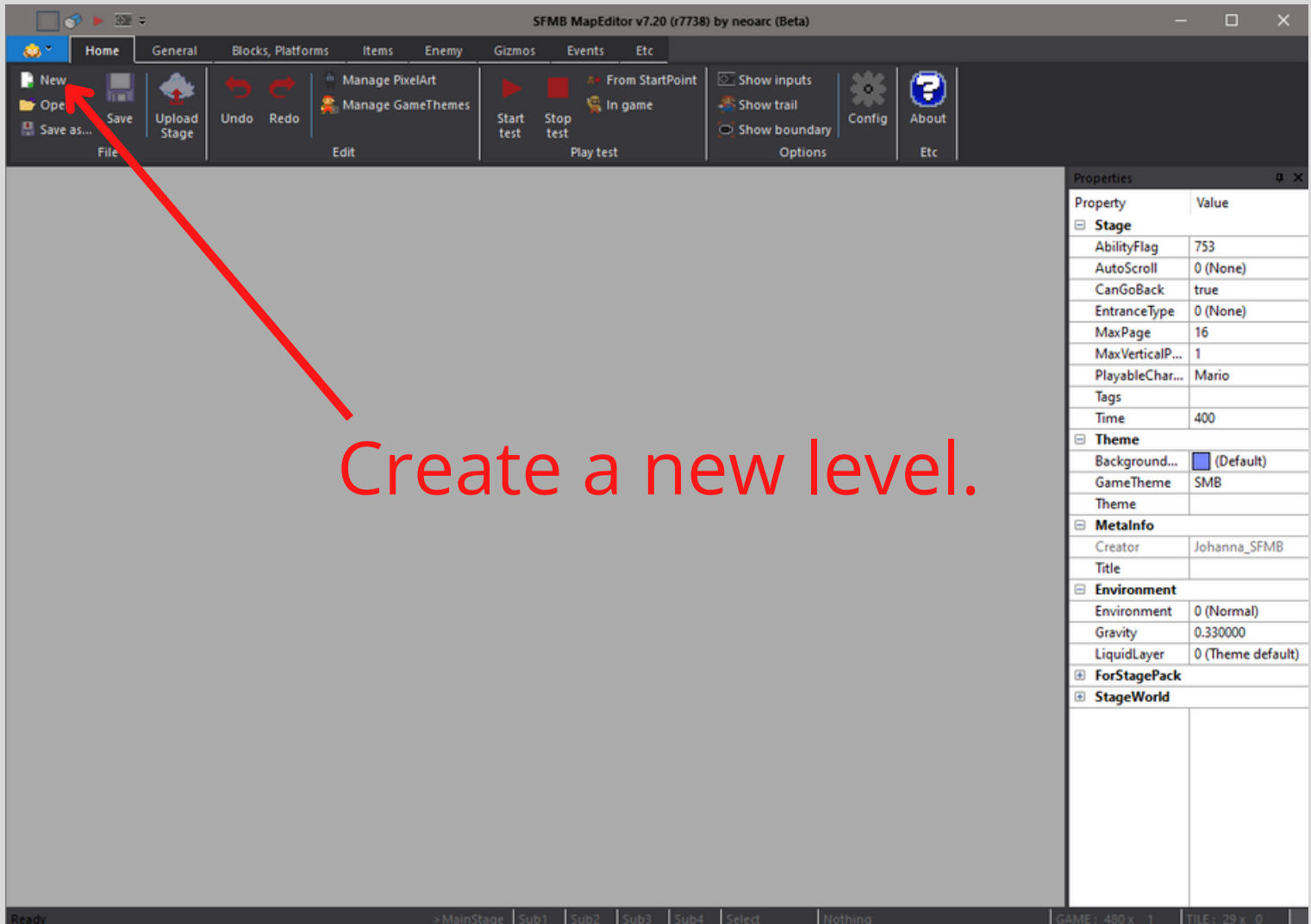


01 - BASICS



01 - BASICS

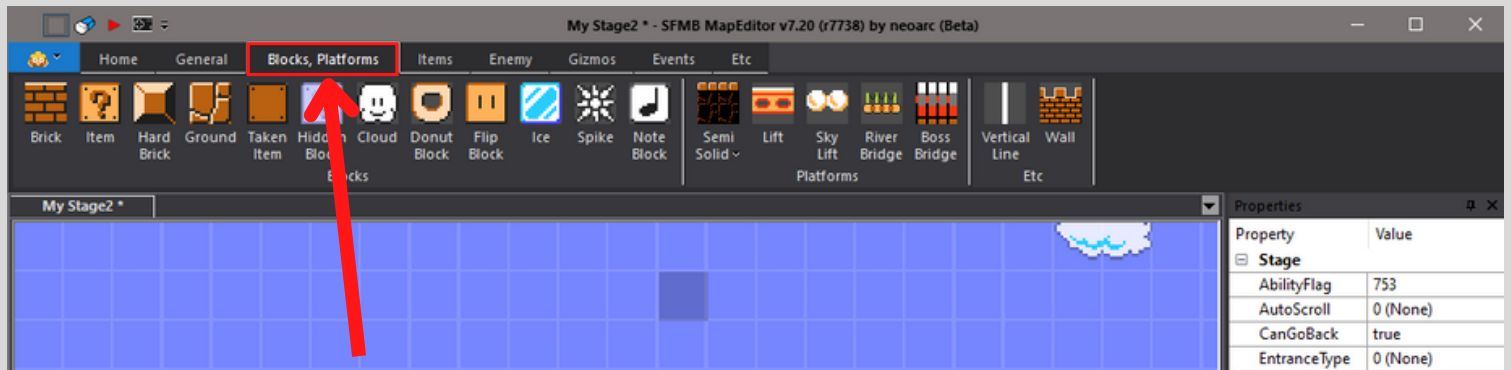
When opening the Editor, you will be greeted by a blank canvas like the one you see here. Since we are only going over the basics of level-making for now, you *don't have to worry about what all the different buttons do*. The first thing you should do now, is click on "new" to create a new level.



After doing so, you should now have something in front of you that actually looks like a level. If that's the case, then bravo, you now know how to make a new level.

Now let's get right into how to start building an awesome level by using the basic tools provided to us!

First, switch to the "Blocks, Platforms" tab on the top. (You can either click on it or use your mousewheel to scroll to it quickly.)

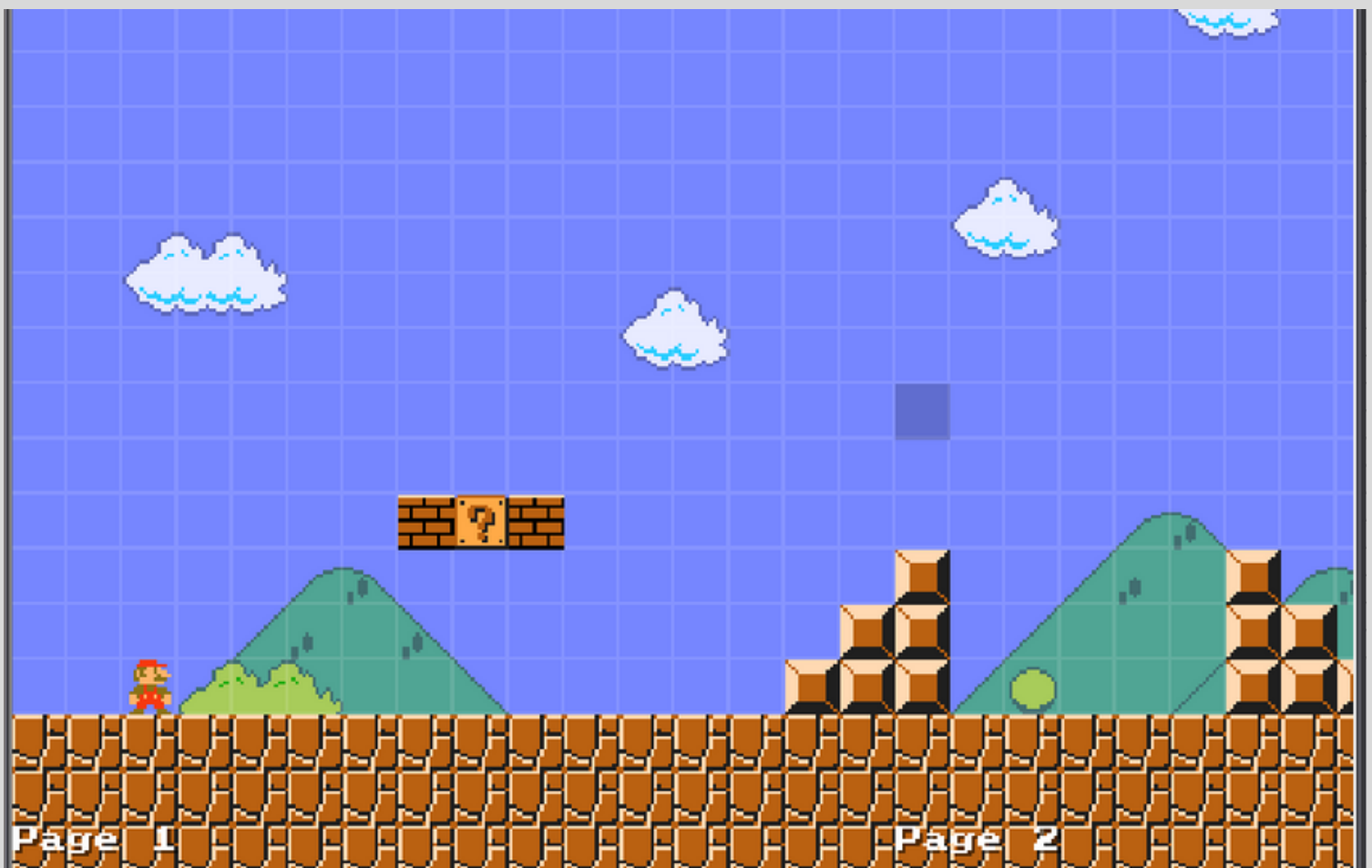


Property	Value
Stage	
AbilityFlag	753
AutoScroll	0 (None)
CanGoBack	true
EntranceType	0 (None)

Now you should have a bar at the top displaying stuff like Bricks, Item blocks, Hard Bricks, Ground, etc.

You can select any of them simply by clicking on them. Lets start building some simple gameplay. (If you run out of space, simply move around the editor by using the arrowkeys OR by using your mousewheel.)

After a minute or so, your level could look something like this:



Now lets add some more stuff by switching to the "Items" and "Enemy" tabs on the top. Add some coins and enemies to your level!

[Pro tip: If you want to delete something in your level, you can switch to the eraser by pressing "E" or by going to the "General" tab and selecting it. Deselecting a tool is done so by pressing "ESC".]

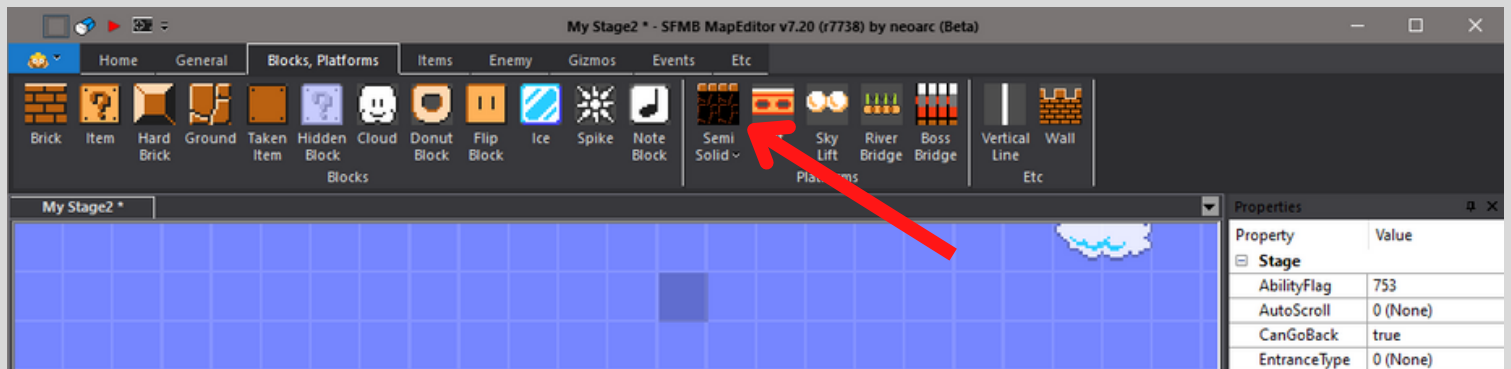


You can make a bottomless pit by deleting all ground in one spot, but be careful. The last row of blocks on the bottom of the editor is off-screen when playing the level and the player won't be able to see if there are blocks or not.

You can use this to your advantage in a troll level, but generally you shouldn't do this as the player has no way of knowing what is a bottomless pit and what isn't.

Also, be careful when placing coins. They may seem really irrelevant to the gameplay or level, but their purpose is to lead the player. Don't make coin trails that punish the player for following them, they are supposed to be rewarding to the player and collecting them should feel good.

Great, our level is coming along nicely! Now lets add some Semi-Solids to our level- they can be used either as gameplay elements, or as decoration. But.. lets navigate to them first.



By just clicking on "Semi-Solid" once, you will have selected them already, but there is also a drop-down menu that gives you two more options (out of which only one is actually useful though).

These 2 new options are "Island" and "Mushroom Island". I recommend ignoring "Island" as its pretty much just the same thing as the normal Semi-Solid, except its a fixed version. *Just don't use it and don't worry about it.*



After selecting either a normal Semi-Solid or a Mushroom Island, you can now place one down wherever you want. Don't worry if the platform seems way too high or too small, you can resize it after placing it down by dragging either of the 4 corners around that become visible as thick yellow dots.

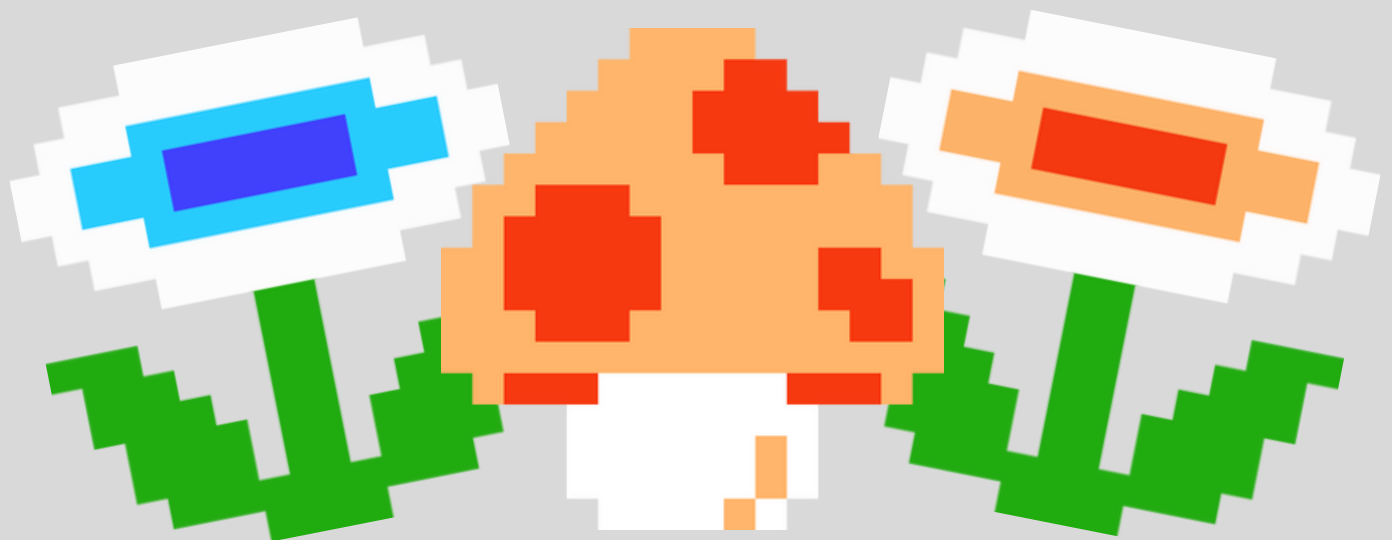
Now simply resize the platform to the size you want. If you want to cycle through the different platforms (there is always 3 variants), just click on the platform and it will magically do so! Try decorating your level with them a little and add some more gameplay.



