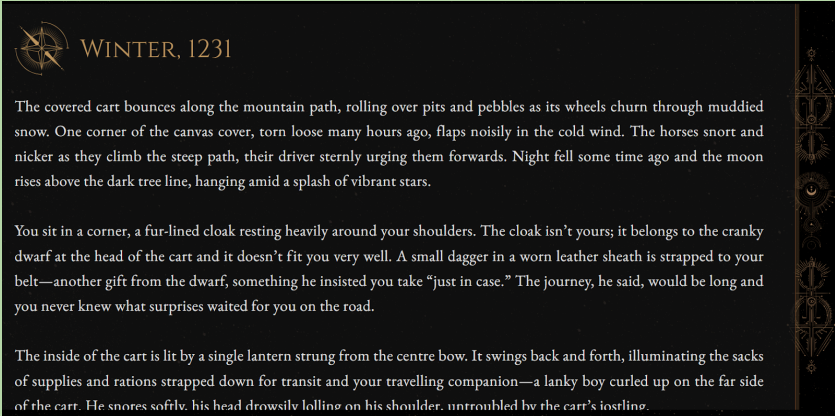
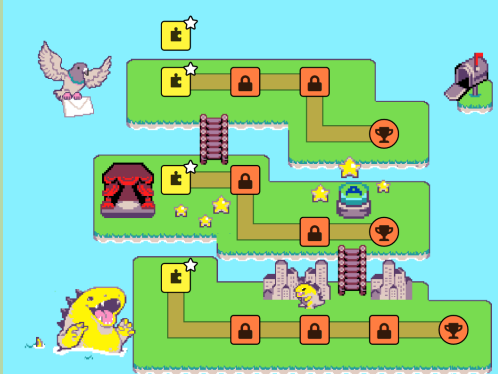


## TOOLS AND RESOURCES FOR MAKING GAMES

For students of **Video Games: Critical and Creative Writing** and **Playable Media**

Top recommendations: For text-heavy narrative games, Twine, Bitsy, Ink, and ChoiceScript. For visual novels, Ren'Py, and Naninovel. For retro RPGs, any of the RPG Maker series. For simple arcade games: MakeCode, Game Salad, Scratch, GDevelop. For more advanced 2D or 3D games: Unity, Unreal, Godot.

Link	What is it	Comments / opinions / tips
POWERFUL GAME ENGINES		
Godot <a href="http://godotengine.org/">godotengine.org/</a>	Free and open source game engine for creating 2D / 3D games and immersive experiences	A heavyweight games engine, and probably a good choice if you want to go open source. Compatible with C+ and C##
Unity <a href="http://unity.com">unity.com</a>	Unity is a major engine for creating 2D / 3D games and immersive experiences	Widely used by professionals for PC, mobile, console, headsets and other platforms. Free to use, except for medium to large commercial projects. It is extremely popular among indie game developers
Unreal <a href="http://unrealengine.com/">unrealengine.com/</a>	Unreal is a major engine for creating 2D / 3D games and immersive experiences	Widely used by professionals for PC, mobile, console, headsets and other platforms. Unity and Unreal are kind of the big two engines. It has a slightly tougher learning curve than Unity, and is popular in the big AAA studios
Construct 3 <a href="https://www.construct.net/en">https://www.construct.net/en</a>	Much less powerful than the other three, but much easier learning curve	Relatively flexible, but not as flexible as the other three. No coding is required: you add behaviours to objects from menus, and create "if/then" events. GDevelop would be a similar alternative
 <p>WINTER, 1231</p> <p>The covered cart bounces along the mountain path, rolling over pits and pebbles as its wheels churn through muddled snow. One corner of the canvas cover, torn loose many hours ago, flaps noisily in the cold wind. The horses snort and nicker as they climb the steep path, their driver sternly urging them forwards. Night fell some time ago and the moon rises above the dark tree line, hanging amid a splash of vibrant stars.</p> <p>You sit in a corner, a fur-lined cloak resting heavily around your shoulders. The cloak isn't yours; it belongs to the cranky dwarf at the head of the cart and it doesn't fit you very well. A small dagger in a worn leather sheath is strapped to your belt—another gift from the dwarf, something he insisted you take "just in case." The journey, he said, would be long and you never knew what surprises waited for you on the road.</p> <p>The inside of the cart is lit by a single lantern strung from the centre bow. It swings back and forth, illuminating the sacks of supplies and rations strapped down for transit and your travelling companion—a lanky boy curled up on the far side of the cart. He snores softly, his head drowsily lolling on his shoulder, untroubled by the cart's jostling.</p>		
FOUR GREAT TOOLS FOR MAKING NARRATIVE GAMES		
Twine <a href="http://twinery.org/">twinery.org/</a>	For creating text-based games and stories. Twine uses a visual interface to create branching narratives. All you need to learn to get started is to [[create a link like this]]. Also a great space	Downloadable or runs in the browser. Probably the best-known tool for creating interactive narratives, with an easy learning curve and some depth. Can run in the browser. Tends to lead you into a "branch and bottleneck" paradigm of interactive narrative design, but can be used in other ways (e.g. a durable,