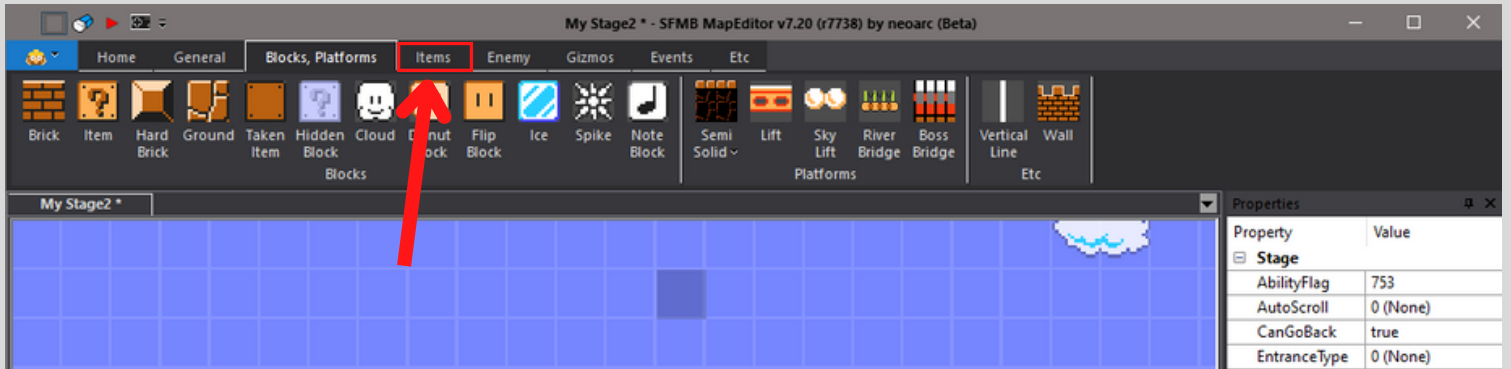
If you've been doing everything right so far (not that there is much to do wrong here) then your level might look something like this now:



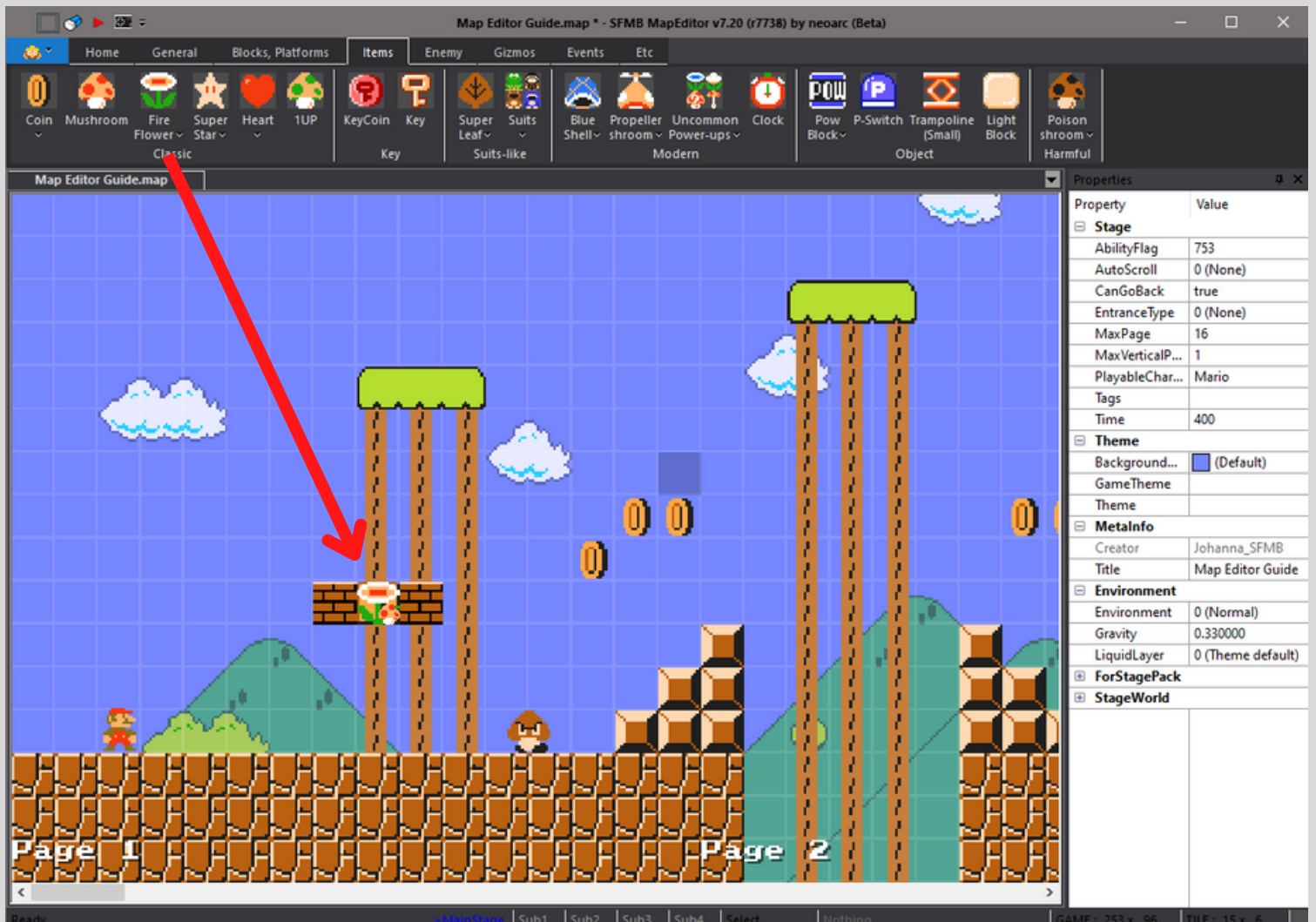
With that out of the way, let's actually add something that's very important for almost any level- a powerup!



It's very simple: go to the "Items" tab and select a powerup you'd like to use in your level. (Some powerups in certain styles might not work, especially for characters like Luigi, because there is no spritework done for those powerups yet- *any and all contribution is greatly appreciated!*)



[Pro Tip: Some items have a drop-down menu where you can select a progressive type. Selecting only the standard item will not make it progressive!] Let's try adding a progressive powerup!

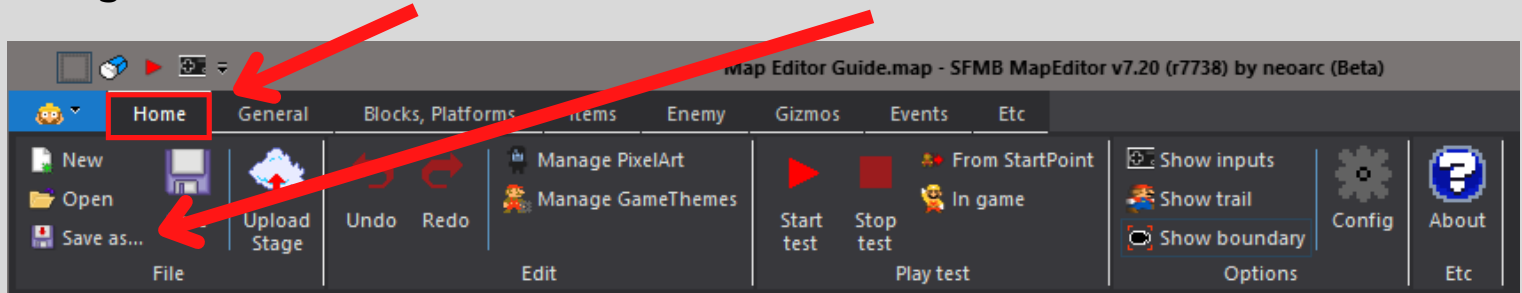


Putting an item "on top of a block" will put it inside that block. Just putting it in empty space will make it spawn there.

Our level is coming along quite nicely- now I want you to expand it some more and just add some more of the stuff you've already been taught. If you feel like you are ready to playtest your level, come back here. (I'll wait for you.)

[..Time passes(?)..]

Ok, now that you are back and ready to playtest your level, you are probably wondering how to do that.. but first, let's save our progress in case the editor crashes or something else happens, which can happen more often than you would think. (After all, you are testing a beta!) Navigate to the "Home" tab and click on "Save as..".



This should open up a new window. You can now give the level file a name and save it in any folder you want. I will name this file "Map Editor Guide". (This will not change the levels name when uploading it!)

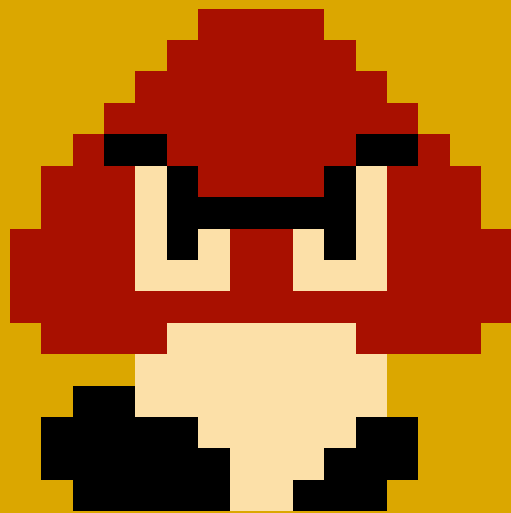
Now that your level is saved, lets playtest it! The hotkeys for starting and stopping a playtest are either Spacebar or F5 by default, or you can click on "Start Test" and "Stop Test" in the "Play Test" category.

[Pro Tip: Playtesting your level will autosave your progress!]

Congratulations!

You now know how to make a basic level, how to add enemies and powerups and how to save and playtest your level!

02 - PROPERTIES WINDOW BASICS



02 - PROPERTIES WINDOW BASICS

Now that you know how to make a basic level, let's go over some basic stuff from the "properties window" on the right of your screen.

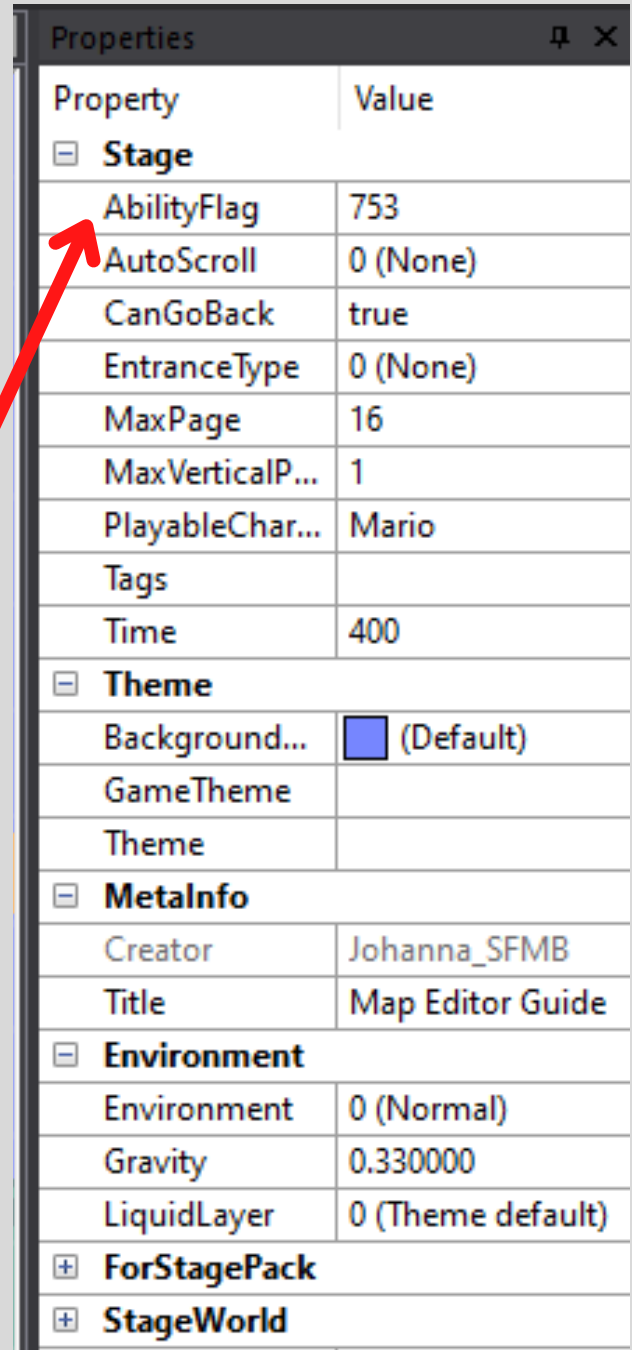
It will look like this:

Don't be intimidated by all the options, the properties window is your friend! First of all, you probably noticed while playtesting your level, that Mario has a lot of moves he didn't have in SMB1, such as *groundpounding* and *walljumps*.

Those are what we call "Ability Flags" and they can be changed individually for every level, making stuff possible that just wasn't in old games!

The combination of ability flags will then be displayed as the number (the "value") next to it. I'm using one that simulates the NSMB DS abilities Mario had, which happens to be the combination "753".

But don't worry, you don't have to remember weird numbers or stuff like it, you can simply click on "AbilityFlag" and a new window will open up, where you can select exactly what abilities you want your player to have (or not to have) in your level! Try messing around with that a little and playtest it in your level- you'll be surprised how much is possible!



Property	Value
<input type="checkbox"/> Stage	
AbilityFlag	753
AutoScroll	0 (None)
CanGoBack	true
EntranceType	0 (None)
MaxPage	16
MaxVerticalP...	1
PlayableChar...	Mario
Tags	
Time	400
<input type="checkbox"/> Theme	
Background...	<input type="checkbox"/> (Default)
GameTheme	
Theme	
<input type="checkbox"/> MetaInfo	
Creator	Johanna_SFMB
Title	Map Editor Guide
<input type="checkbox"/> Environment	
Environment	0 (Normal)
Gravity	0.330000
LiquidLayer	0 (Theme default)
<input type="checkbox"/> ForStagePack	
<input type="checkbox"/> StageWorld	

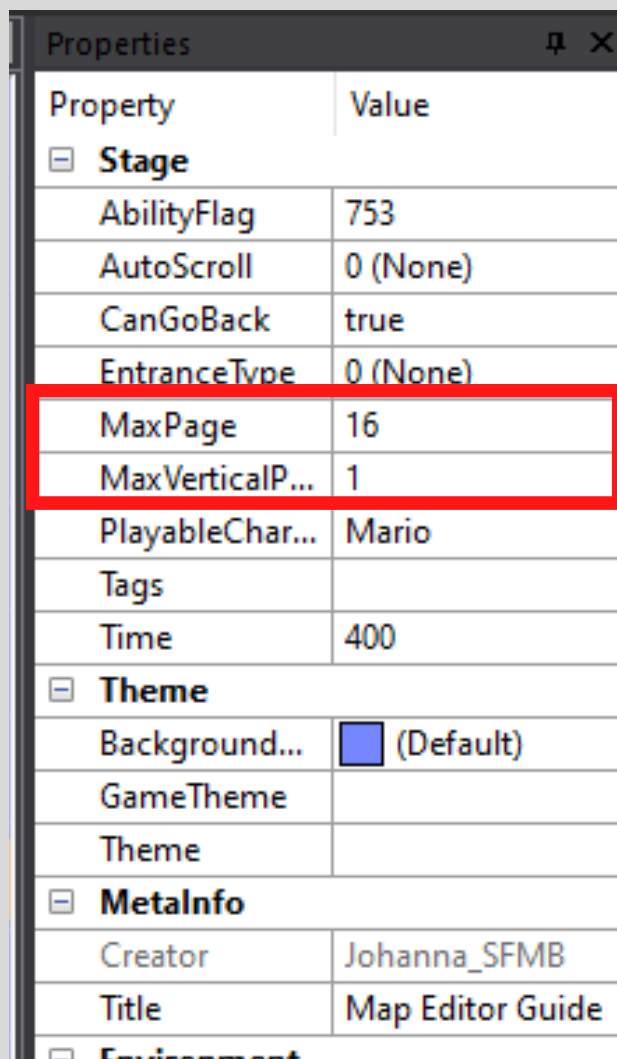
Next up is changing your levels size. You're probably wondering by now how you can make your level longer or how you can make it vertical.


To change how long your level is, simply edit the number next to "MaxPage".

The number stands for pages. You probably noticed at the bottom of the screen in your level it says "*Page 1*" and so on. There you can see how long 1 page roughly is in your level.

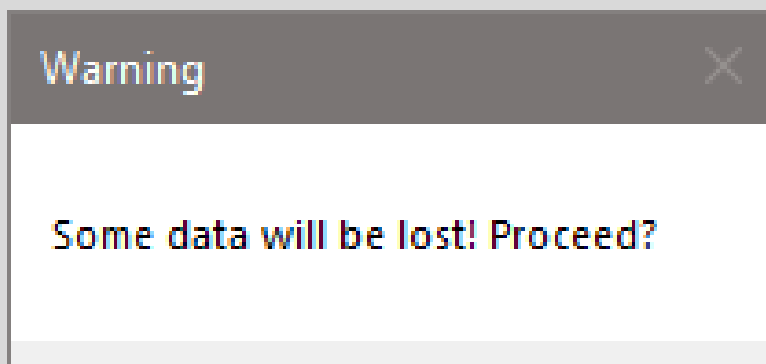
Making the number smaller will of course make your level shorter. Making it bigger will make your level longer. Ez pz, right?

Same thing applies to the vertical length of your level! If you go ahead and navigate to "MaxVerticalPage" right below the "MaxPage", you can change the height of your level just like that as well!



Property	Value
Stage	
AbilityFlag	753
AutoScroll	0 (None)
CanGoBack	true
EntranceType	0 (None)
MaxPage	16
MaxVerticalPage	1
PlayableChar...	Mario
Tags	
Time	400
Theme	
Background...	 (Default)
GameTheme	
Theme	
MetalInfo	
Creator	Johanna_SFMB
Title	Map Editor Guide
Environment	

Be careful though when making your level smaller in any way! Making it smaller will also delete everything that's on those pages!

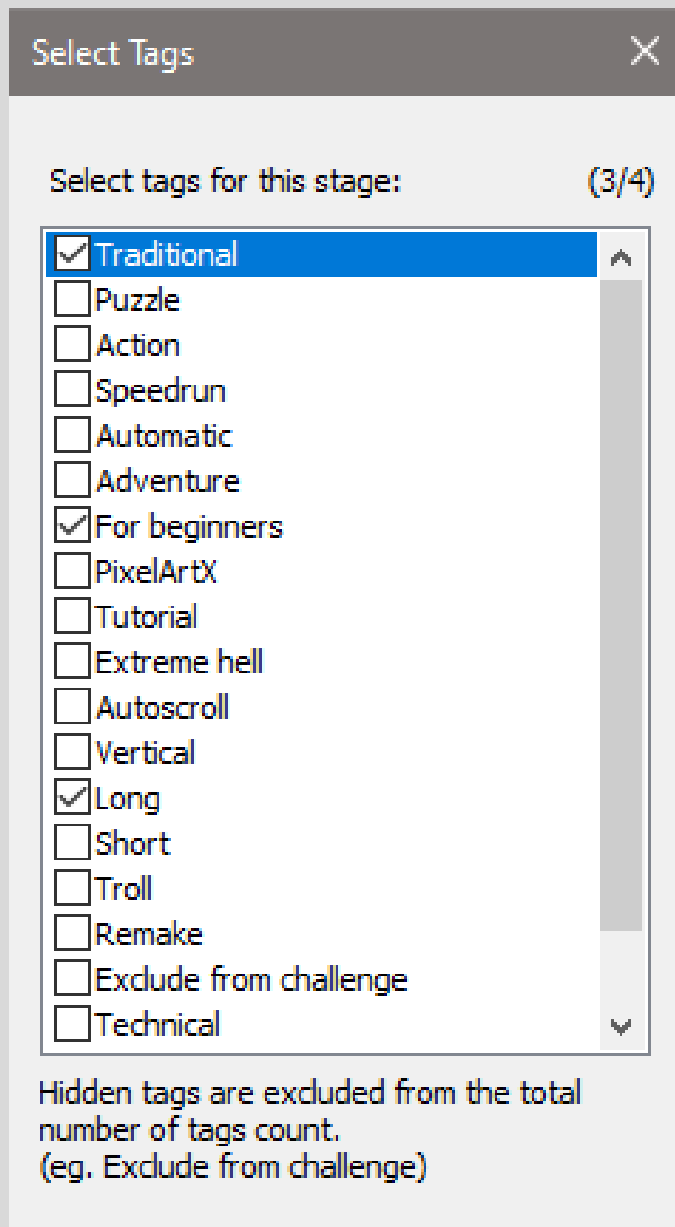


Now you might be saying: "I like my level, I think I'm ready to upload it!" But whoa there, wait a second. There is a few things you need to consider first before uploading your level.

Those things are: **Tags, Title, PlayableCharacters and Time!**

Let's start with **Tags!** Your level can have **4 different tags.** (If you are using PixelArt anywhere in your level, it will automatically assign the tag "**PixelArtX**" and you will not be able to remove that tag!)

Go ahead and click on the empty space next to "**Tags**" and select a few that fit your level! I will select "**Traditional**", "**Long**" and "**For Beginners**" for my own level for now.

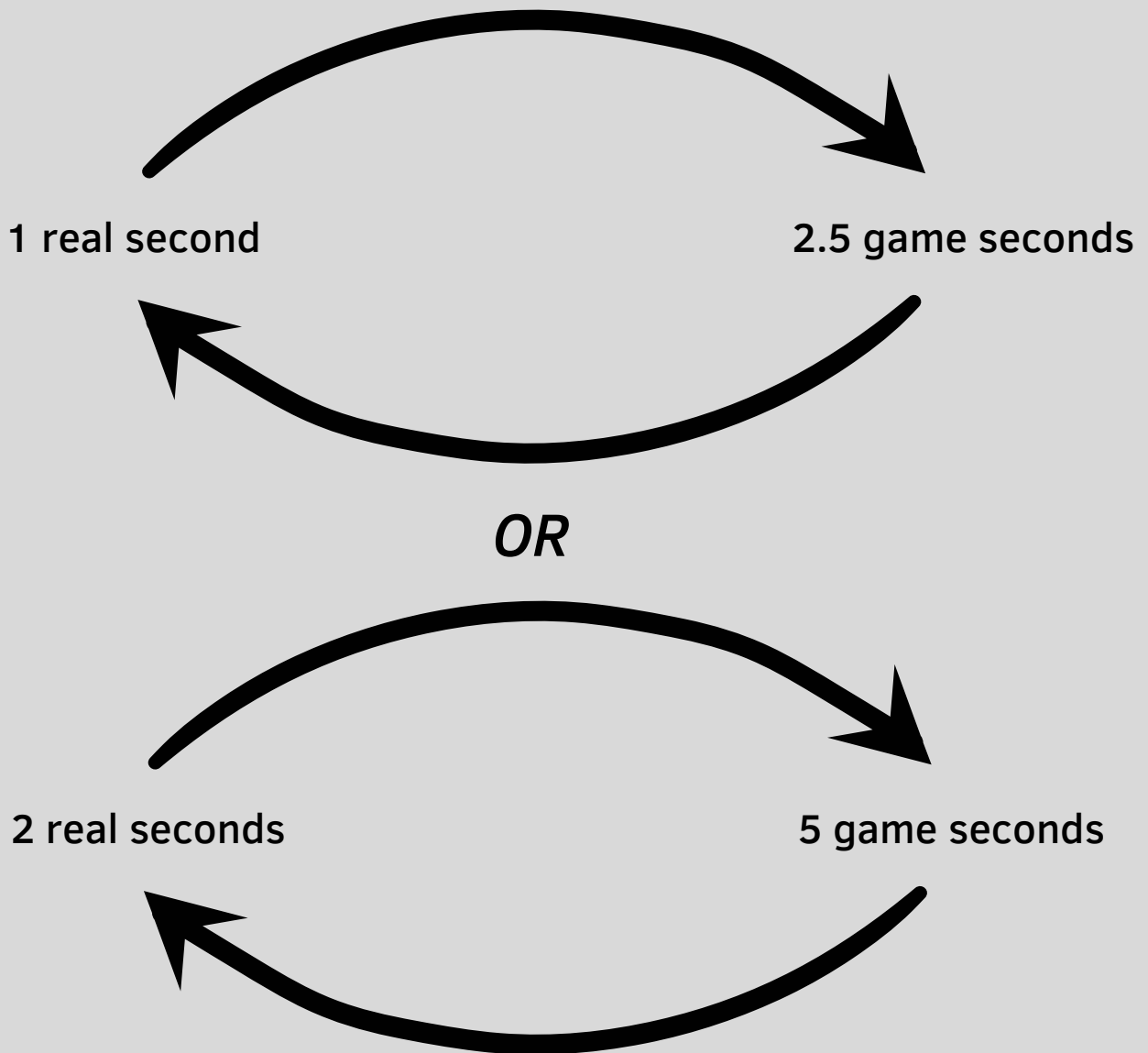


Tags like "**Exclude from Challenge**" and other tags that you can't select yourself, like "**Broken**" will exclude the level from **Challenge Runs**, meaning your level will not be able to show up in someone elses challenge run.

(Levels that have a rating below "5" will also be excluded from challenge runs, even if the rating is something ridiculous like 4.9)

Make sure that your tags are accurate. Don't tag 10 page-levels with the "**Long**" tag and if your level is a troll-level, don't forget to add the "**Troll**" tag. **Stage Moderators** will change the tags on your levels if they conclude that they are not accurate or perhaps even tagged wrong on purpose.

Then there is "Time". As you have probably guessed already, that is how many "seconds" it takes before the player runs out of time in your level and dies. This is set to 400 by default, which probably sounds like a lot at first, but time works differently in SFMB.

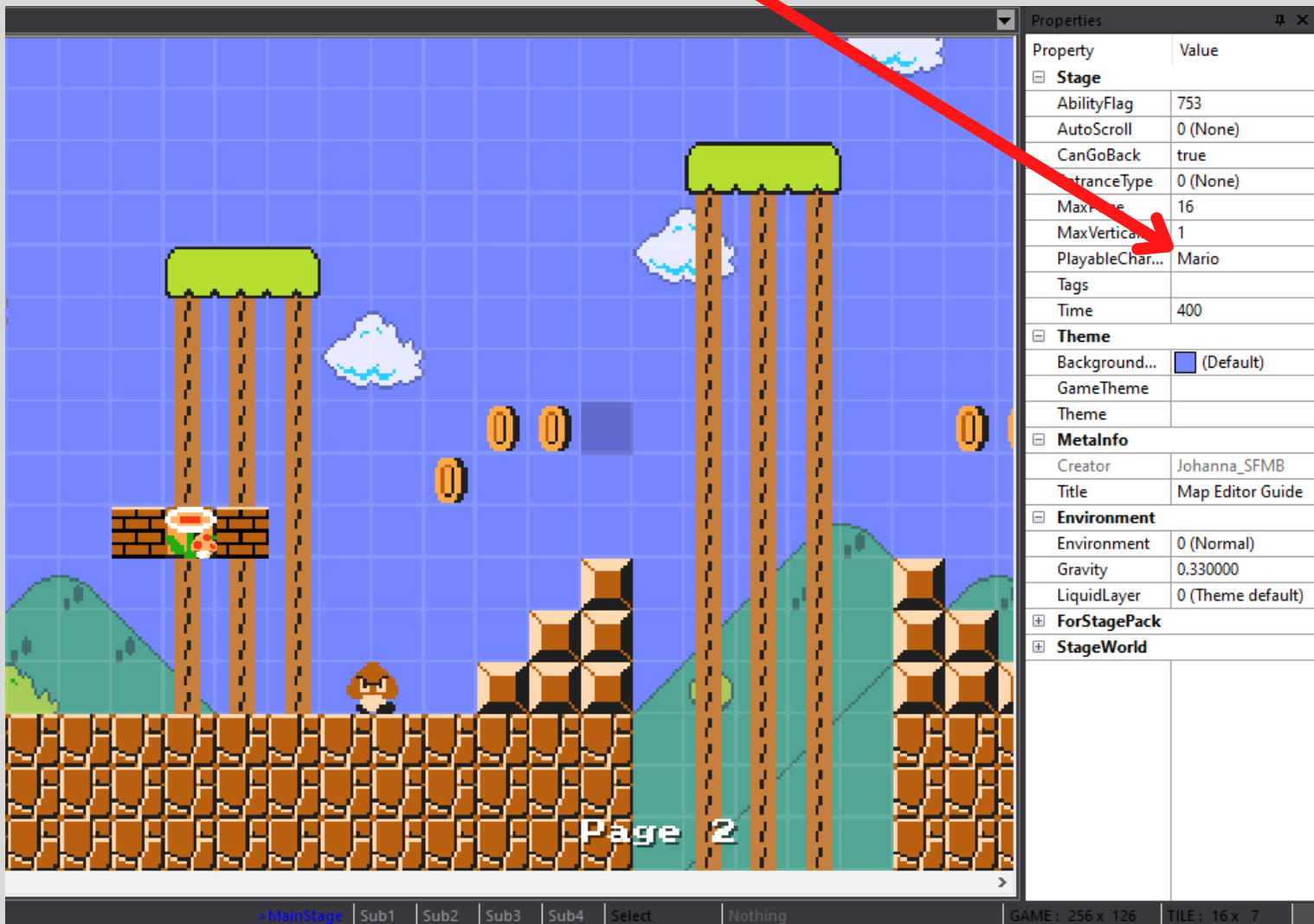


So, if you do the math, 400 "seconds" on the timer, are actually only 160 real seconds, which rounds up to 2 minutes and 40 seconds.

That might still sound like a lot, but if your level uses 25 or more pages, it might become a tight timer quicker than you think, *especially if you add a lot of areas and sub-areas that can be explored.*

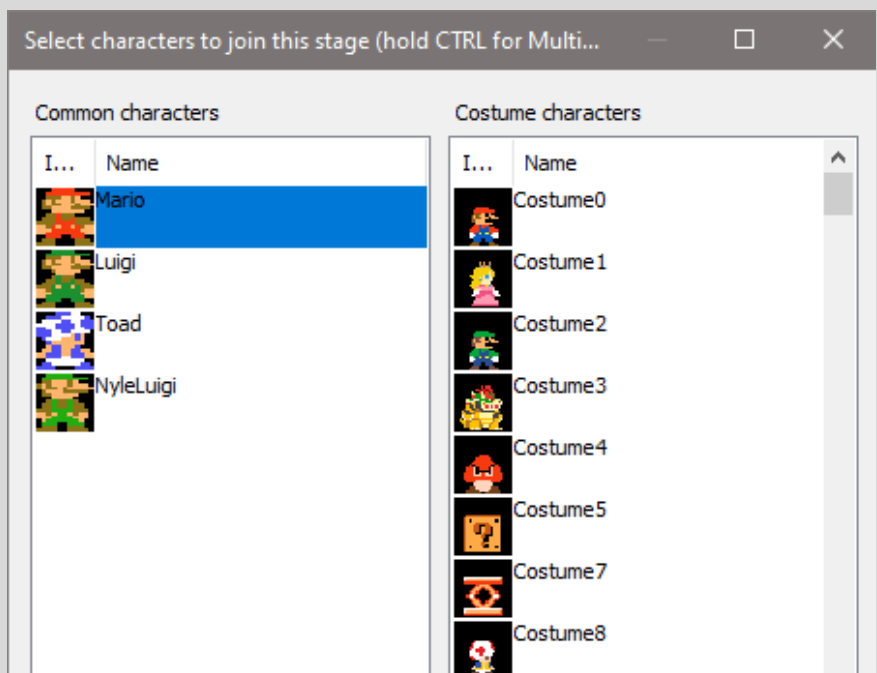
(More on how to make Subareas later!)

Now, let's check out the "PlayableCharacters"! You wanna play as Luigi? Give the player the choice between Mario and Luigi? Or maybe you want to use one of the many costumes? Then let's get started! As one does, go ahead and click on "Mario" next to "PlayableCharacters".



After doing so, a window will open up that looks like this:

Here you can select other playable characters. (If you want multiple characters to be playable, simply hold CTRL while clicking on them.)

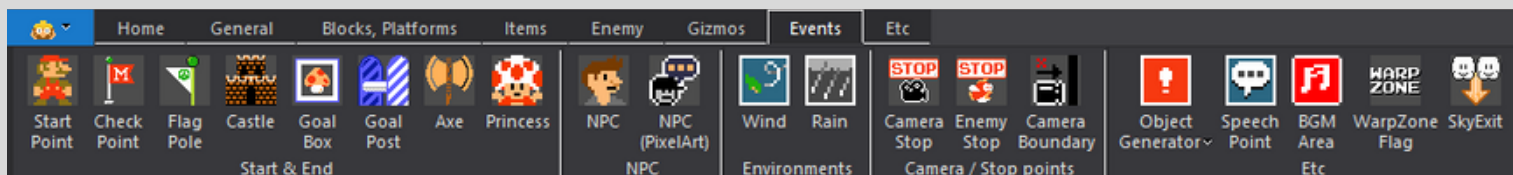


Finally, let's get your level ready to be uploaded! For this, we of course need to give the level a name. This is where the "Title" comes in. Simply type the name you want your level to have into the empty box next to where it says "Title" and press enter or just click somewhere else in the editor. I've named my level "Map Editor Guide Level".

MetalInfo	
Creator	Johanna_SFMB
Title	Map Editor Guide

[By the way, you can not change the name in "Creator", because this is tied to your account. If you want a different name, you can *buy a name change coupon* from the ingame shop for *750 NeoCoins*. This currency can not be bought with real money! You earn it simply by playing!]

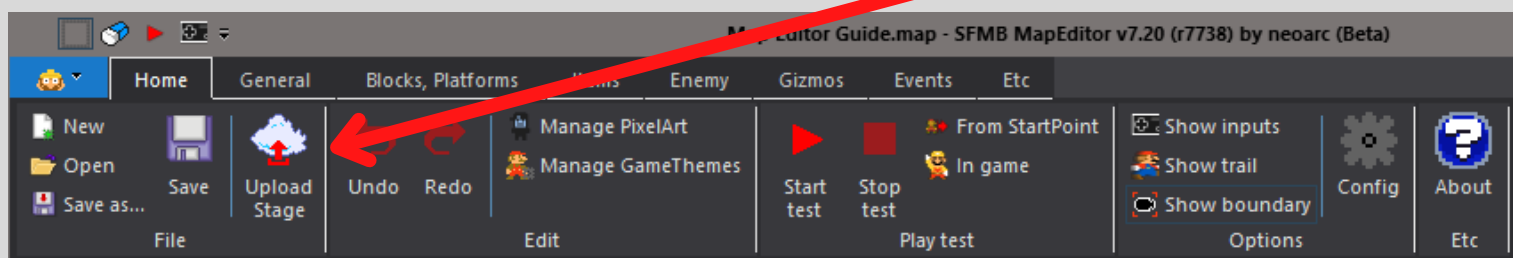
Last but not least, you have to add a "Start Point" and some kind of Goal to your level, so the game knows where the player starts in your level and where it ends. To do this, navigate to the "Events" tab and select them from there.



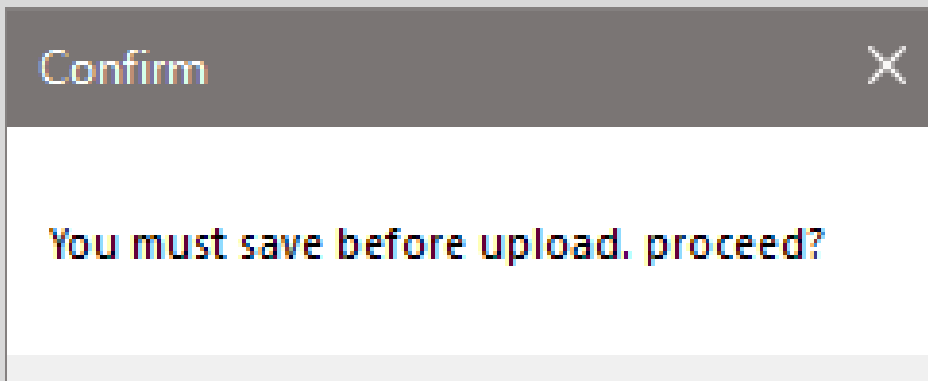
Now, simply place them in your level wherever you want.

[Pro Tip: You dont have to start on the left and end on the right! You could start your level from the right or the middle and end it wherever you want!]

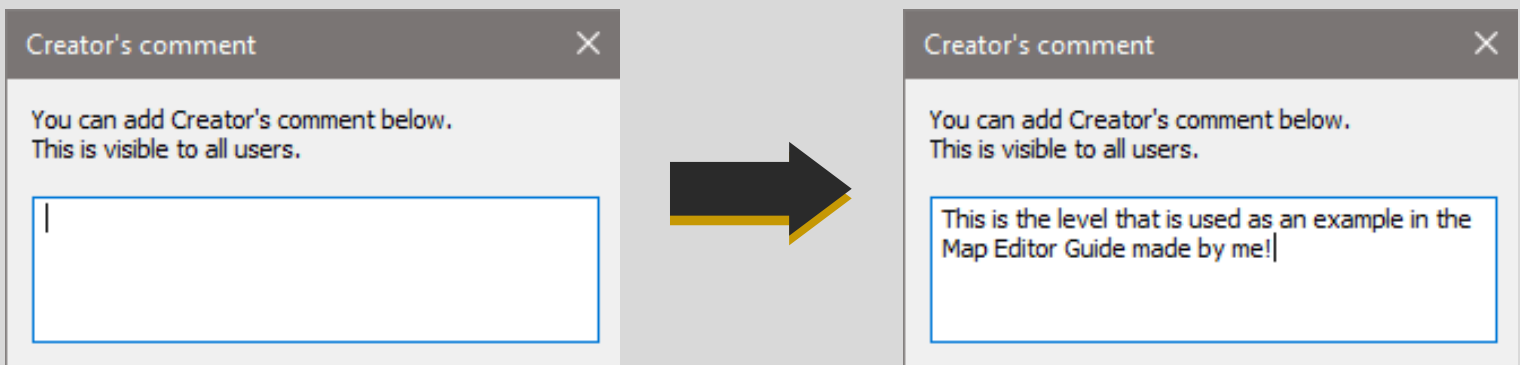
And there we go- now the only thing left to do, is to upload it. To do that, just go back to the "Home" tab and select "Upload Stage" from there.



A new window will open, asking you to save your changes, if you haven't done so already. (*Don't forget to save frequently!*)



After doing so, another window will open up and ask you to add something called a "Creator's comment", which is basically just the description of your level. *Everyone will see this, so try not to just type some random stuff in there.*



And.. done! You just uploaded your first level!