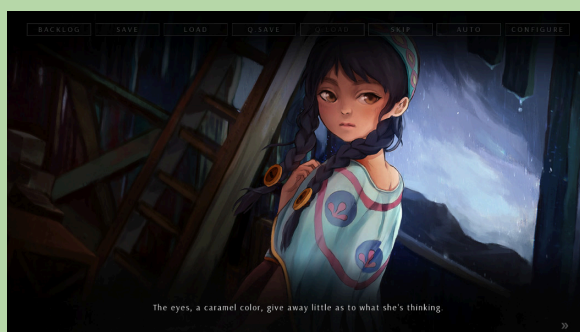
	to explore basic coding principles like variables, if then statements, etc. The output is an html file.	changing, navigable world). Lots of tutorials and resources online, fairly active user communities. Use CSS to change appearance. Easy to host your creations on itch.io. It is possible to embed links to images too. Free to use
<a href="#">Ink</a>	For creating branching text stories / games. Easy learning curve.  (The very-easy-to-use version, Inklewriter, is no longer being supported and is probably best avoided)	Ink is thoughtfully designed, easy to get started with, and pretty scaleable too (you can do some fancy things). It integrates with Unity. Underpins narrative-focused games from Inkle Studios (e.g. Pendragon, Around the World in 80 Days, and others). Inkle also have a lively Discord. Another top recommendation. Nicely documented ( <a href="#">here's an introduction</a> ). Free to use.
<a href="#">Bitsy</a> <a href="https://ledoux.itch.io/bitsy">ledoux.itch.io/bitsy</a>	Cute v. minimalist in-browser game engine. Great for a game where you mostly walk around looking at stuff and talking to NPCs.	There have been some <a href="#">neat little games &amp; experiences</a> created in Bitsy. See also <a href="#">Borksy</a> - Bitsy with hacks built-in. <a href="#">Bitsy HD</a> - Bitsy at double the size. <a href="#">bitsy hacks</a> - Hacks that extend the functionality of bitsy in various ways. <a href="#">bitsy mixer template</a> - Hacks that extend the functionality of bitsy in various ways. Free to use.  <a href="#">Mosi</a> is somewhat similar. Also check out PuzzleScript below.
<a href="#">ChoiceScript</a>	"ChoiceScript is a simple programming language for writing multiple-choice games (MCGs) like <i>Choice of the Dragon</i> . Writing games with ChoiceScript is easy and fun, even for authors with no programming experience."	Great for interactive novels. A good selection of games to study to understand the affordances of the medium. Games often focus on relationships (e.g. diverse friendship and romance options) against the background of lighthearted fantasy / horror / science fiction adventure. Choice of Games actually appears to have found a real market niche for text-based stories. Some established SFF novelists (e.g. Max Gladstone) have written games for them. Free to use
 <p>FOR MAKING RETRO ARCADE STYLE GAMES</p>		