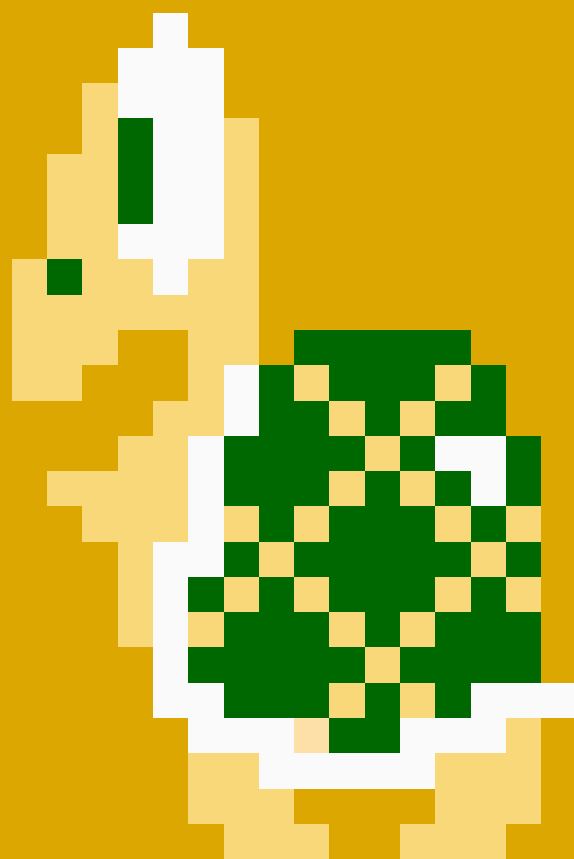
Congratulations!

You now know the basics of how to use the properties window, how to change the Timer, the Tags of your level, the playable Characters, as well as how to give your level a name and upload it!

Next up will be a tutorial on how to change GameStyle and Theme, as well as how to make Subareas and how to get there!

PS: You can play the level shown in this Guide in the actual game if you search up "Map Editor Guide Level" in Stage World!

03 - GAMESTYLES AND SUBAREAS

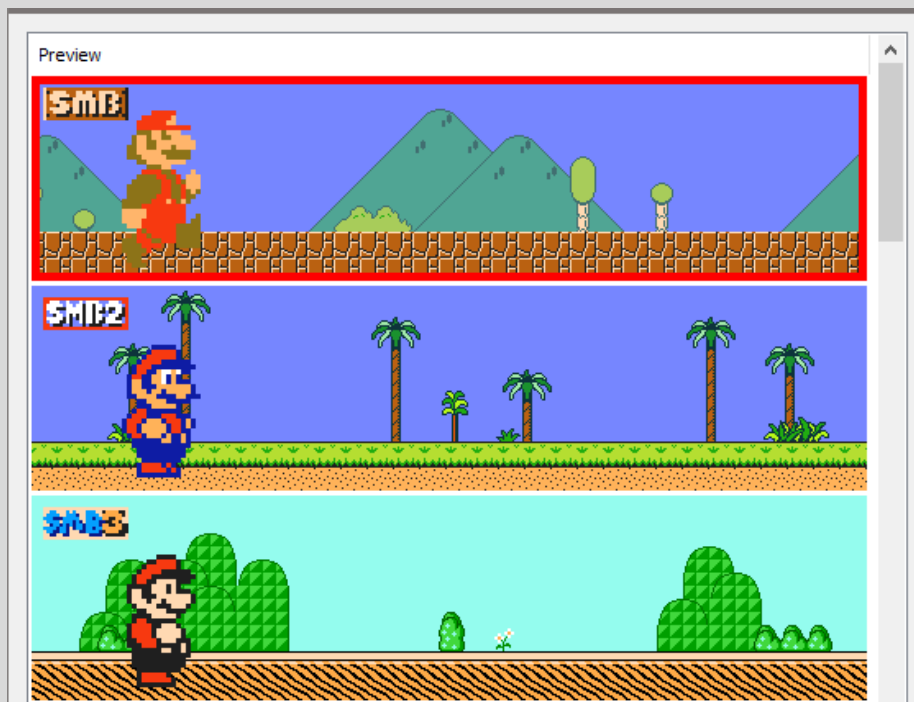



03 - GAMESTYLES AND SUBAREAS

It's time to talk about changing GameStyle and Theme! Similiarly to Mario Maker, if you change the GameStyle or Theme of your level/subarea, all the gameplay you already made will change with it and you won't have to make it all again from scratch, which is really awesome!

But how do you actually change the GameStyle? It's quite easy actually. Just navigate to "GameTheme" in your properties window and click on the empty space next to it.

A new window will pop up displaying a huge selection of all the currently avaiable Game Styles in SFMB:

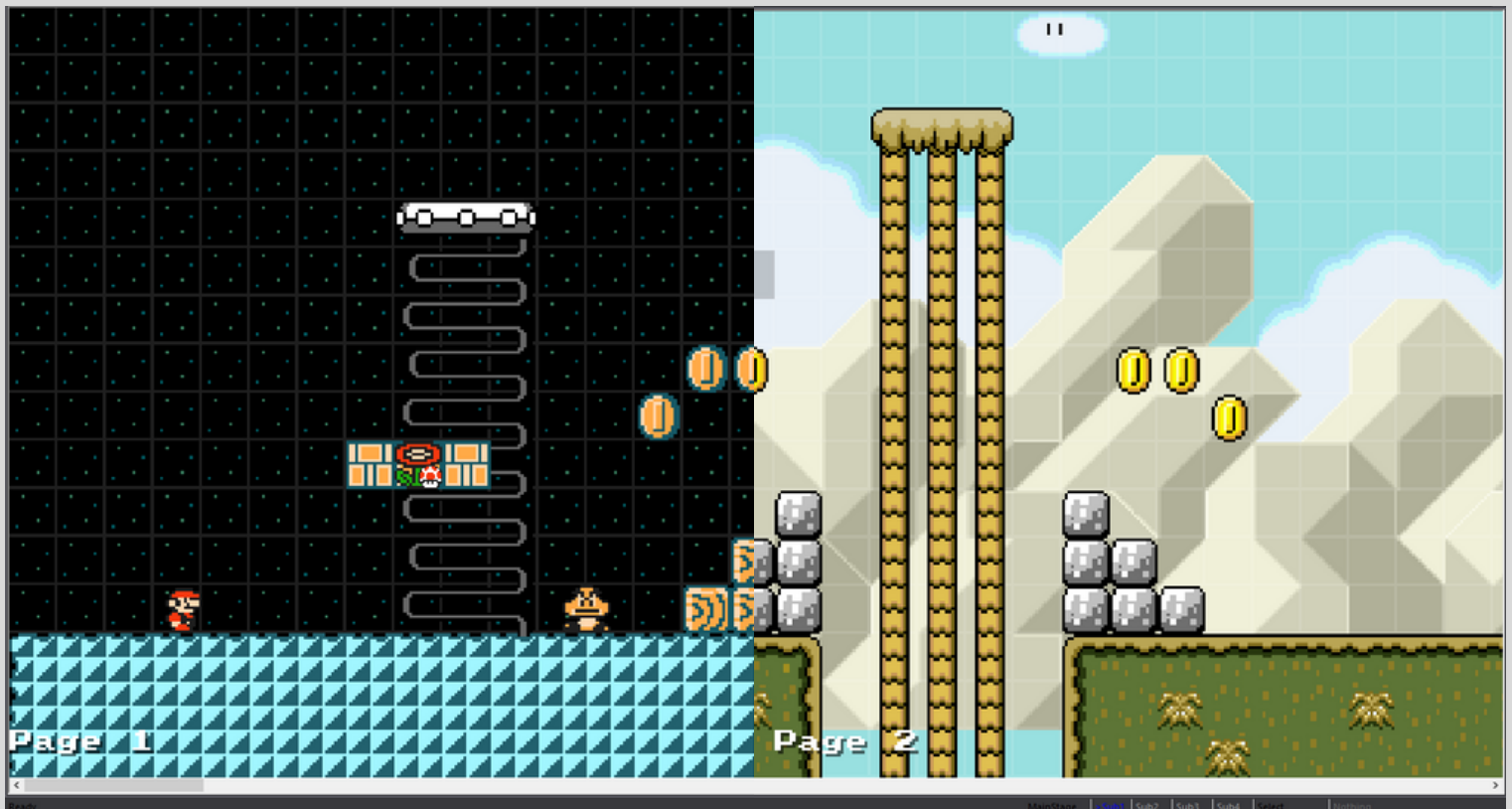
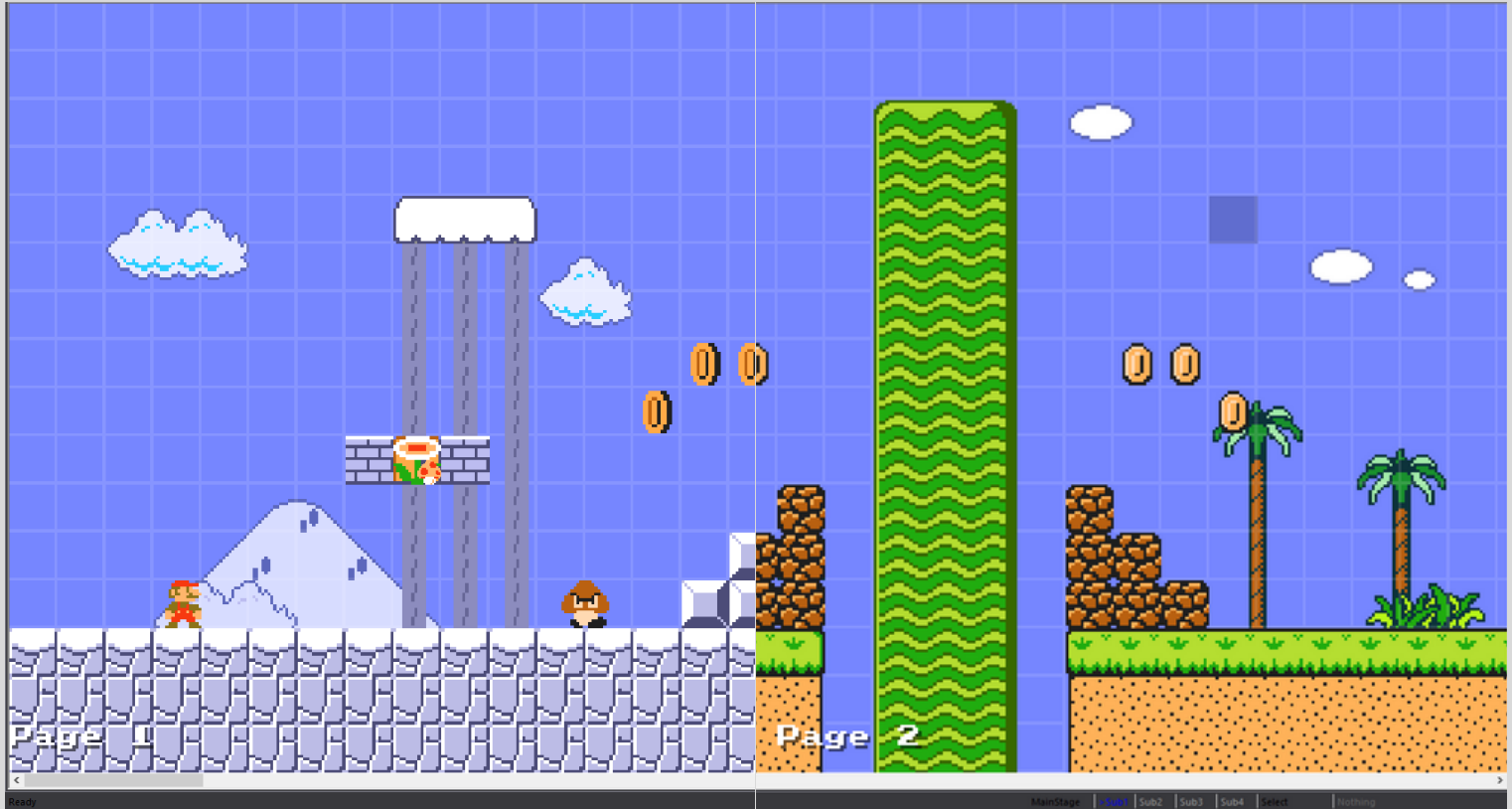


<input type="checkbox"/> Theme	
Background...	 (Default)
GameTheme	
Theme	
<input type="checkbox"/> MetalInfo	
Creator	Johanna_SFMB
Title	Map Editor Guide
<input type="checkbox"/> Environment	
Environment	0 (Normal)
Gravity	0.330000
LiquidLayer	0 (Theme default)
<input type="checkbox"/> ForStagePack	
<input type="checkbox"/> StageWorld	

GAME: 256 x 126 TILE: 16 x 7

By selecting one, it will immediately change your levels Game Style! That's very awesome isn't it? I will keep SMB for now though, but you don't have to! Choose whatever Game Style you like!

Changing the levels theme works the same way, just click on the empty space next to "Theme" and select a theme that you like!
I will keep Overworld for now, but here is how your level could look after changing it's Style and Theme:




But now we get to a fun part that you've probably been looking forward to since the beginning: **Subareas!**


Let's start by.. creating a subarea! To do that you can use either of three approaches:

- the hotkeys "1", "2", "3" and "4", which are also used to quickly switch to those sub-areas
- right click on an empty spot in the editor and choose "Sub Stages" right on the top of the menu
- go to the "General" tab and choose a Sub-Area there

Now you should have automatically been brought to that newly created Subarea, which is currently empty. *The first thing you might notice is that the properties window has significantly less options.*

Property	Value
Stage	
AbilityFlag	753
AutoScroll	0 (None)
CanGoBack	true
EntranceType	0 (None)
MaxPage	16
MaxVerticalP...	1
PlayableChar...	Mario
Tags	Traditional,For b...
Time	400
Theme	
Background...	 (Default)
GameTheme	SMB
Theme	Snow
MetalInfo	
Creator	Johanna_SFMB
Title	Map Editor Guid...
Environment	
Environment	0 (Normal)
Gravity	0.330000
LiquidLayer	0 (Theme default)
ForStagePack	
StageWorld	

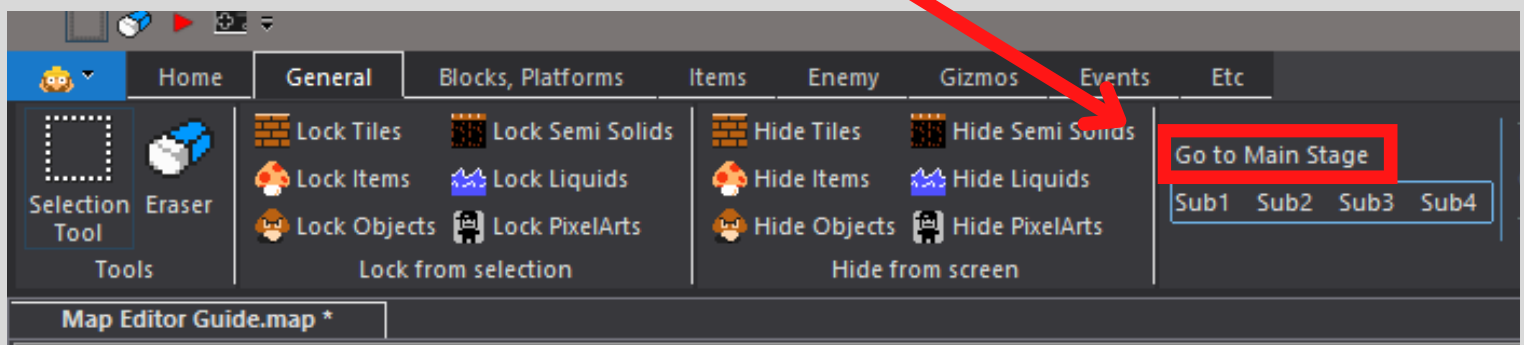


Property	Value
Stage	
AutoScroll	0 (None)
CanGoBack	true
EntranceType	0 (None)
MaxPage	16
MaxVerticalP...	1
Theme	
Background...	 (Default)
GameTheme	SMB
Theme	Overworld
Environment	
Environment	0 (Normal)
Gravity	0.330000
LiquidLayer	0 (Theme default)
ForStagePack	

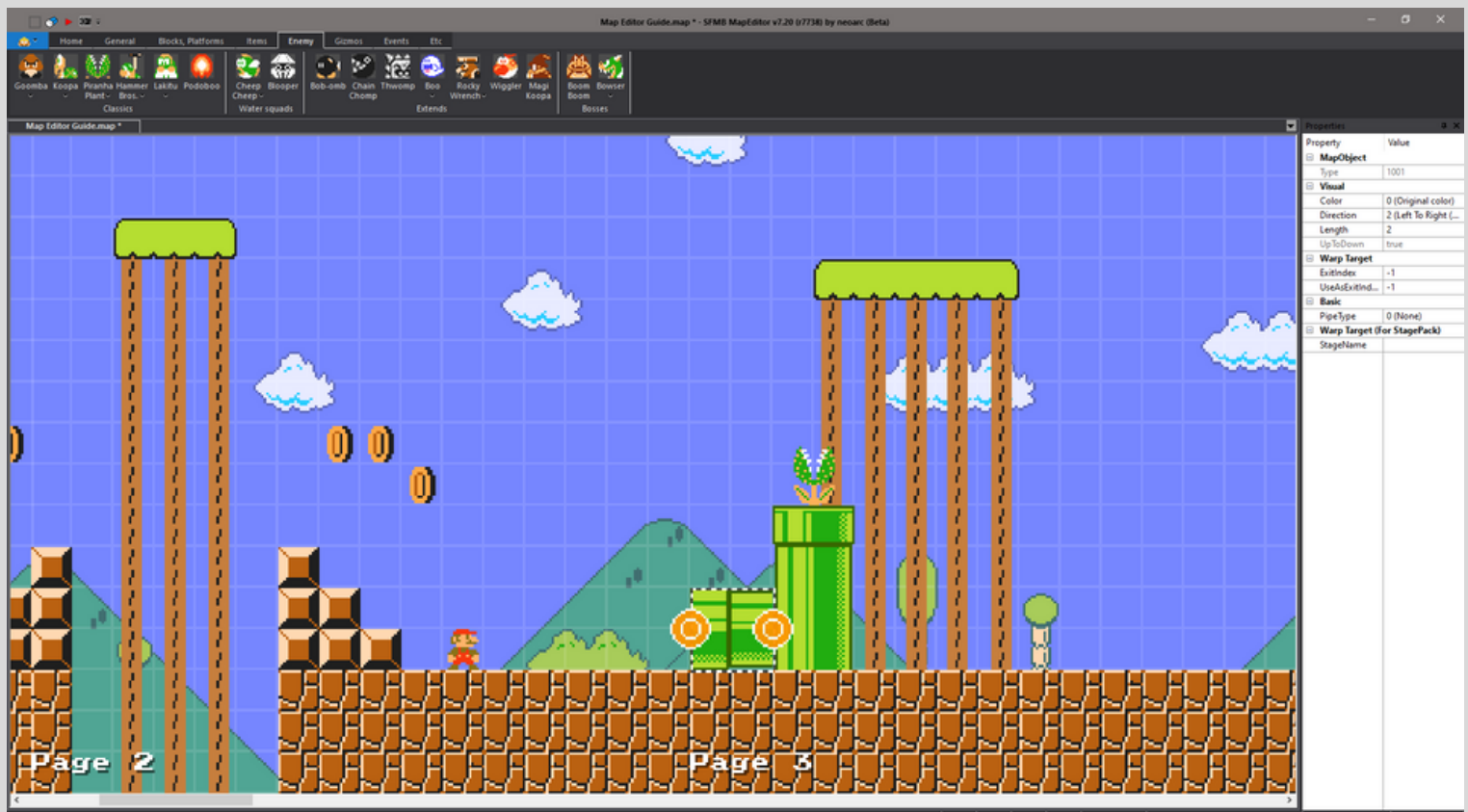
As you can see though, you can even change the GameStyle and Theme in the Subarea, meaning your level could be a SMB1 and SMB3 mix, or considering that you can have 4 different Subareas in a single level, you could even have a level with as much as 5 different GameStyles!

Although that's really cool and all, you might be wondering "ok but how do you actually switch to those sub-areas ingame?"

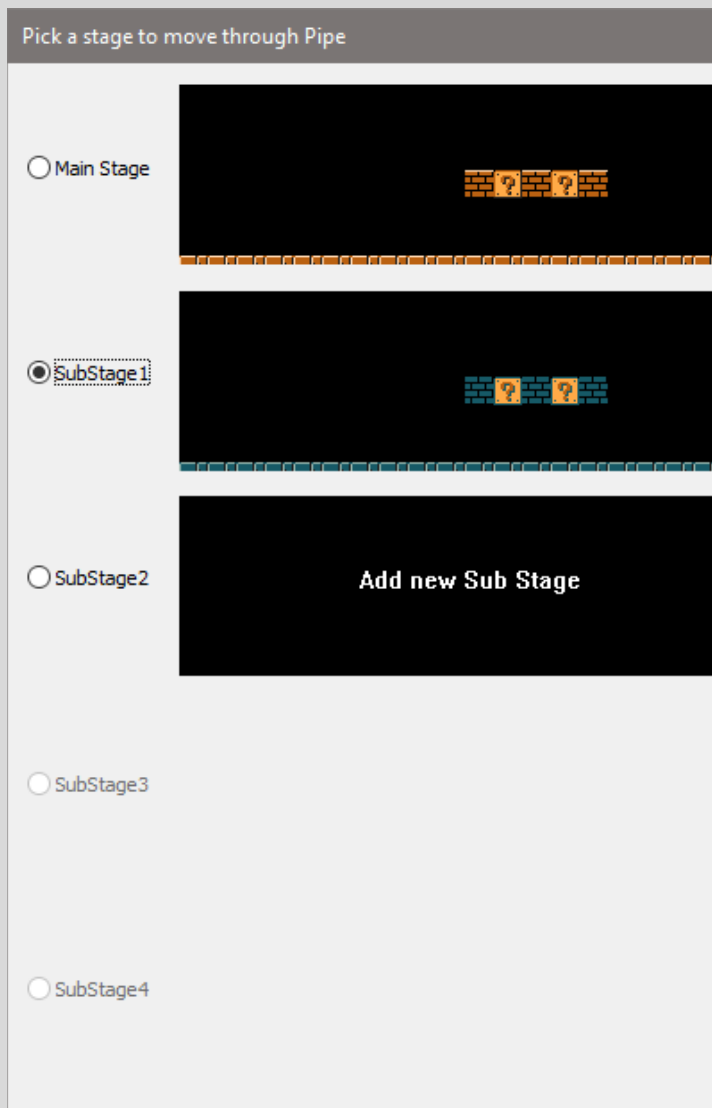
I'm glad you asked! Go back to the main area, by going to the "General" tab and choosing "Go to Main Stage".



Now go ahead and go to the "Gizmos" tab and grab a pipe. Place it down somewhere you feel like it fits in nicely. (You can rotate pipes by clicking on them and change their length just like Semi-Solids.)



Now, take Mario and drag him on top of the pipe you just made. Now, a new window should pop up, asking you what substage you want the pipe to lead to. (You can even create a new substage this way, so *technically there are four ways to create substages.*)



I will pick "SubStage 1" since I have already created that one, but if for whatever reason, you want your subarea to be a different one, you can pick any of the ones you want. (But that's kinda weird, don't do that.)

After doing so, you will be brought to the previously selected subarea and you will be asked to place down an exit-pipe. (If you chose the Main Area, you can actually make a warp within that same area.)

If you did everything right, you should now be able to warp to that Subarea in your playtest by using the pipe.

[Pro tip: If you want to make a warp back to the Main Area using the same pipe, you can simply drag Mario on that pipe again and when asked to place a new exit-pipe in the Main Area, you can just put it on top of the other one, creating a warp-pipe that works in both directions!]



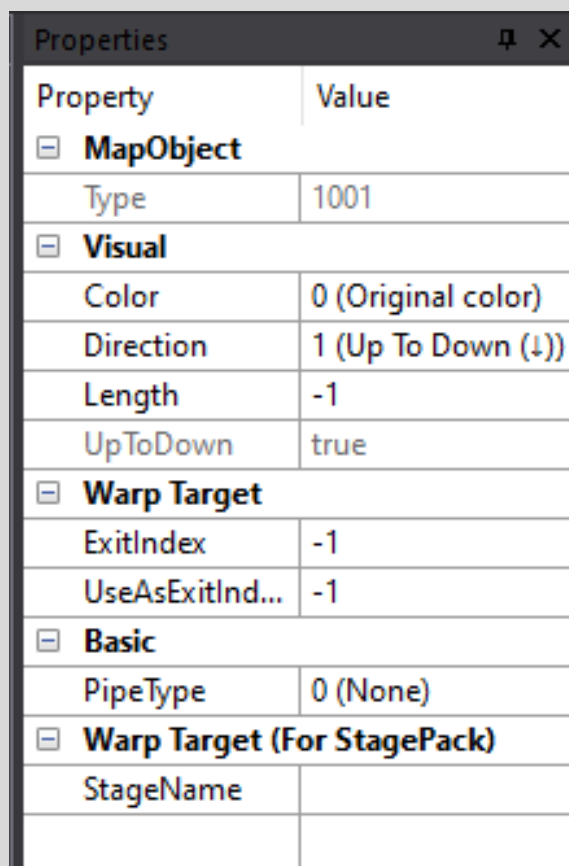
If dragging Mario on the pipe and creating a warp that way is not the way you wanna go about it, then there's another simple method of creating a new warp-pipe. Simply left-click the pipe you want to use as a warp pipe and select "Make new pipe-warp" and follow the same procedure as before. Quite simple, isn't it?

Well, if simple isn't what you're looking for, there is another way to do it, albeit a little more complicated. Select the pipe you want to use and navigate to the properties window. It should look something like this:

First, click on "0 (None)" next to "PipeType" and give it the value "4 (Warp to Substage)" to make it a warp-pipe.

Now we have to link it to a pipe in one of the sub-stages. Give this pipe the "ExitIndex" value 1 (or any other you want, just make sure you don't get confused with your numbers later) and head to the sub-area.

There, you have to select the pipe you want to exit out of and give it the "UseAsExitIndex" value you just gave the other pipe as "ExitIndex", in this case 1. Now simply type in the substages name in "StageName" (e.g. "Sub 1") and done!



The screenshot shows a 'Properties' window with a table of attributes and values. The table is organized into sections: MapObject, Visual, Warp Target, Basic, and Warp Target (For StagePack).

Property	Value
MapObject	
Type	1001
Visual	
Color	0 (Original color)
Direction	1 (Up To Down (↓))
Length	-1
UpToDown	true
Warp Target	
ExitIndex	-1
UseAsExitInd...	-1
Basic	
PipeType	0 (None)
Warp Target (For StagePack)	
StageName	

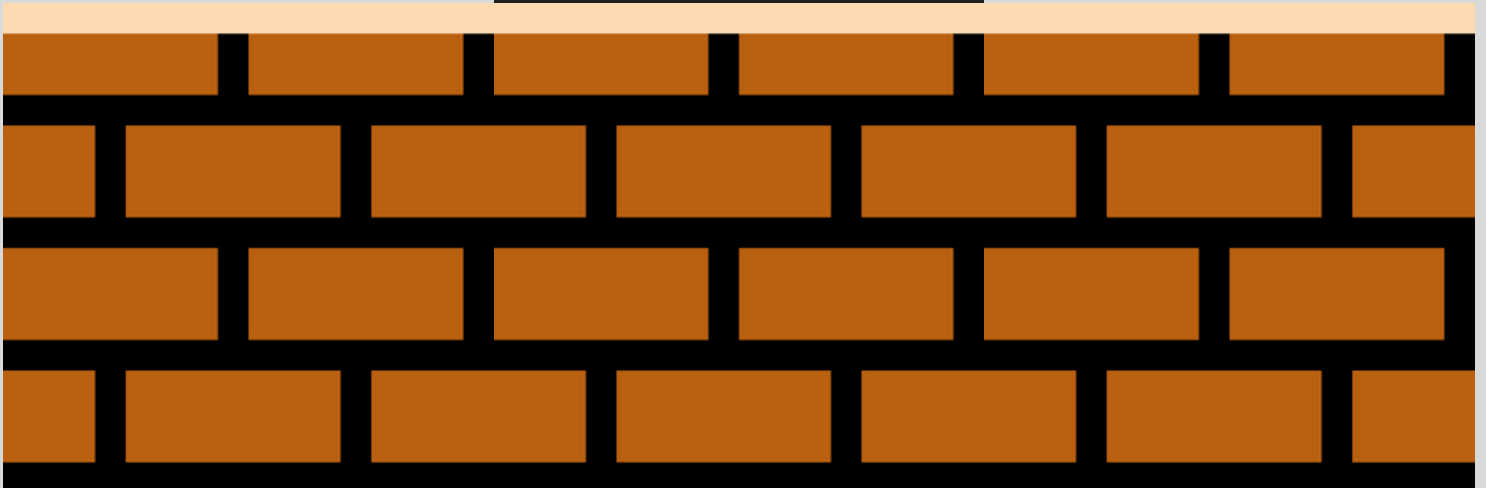
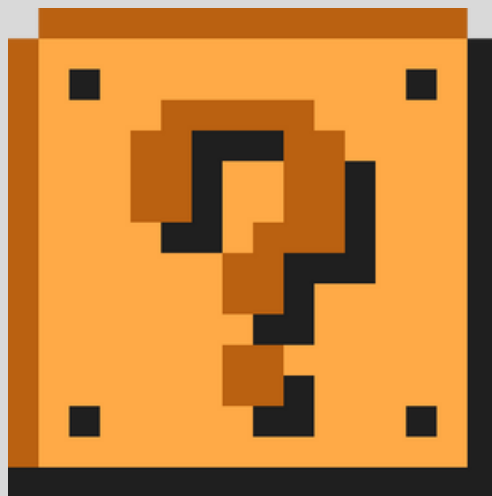
However, *I do not recommend using this method*, as it is simply more tedious, often doesn't work right away and the other 2 methods I showed you are much faster. (But at least you know this method exists.)

[By the way, everything you just learned for making warp-pipes also applies to doors! (And for doors I actually do recommend using the more tedious method, as it can get quite confusing very quickly if you use a lot of warp-doors across your main-area, as well as your sub-areas, which really happens more often than you would think!)]

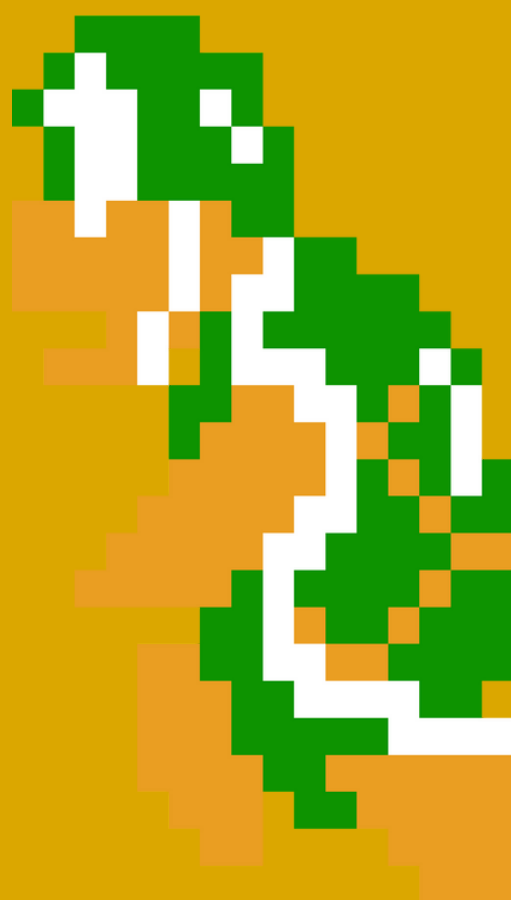
Congratulations!

You now know how to change the GameStyle and Theme of your level in the main-area, as well as the subareas, and how to create warp-pipes and warp-doors to those subareas and within your main-area!

In the next chapter, you will learn how to change the Environment in your level, what CanGoBack and Autoscroll is, as well as what some of the most useful things from the Event tab do.



04 - EVENTS AND ENVIRONMENT



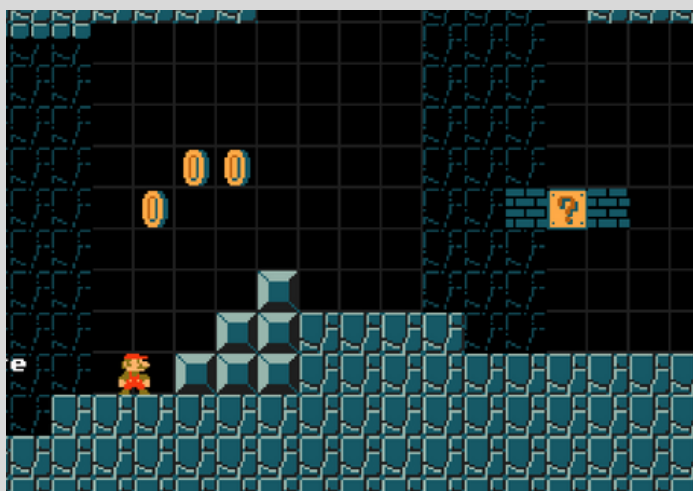
04 - EVENTS AND ENVIRONMENTS

By now, you already know enough about the Editor to find out the rest by experimenting around, but there are a few more things I wanna talk about in-depth and explain them to you so you dont get confused. First off there are the "Environment" options in the properties window.

The "Evinronment" option itself lets you change really cool stuff about your level! For example you could have your level be taking place in a thunderstorm!

Environment	
Environment	0 (Normal)
Gravity	0.330000
LiquidLayer	0 (Theme default)

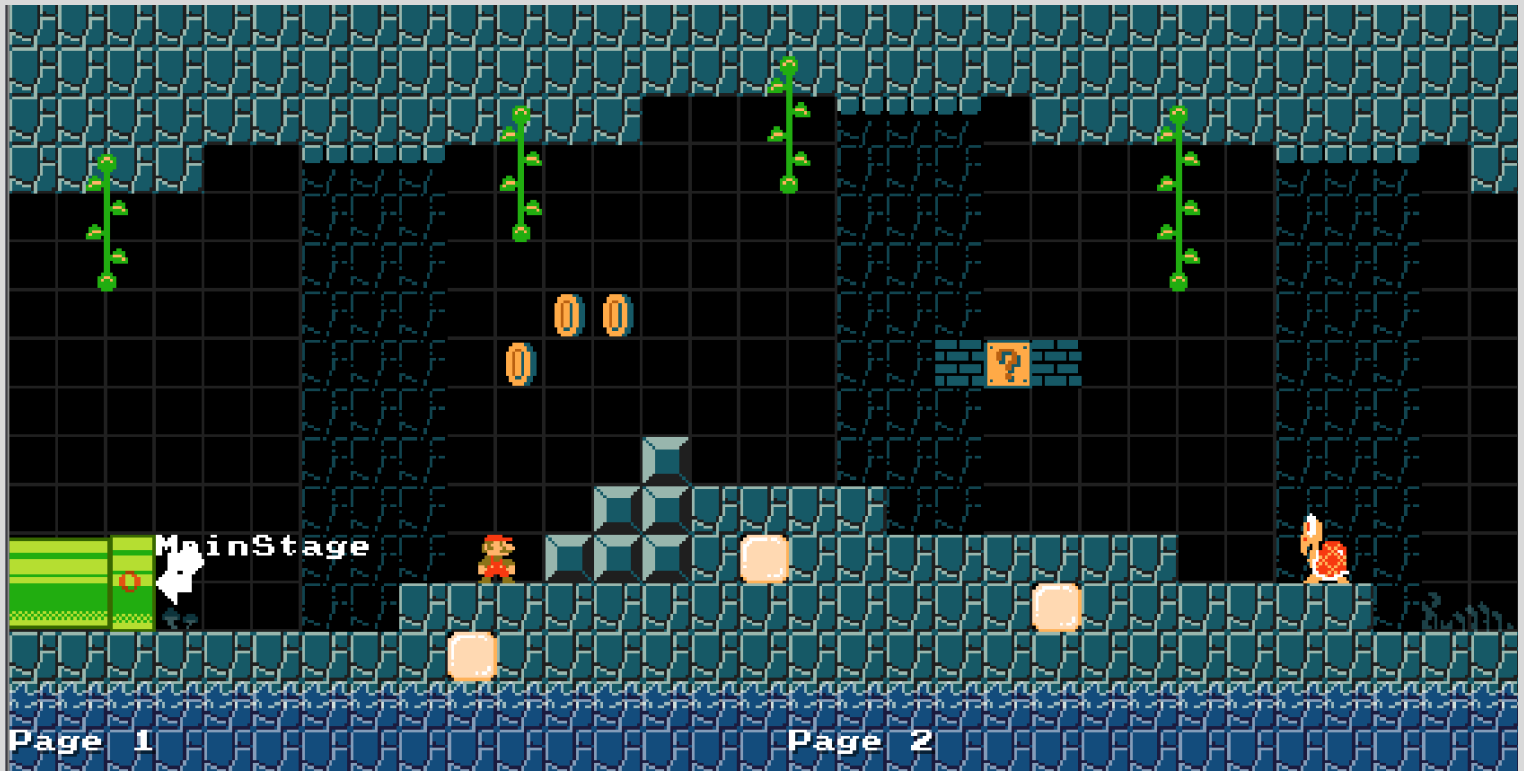
Just experiment around with the different options and playtest your level to see them take effect! [Pro Tip: These options are stage-specific, so you can have one subarea be a "Dark Cave" and your main area be normal.]



Next up is "Gravity" and this is where things get really interesting and sometimes buggy. *The standard gravity the game uses is 0.33*, which should already be there. Now, if you increase that number, obviously the gravity will be stronger and if you lower the number, it will be weaker.

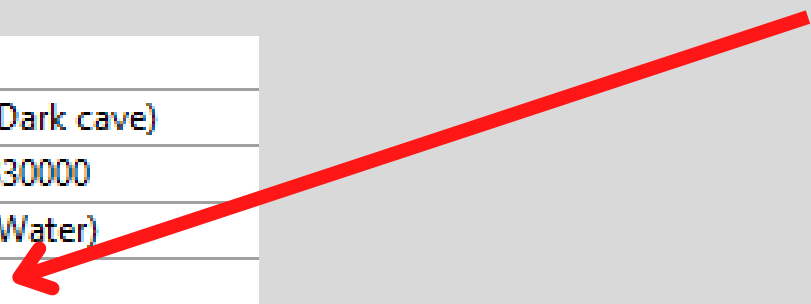
Lowering the gravity in your level is great for making levels that take place in the space-theme for example, but it can be used for quite a lot of creative things- I'm excited to see what you can come up with!

Last but not least in our "Environment" section is the "LiquidLayer", which is very useful if you want to make levels that are completely submerged in water, but for example aren't traditionally a water-theme, such as Castle, etc. or if you just want to have a layer of water, lava or poison in your level without having to place it all down yourself:

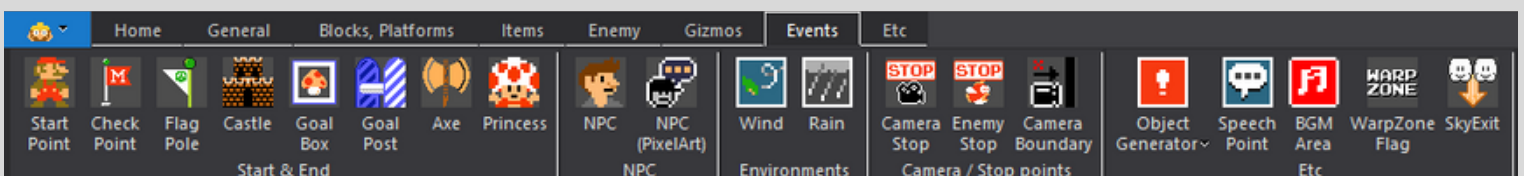


You can also change the height of the LiquidLayer by typing in a new number at "LiquidLayerHeight". The default in this case is "1".

Environment	
Environment	1 (Dark cave)
Gravity	0.330000
LiquidLayer	2 (Water)
LiquidLayerH...	1

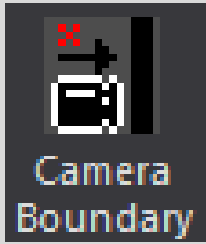


Next we're going to look at some advanced stuff from the "Events" tab.



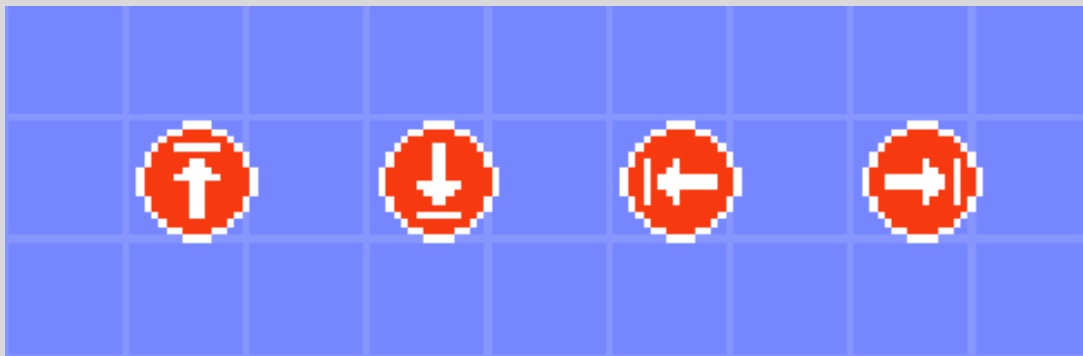
Let's start with the most useful Event objects. First up is something that can be extremely useful in a lot of different ways.

The "Camera Boundary" object.



This object has some very useful properties. Obviously, it can of course be used as a camera boundary in your level, meaning the screen-camera will stop at that boundary until you have passed it. When placing it down in your level, it can

face a total of 4 directions. Up, Down, Left and Right:



Be careful though, placing them in the middle of the air like that does absolutely nothing (especially in that combination). To make the camera boundary object actually work, you need to remove three of them. Just keep the one pointing to the right for now and click on it.

Check out the properties window and navigate to "UnlockCondition".

Currently, the value "0 (Destroy any attached block)" is selected, meaning *the camera will not move past that boundary until ANY attached block has been destroyed.* (Bob-Ombs can destroy a variety of blocks, like Bricks, Hardblocks, etc.)

To make the camera move without having to destroy any blocks, you will have to select "2 (Touch Boundary)". That way, *the player just has to touch the boundary.*

Properties	
Property	Value
<input type="checkbox"/> GameObject	
Type	6053
<input type="checkbox"/> Base	
Direction	0 (Right ->)
UnlockCondi...	0 (Destroy any at...
<input type="checkbox"/> AffectedArea	
Height	1
Width	1

As you can see, it also has a "Height" and "Width" modifier, meaning you can make the object bigger. This is useful if you have set the value of the "UnlockCondition" to "1 (Destroy all attached block)".

This condition will require that **ALL** attached blocks get destroyed before the camera boundary will unlock. These 2 values (1 and 2) are also useful when making an auto-scrolling level, as the scroll will stop at those boundaries and continue when the UnlockConditions have been met.

Speaking of Auto-Scrolling: you can find this feature in the properties window. Simply select a scrolling speed and your level will become an auto scroller!

Property	Value
<input type="checkbox"/> Stage	
AbilityFlag	753
AutoScroll	0 (None) <input type="button" value="v"/>

Next up on our list of objects from the "Event" tab is the "BGM Area". This object allows you to change the music in either a specific area or the whole stage (sub-stage).

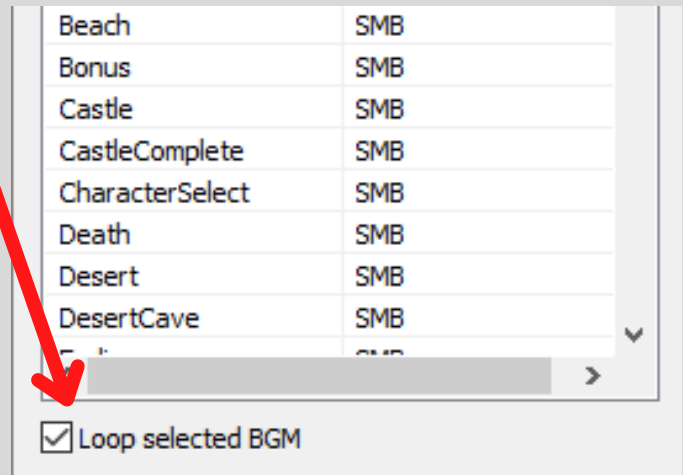
There isnt really much to explain about it. After placing it down and depending what you chose, it will look like one of these two:



You might have noticed that it says "<No BGM selected>". Let's change that and select the "Underground" BGM in the properties window by clicking the empty space next to "BGM". This should bring up a new window where you can select the BGM you want. (These are GameStyle specific. You will not be able to use NSMBWii music in an SMB3 level.)

Also, make sure you check the box that says "Loop selected BGM", or else the BGM track will only play once and then you're stuck with silence.

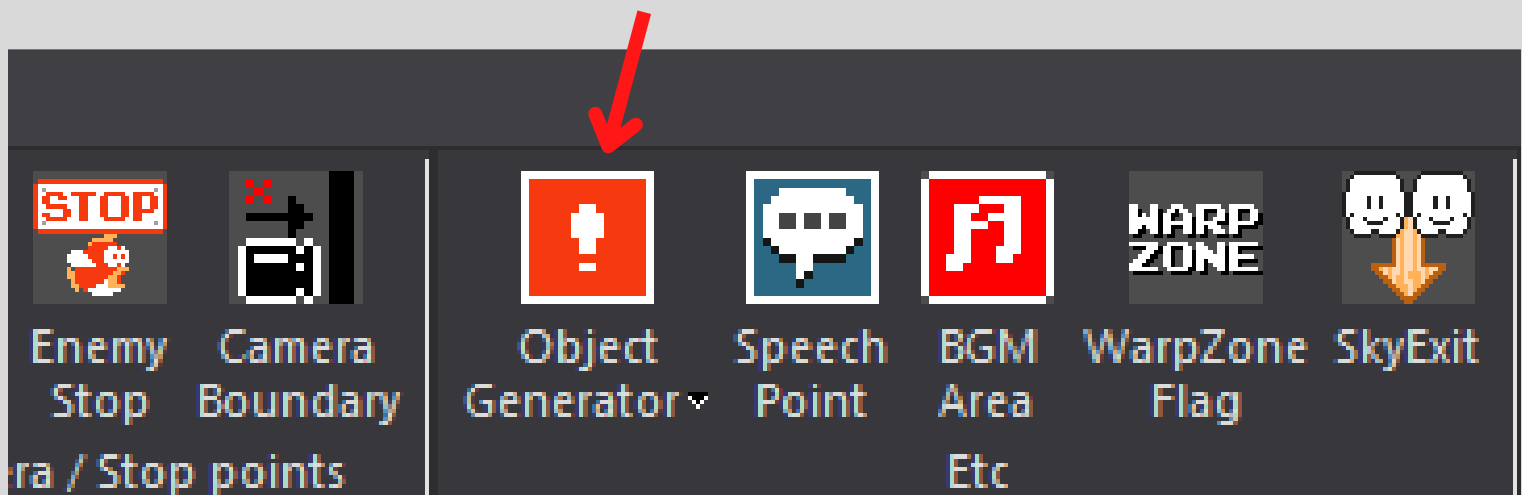
This can of course be utilized too, but generally you should always check that box to loop your BGM.



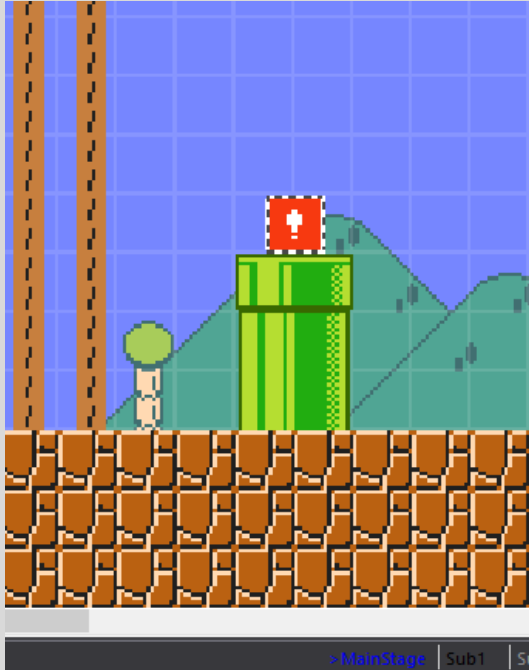
[Pro Tip: If you have a BGM Area object that is set to "WholeStage: true", no other BGM Area object will take effect in that sub-stage, so be mindful of that when using BGM Area objects!]

The "Wind" and "Rain" objects work similar to the BGM Area object and I probably don't have to explain what they do. Just mess around a little with them and you will figure out pretty quickly what they both do.

Let's shift our attention to an object that can be very useful and utilized in a lot of creative ways: the "Object Generator" object!



First, let's start by placing it down somewhere in the level. I will put mine on top of a pipe, to "make enemies spawn from it".



Property	Value
<input type="checkbox"/> GameObject	
Type	6035
<input type="checkbox"/> ObjectGenerator	
Chance	100
GeneratePosi...	0 (GeneratorPosi...
GenerateType	0 (None)
Interval	1
MaxCount	3
Range	0 (JustThisPage)

I'll explain what everything does, starting from the top of the properties.

"Chance" - How high the chance of spawning the object is per interval.

"GeneratePosition" - Where the enemies will spawn from. Either the Generator position, the bottom of the screen, or the right of the screen.

"GenerateType" - What object will be generated. I chose "Goomba".

"Interval" - How often the object will be generated.

"MaxCount" - How many of the objects are allowed to be on-screen until the Generator stops generating new objects.

"Range" - If the objects should be generated at all times, or only when the player is on the same page as the Generator.

As you might have already guessed, there are tons of combinations you can do here and lots of stuff you can generate with the Object Generator.

Let's move on to something a little less complicated, but even cooler.

What? You think there can't be anything cooler than an Object Generator?

Well, think again, because we are now going to take a look at "NPC"s.

You know the drill by now. **Select the NPC object and place it somewhere in your level. I'll put mine on the ground for now.**



Now you might be thinking: "Hey! Why do you have a super awesome and cool sign, but I only have this old, boring guy in a shirt?"

Well, first off: *that's Neo*. Second: you can cycle through the 3 different NPCs by clicking on them. They are the same for every style: Neo > Toad > Sign.

You can also change the NPC type by selecting it next to "NPCType". (Who would've guessed?!) There is a few things you can do with that NPC. **Mainly, you of course want him to say something.** You do that by typing text into the empty space next to "Message". (Pro tip: Typing \n in there will start a new line.)

Next, we choose how that message gets triggered by choosing an option from "Trigger".

"0 (Near)" - You just have to stand near the NPC for it to say its message.

"1 (Press UP key)" - You have to stand near the NPC and press up to make it say its message.

One key difference here is, that while choosing "0 (Near)", the game will continue running, but when choosing "1 (Press UP key)", the game will pause during the message and then continue afterwards.

"LookAt" is pretty self-explanatory. Depending on what you choose, that is where the NPC will look at.

"TextRendering" is something you best shouldn't touch. **Just leave both values in their "true" state.**

Property	Value
GameObject	
Type	6032
AfterEvent	
ActionAfterE...	0 (Stay Forever)
ItemAfterEvent	0 (None)
Advanced	
LookAt	0 (Player, if have ...)
NPC	
Message	
NpcType	2 (Sign Board)
Trigger	0 (Near)
TextRendering	
Proportional...	true
WordWrap	true

"AfterEvent" is a little more interesting. Here you can choose what happens after talking to the NPC. This only applies though, if "Trigger" is set to "1 (Press UP key)".

"ActionAfterEvent" is what happens to the NPC after saying its message. "ItemAfterEvent" will spawn the item you choose after the NPC has finished saying its message.

With this, you could for example make the NPC disappear with a Poof and make it leave a Fire Flower behind for Mario!

[By the way: if the "Trigger" is set to "1 (Press UP key)", the NPC will only say its message once. If you want the player to be able to read it multiple times, you will have to set it to "0 (Near)", sacrificing the option to use "ActionAfterEvent" and "ItemAfterEvent", so keep that in mind!]

Last, but not least in our "Event" tab: our best friend, the "Checkpoint"!

One great thing about SFMB is, that you can have as many Checkpoints in your level as you want!

SFMB does not limit you in unreasonably stupid ways, like Mario Maker 1 and 2.

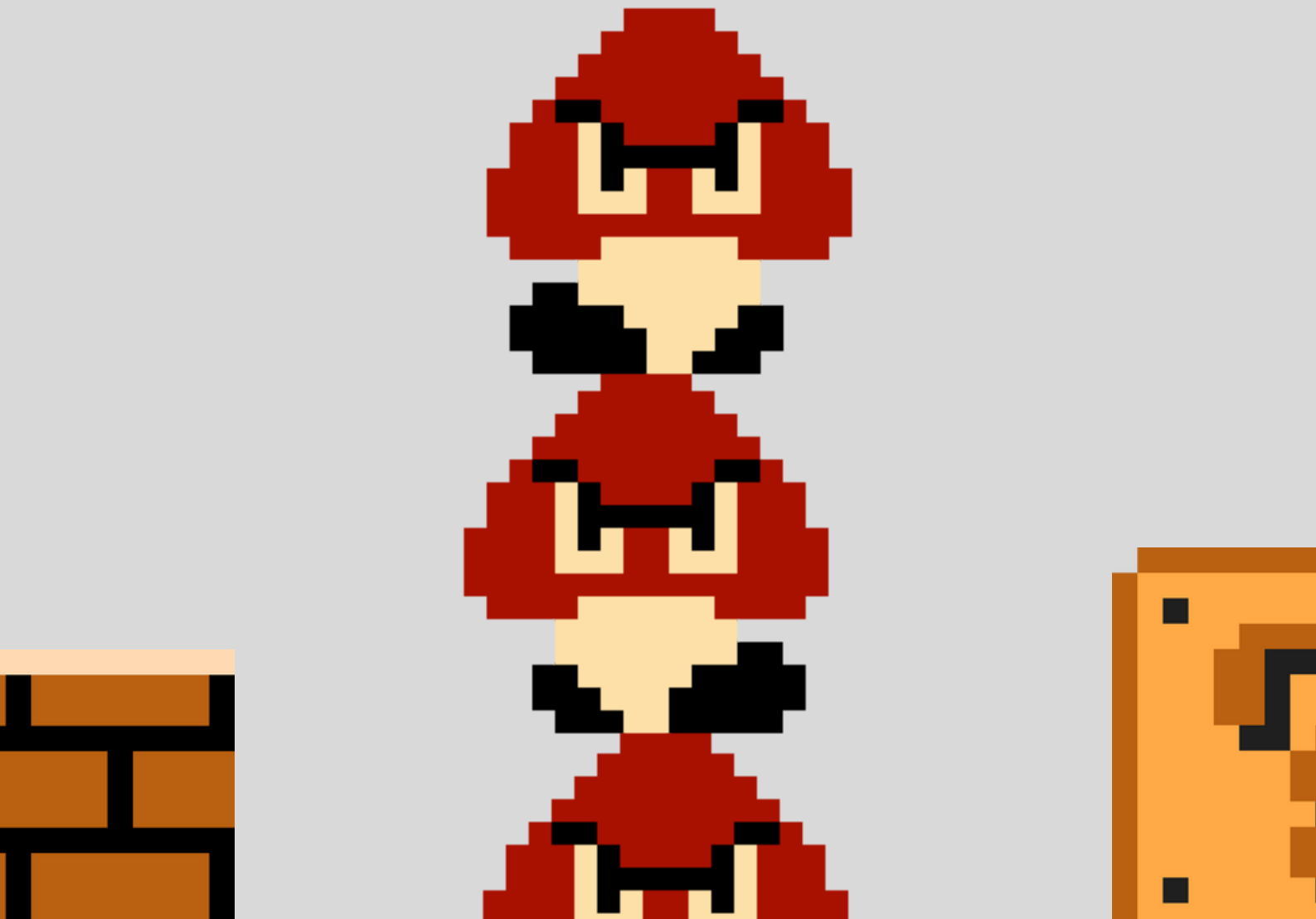
As you should know by now, you can change a few things about the Checkpoint object in the properties window, such as if activating the checkpoint should reward the player with an item, like a Mushroom.



Congratulations!

You now know how to use a vast variety of very useful event objects and how to use the "Environment" settings to your advantage to make the level of your dreams.

In the next chapter, you will learn how to create a sprite, how to import them into the Editor and finally, how to assign those sprites to a PixelArt object, so you can use it in your level. You will learn what all the different properties and their values do when using a PixelArt object- and finally, you will learn how to make a Custom NPC, by using PixelArt.



05 - THE WONDERS OF PIXELART



05 - THE WONDERS OF PIXELART

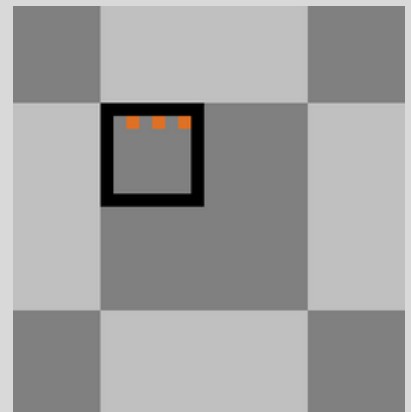
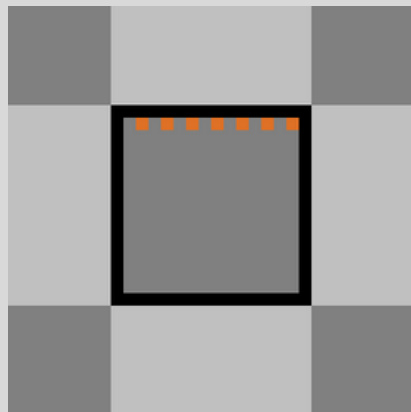
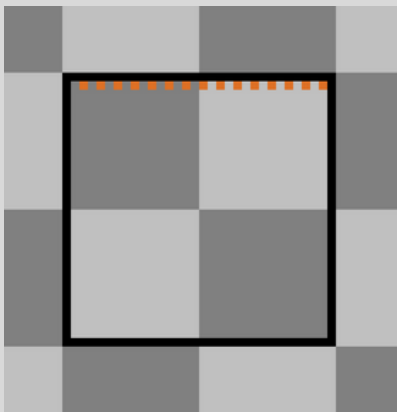
Now we are getting into the advanced stuff. You want to use PixelArt in your level, eh? First off, I recommend getting a program like "Aseprite" for doing your PixelArt. You can, of course, try doing the PixelArt in the Editor itself, but that's *definitely not recommended*.

(If you don't have the money to buy Aseprite, just DM me.)

Before being able to use any PixelArt in your level, you of course have to sprite some stuff first- and for doing that you need to know what to keep in mind.

First off, dimensions:

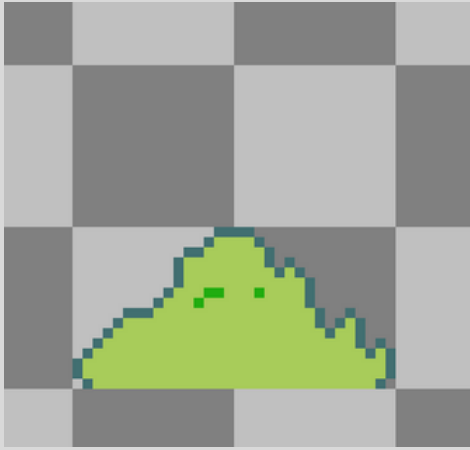
Your PixelArt can be in either 32x32, 16x16 or 8x8.



Also, keep in mind that your PixelArt can not use more than 32 colors!

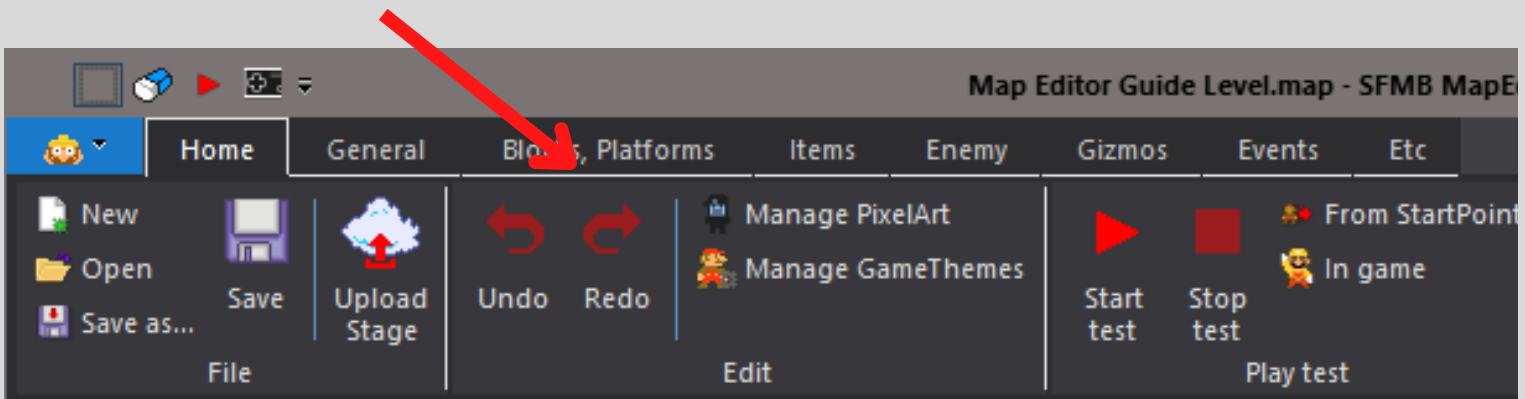
If you're done picking the size and making your sprite, it could then look a little something like what I made- a bush in SMB1 style that I will be using as decoration in the level I've been using as an example this whole time.

But you can, of course, do whatever you want and go bonkers.

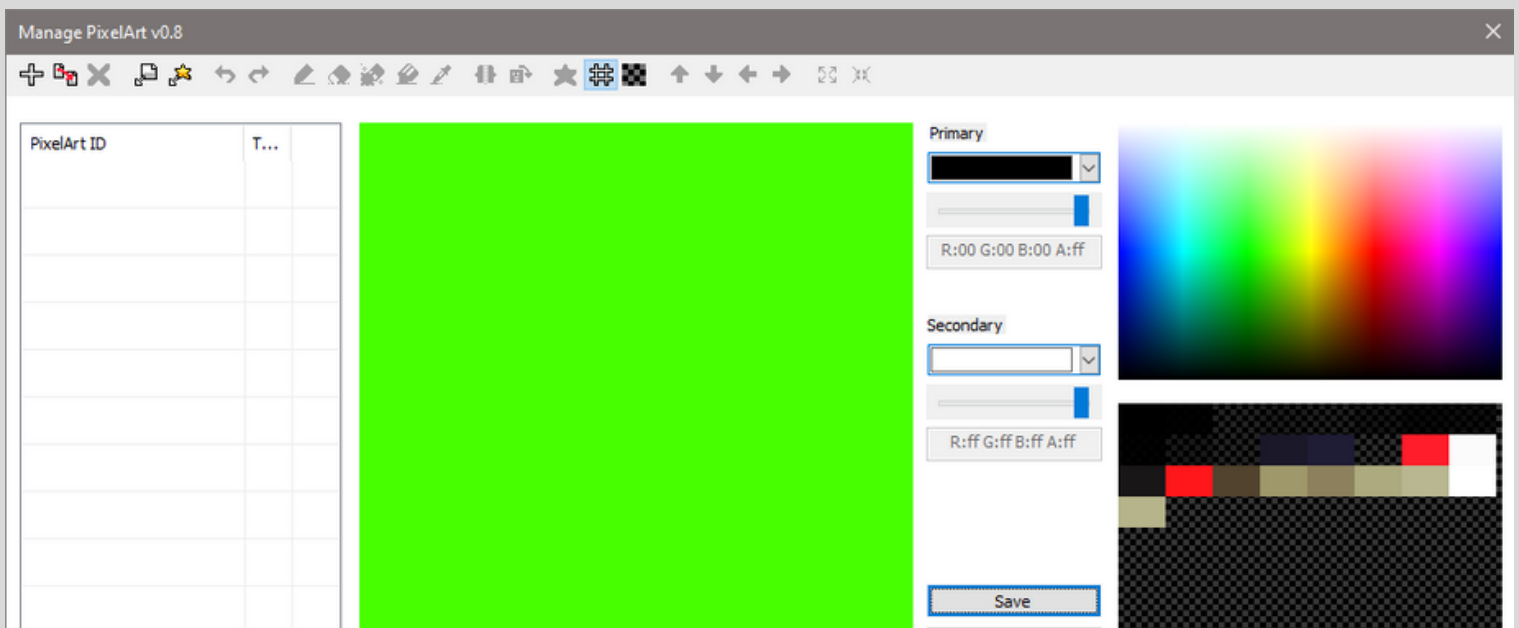


[Pro Tip: If you're not good at spriting, you can go and recycle a lot of sprites by going into the games files and grabbing whatever you need from the respective themes files! I did not sprite this bush myself, its just a recycled SMB1 bush that I slightly edited to fit the 32x32 dimensions!]

Now, in the Editor, navigate to the "Home" tab and click on the little icon that says "Manage PixelArt". We will now import the sprite we just made.

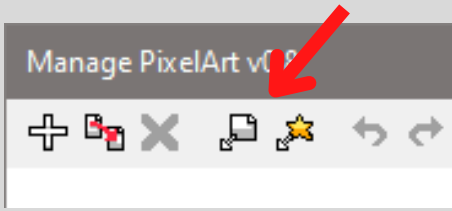


You should now see this window:



Don't worry about this looking a bit complicated at first- everything is very self-explanatory. (Especially if you're already familiar with stuff like this from a little bit of knowledge from other artistic programs.)

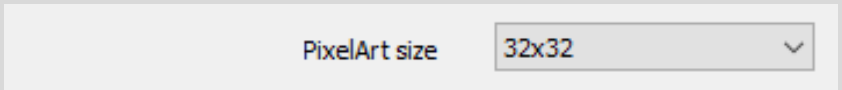
Go ahead and click on the following icon and select the file that you saved your sprite as on your computer. (Make sure that it is a .png file!)



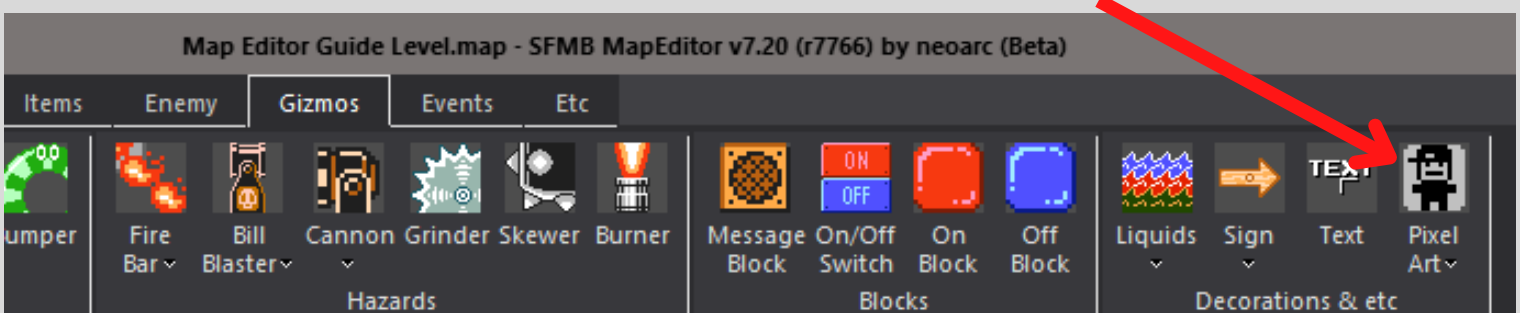
You should then be greeted by a new window that looks like this and here you have to manually and carefully select your sprite with your mouse:



Don't worry if the red box seems to be too small to fit your sprite, you can change the size (16x16 by default) in the top right corner of that window to have a bigger selecting-area. After you've done that, click ok- and back at the first window, click "Save". That's how you import a sprite!



Now go to the "Gizmos" tab and select the "PixelArt" object from there.



Place the object down in your level and don't be confused as to why there is nothing there, because we still have to assign a sprite to that PixelArt! So, since we've just made one and imported it, let's do exactly that! Head over to the properties window.

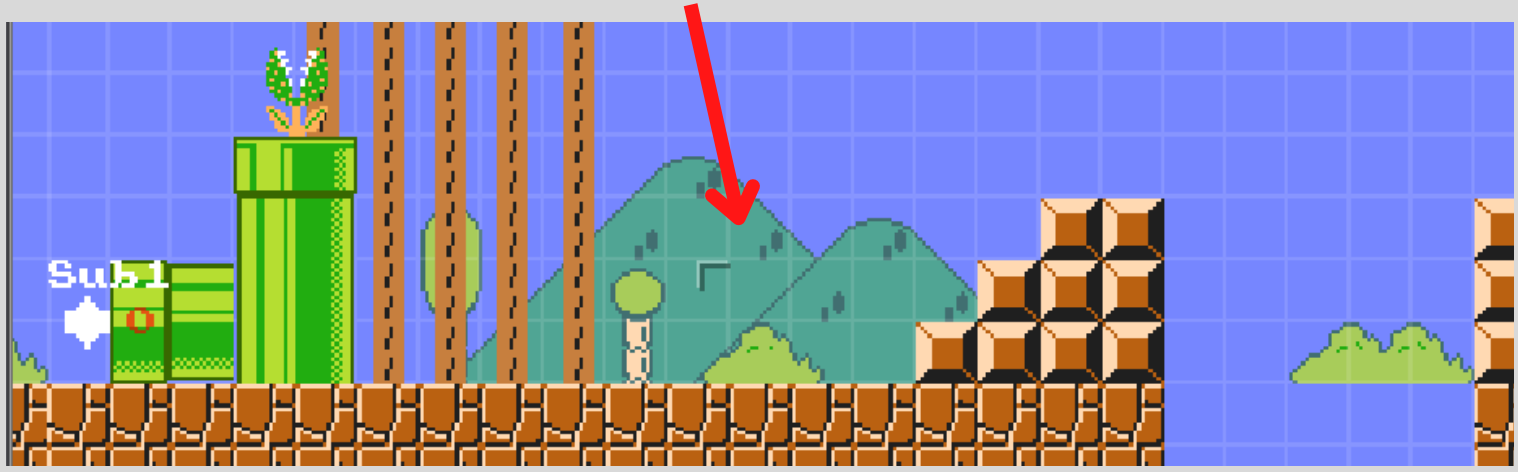
Property	Value
GameObject	
Type	6040
PixelArtViewer	
Angle	0.000000
Behavior	0 (Fade if near)
FlipH	false
FlipV	false
IsFront	false
Opacity	100
Scale	2
PixelArt	
PixelArtID	

Before we continue, here is what everything does:

- "Angle" - rotates the PixelArt.
- "Behavior" - How the PixelArt will behave in your level. (I'll explain this in more detail in a bit.)
- "FlipH" - Flips the PixelArt horizontally.
- "FlipV" - Flips the PixelArt vertically.
- "IsFront" - If the PixelArt is in the foreground or not (including in front of the player and other PixelArts).
- "Opacity" - opacity of your PixelArt.
- "Scale" - the multiplied scale of your PixelArt (is 2 by default, should be 1)

And last, but not least: "PixelArtID" - this is where you select the sprite that will be assigned to this PixelArt.

Go ahead and select the one you just imported and you will see, now there is a (in my case) bush in your level!



But, oh no.. if you go ahead and playtest your level, you will notice that when coming close to your PixelArt, it is starting to fade out.. and that is where the "Behavior" values come into play!

You see, the reason why your PixelArt fades out when being close to it, is because the value "0 (Fade if near)" is selected by default.

The values and what they do are as follows:

"0 (Fade if near)" - *PixelArt will start fading out when the player is near it.*

"1 (Fade if near & able to troll)" - *Same as 0, but old value, just ignore.*

"2 (Disappear with smoke if near)" - *The PixelArt will disappear with a little smoke effect when the player comes near it. (It will not re-appear!)*

"3 (Blinking forever)" - *The PixelArt will.. blink.. forever.*

"4 (Do nothing)" - *The PixelArt will do absolutely nothing. It will not disappear, or blink, it will just be an element in your level.*

(In my humble opinion, this should be the default value for every newly created PixelArt, since it is the most commonly used one.)

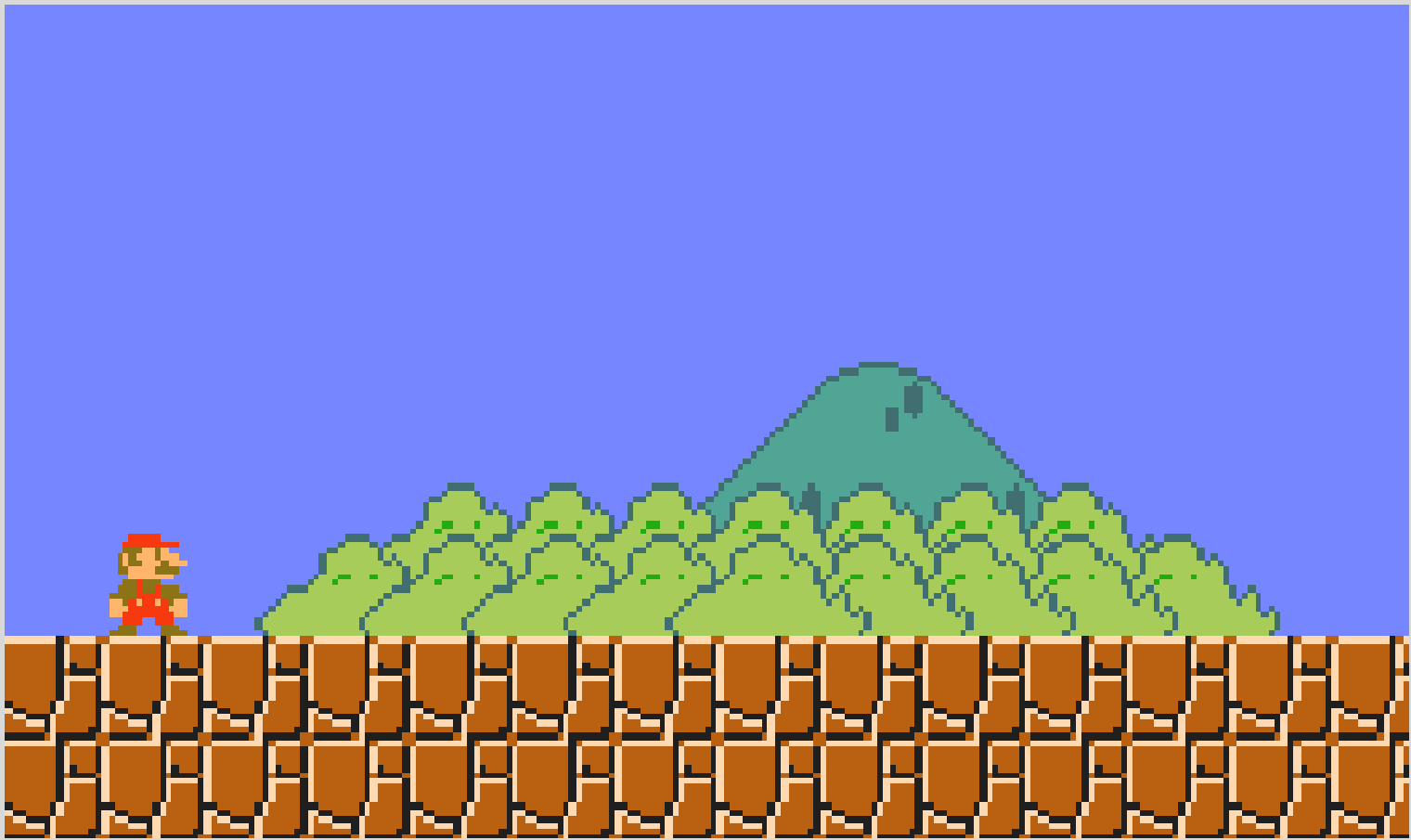
Next, I'm gonna teach you a little trick that no one else knows about so far. (This Guide is actually useful? What?)

If you want to layer your PixelArts, but don't want to use "IsFront" to layer them in front of everything, including Mario, then read the following carefully my friend:

If you copy a PixelArt object, by using the "hold CTRL" method, the PixelArt object that you have copied your new object from, will be layered in front of all other PixelArt objects that have existed before it, also including the one you just copied.

The OLD PixelArt object, that you just copied a new one from, is now layered in front of all other PixelArt objects, NOT the NEW one!

And with this technique, you can make layers upon layers of PixelArts, without using the "IsFront" value at all:



Now you know how to use PixelArt in your level! However, there is one last thing I want to teach you that uses PixelArt: Custom NPCs.

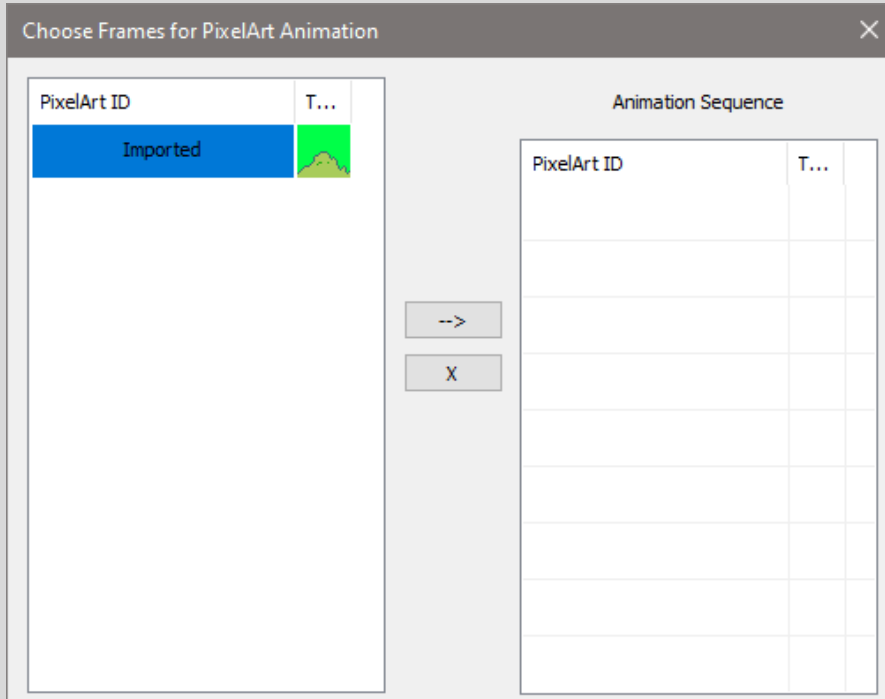
You know what comes next. (*wink wink*) Visit the "Events" tab and grab your local "NPC (Pixelart)" object. Put it somewhere in your level and head over to the properties window once again.

Most of these options should look familiar to you by now. "AfterEvent", "Advanced", "NPC" and "TextRendering" are all exactly the same as for a normal NPC. The only big difference for custom NPCs is, that you can assign your own PixelArt to those NPCs, including a talking animation and a throw-item animation.

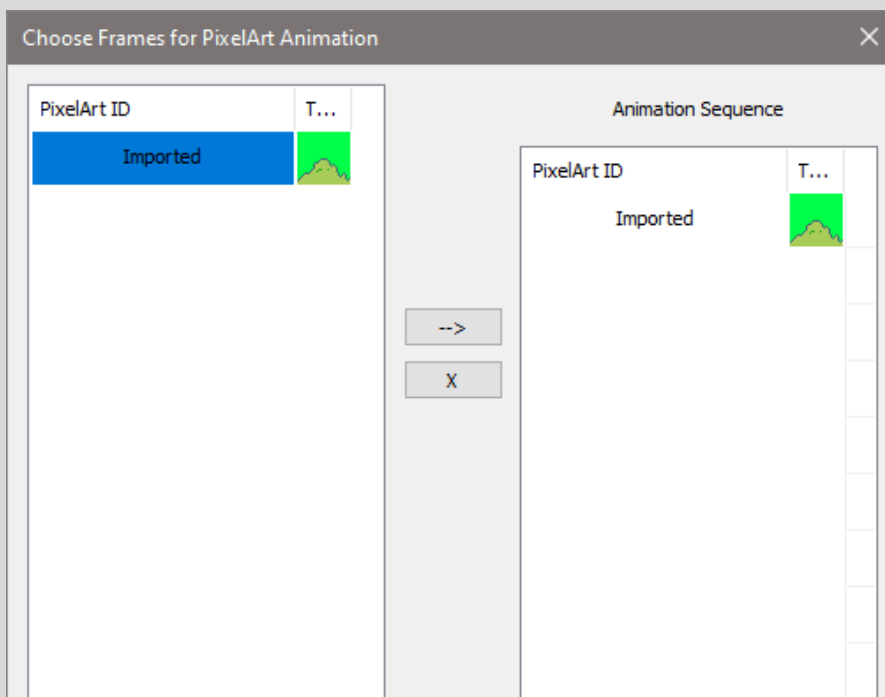
But first off, you should go ahead and assign one of your sprites to the "PixelArtID", to give the NPC a base.

Property	Value
GameObject	
Type	6052
AfterEvent	
ActionAfterE...	0 (Stay Forever)
ItemAfterEvent	0 (None)
Advanced	
LookAt	0 (Player, if have ...)
NPC	
Message	
Trigger	0 (Near)
Appearance	
PixelArtDelay	16
PixelArtID	
PixelArtID-Talk	
PixelArtID-Th...	
TextRendering	
Proportional...	true
WordWrap	true

After doing so, a new and unfamiliar window will pop up:



As you can see, on the left is the PixelArt you just added and on the right is the "Animation Sequence". Now you can add the PixelArt you want to the NPCs default animation sequence by clicking on the arrow in the middle. (If you dont have any other "frames" for an animation sequence, just add 1 frame of the PixelArt you chose.)



When you're done with creating your animation sequence, just "Save" and you should be done! *Your custom NPC will now look like the PixelArt you added!* The rest works the same way as for normal NPCs, so just play around in the properties window with that.

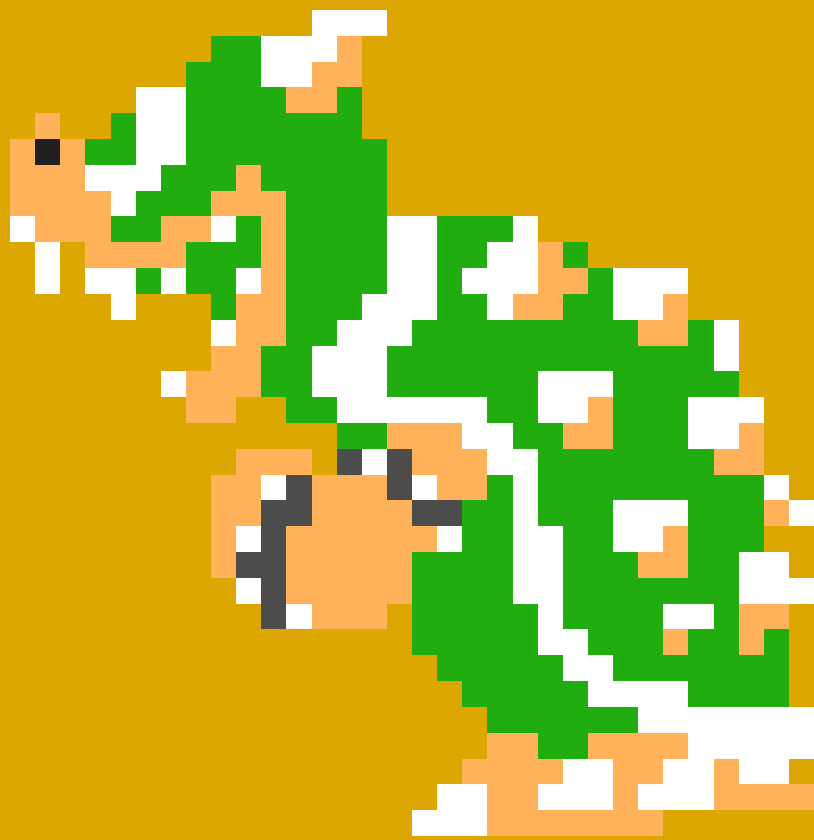
Congratulations!

You now know how to sprite and add PixelArt to your level, how to utilize layering for those PixelArts and how to add custom NPCs to your level.

Now you know all the basics of how to use the SFMB Map Editor and how to make the levels of your dreams! In the last chapter, we will go over how you can put all of those levels into a Stagepack and how you can publish it!



06 - STAGEPACKS AND FINAL WORDS



06 - STAGEPACKS AND FINAL WORDS

Lastly, we have Stagepacks. These are basically what you would call the equivalent to Super Worlds in Mario Maker 2, *only that you can create and publish as many as you want.*

Stagepacks will not be published to Stage World, but instead get their own category in the game's menu, called.. well.. "Stagepack".

To start making a Stagepack, you first need a few levels of course. And with a few, I dont mean 4 or so.. personally I think a good amount for traditional packs is anything 16 levels and over.

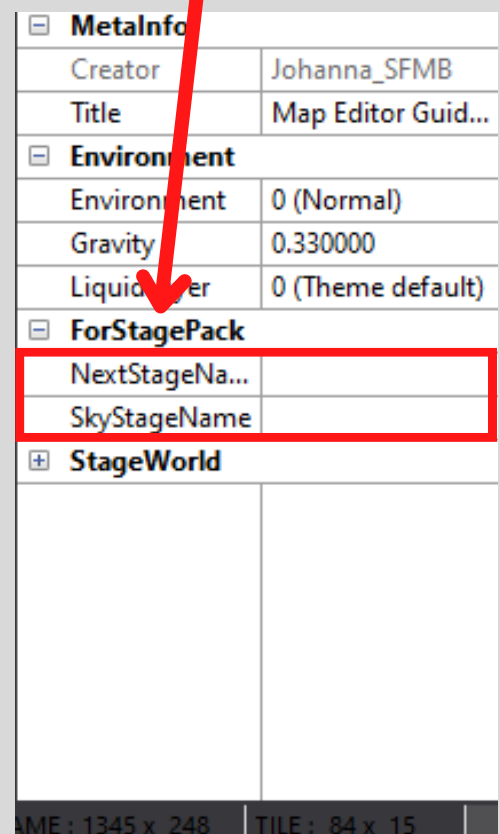
These levels need to link to each other in order for the game to know that 1-2 comes after 1-1 and so on. For this, go to the **Main Area** of each level and navigate to the properties window, where it says "ForStagepack".

"NextStageName" is obviously where you will have to put the name of the level that is supposed to play after this one.

For example: If this level is "1-1", the next level would be "1-2". So you would put "1-2" into that box. (Make sure your levels file name and "Title" are the same, so you don't get confused easily.)

Do this with every level until you've made sure that all levels link to each other in their correct order.

"SkyStageName" can be ignored.



To end a stagepack, you need to have a level that uses the event "Princess" object to end the level, otherwise the game will attempt to go to the next stage and you will end up in a "level" with a completely black screen.

Now that you have all of your levels ready, go put them in a single .zip folder together and create a .txt file. Call this file "StagePack.json" and add the following text formatted exactly as is:

```
{  
  "Name": "The name of your Stagepack",  
  "Creator": "Your name (does not have to be your ingame name)",  
  "InitialStage": "the exact name of the first stage of your Stagepack"  
}
```

Obviously, you are supposed to replace everything with what actually applies to you. In my case, it would look something like this:

```
{  
  "Name": "Map Editor Guide Stagepack",  
  "Creator": "Johanna_SFMB",  
  "InitialStage": "Map Editor Guide Level"  
}
```

Now save the file and you're ready to submit the stagepack to Neoarc! *(It is recommended though that you test your stagepack before submitting it.* You can do this by creating a new folder in "`\Mario\Multiverse\Files\Resources\Map`" and putting your levels and the .json file in there, then opening the game and playing it from there.)

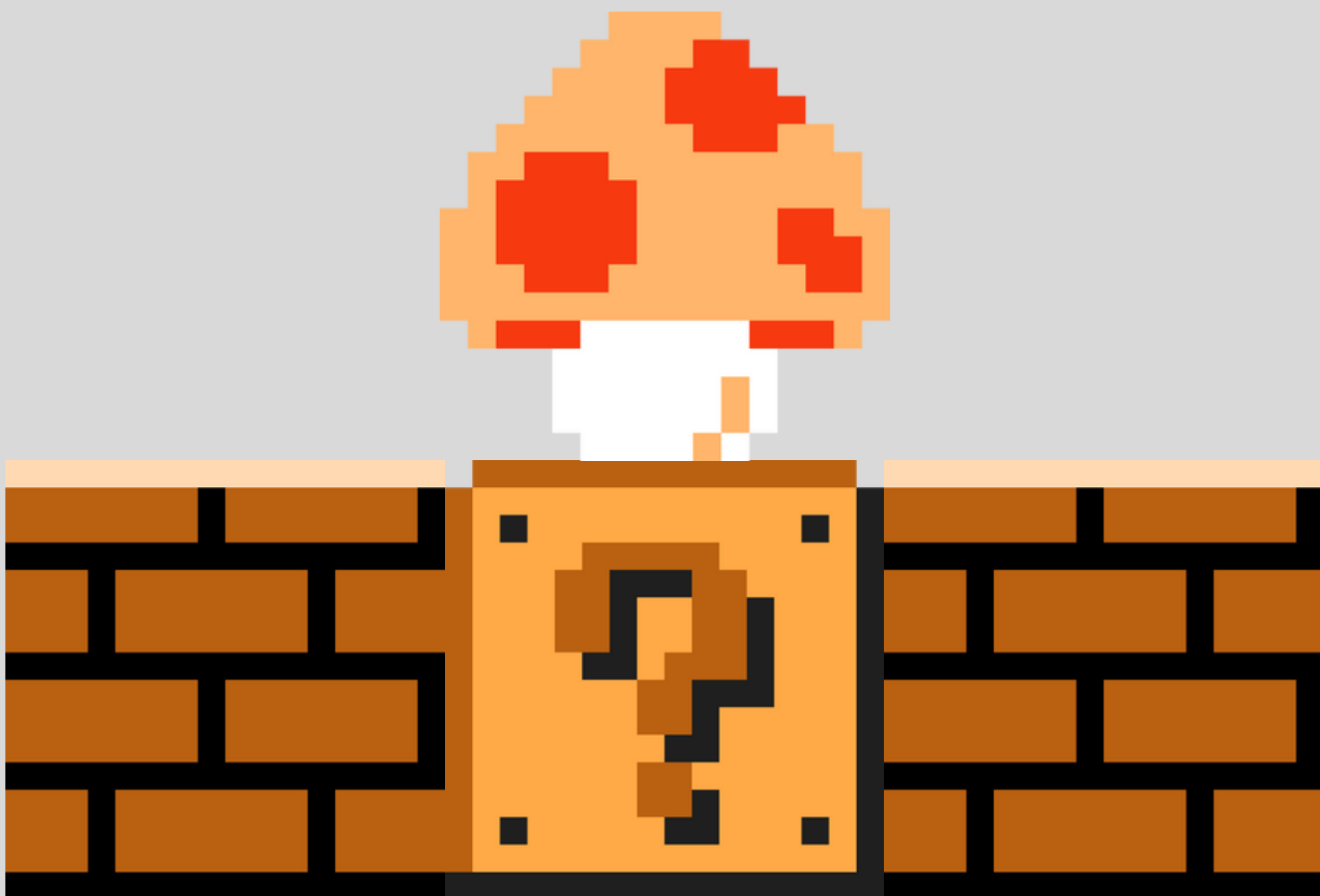
If something doesn't work, don't be afraid to ask for help in the Discord server! People will usually be happy to help 99% of the time!

Submitting your Stagepack to Neoarc is done by sending him the .zip file of your levels and the .json file you made. He will then publish it as soon as possible (usually with the next game-update).

Congratulations!

You now know how to create a Stagepack and submit it to Neoarc!

Consider this Guide finished now, you can stick around for my final words if you like to, but you don't have to!



FINAL WORDS

If you are reading this- thank you.

It took me quite some time to make this Guide and even though it doesn't explain and talk about absolutely every object in the editor, I tried to cover all the important basics to give someone the headstart they need when they're new to the game.

If you, in fact, did enjoy reading this, leave a like, activate the bell and subscribe to the channel so you don't miss a single video.

Imagine changing your name to "Authorized Personnel". The places you could go..

Neo, when are you going to add uhhhhhhh....

Special Thanks to the people that helped me with creating this Guide:

- toasty (Proofreader)
- me
- myself

Anyways, I'm really happy I actually managed to finish this. If it wasn't for SFMB, I'd really probably be dead by now already or sitting at home, not knowing what to do anymore, because it feels like this is genuinely the only thing left in the world that brings me joy.

- Johanna 