Microsoft MakeCode <a href="https://www.microsoft.com/en-us/makecode">https://www.microsoft.com/en-us/makecode</a>	A visual coding platform which also accommodates JavaScript or Python	Great for beginners, and comes with lots of free assets and tutorials. Another similar engine would be Scratch
TIC-80 <a href="https://tic80.com/">https://tic80.com/</a>	Free and open-source fantasy console, good for making retro 8-bit style games	



#### ENGINES FOR MAKING ADVENTURE GAMES (NARRATIVE, INVENTORIES, PUZZLES, ETC.)

Adventure Game Studio	Game engine for adventure games (free)	Point and click adventure games. See some games here: <a href="http://www.adventuregamestudio.co.uk/site/games/">www.adventuregamestudio.co.uk/site/games/</a> Free to use
<a href="http://www.visionairegame.com/">Visionaire</a>	Game engine for adventure games	A great engine for point and click style adventure games. Costs around 50 euros for the indie license
Adventure Creator <a href="http://adventurecreator.org">adventurecreator.org</a>	Toolkit for Unity for adventure games	Makes it much easier to create adventure style games in Unity, with little or no coding experience. You would need to buy it



#### FOR MAKING VISUAL NOVELS

Ren'Py <a href="http://www.renpy.org">www.renpy.org</a>	For making visual novel games, based on a fairly simple mark-up language. Games often focus on dialogue and relationships,	Lots of graphics available, and fairly easy for non-artists to create their own backgrounds and sprites.  Worth thinking about the politics embedded in
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	e.g. dating sims, otome.	software and asset collections (e.g. representations of gender).
Naninovel <a href="http://naninovel.com">naninovel.com</a>	Another good option for making visual novels	Naninovel has good Unity integration and would be better than Ren'Py if you wanted to publish on consoles. It isn't free though
TyranoBuilder <a href="http://tyranobuilder.com/">tyranobuilder.com/</a>	Another good option for making visual novels	Might be worth a look, although there are



#### FOR MAKING RETRO RPGS

RPG Maker series <a href="https://www.rpgmakerweb.com/">https://www.rpgmakerweb.com/</a>	For making a very specific type of game (retro-ish JRPGs), but can still tell <a href="#">many different kinds of stories</a>	No coding required, very intuitive and (within the confines of the JRPG genre) very flexible games engine with substantial asset libraries, plus lively user communities. Definitely worth considering for classroom use
EasyRPG <a href="https://easyrpg.org/">https://easyrpg.org/</a>	Another game engine for JRPGs	Good free open source alternative to RPG Maker
RPG Paper Maker <a href="http://rpg-paper-maker.com/">http://rpg-paper-maker.com/</a>	Also similar to RPG Maker, but 3D (using both 3D objects and 2D sprites)	

#### PROGRAMMING LANGUAGES

JavaScript	Programming language	Used together with HTML and CSS to create interactive websites or games that run in the browser. Tools like Twine and Ink export to JavaScript
C#	Programming language	Object oriented language, used with Unity. Easier learning curve than C++
C++	Programming language	Powerful object oriented language, steep learning curve. Used with Unreal
Java	Programming language	Very versatile language, with some similarities to C++ ... not one of the 'main' game programming languages but e.g. Minecraft was built with Java

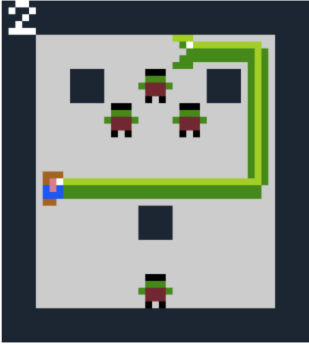

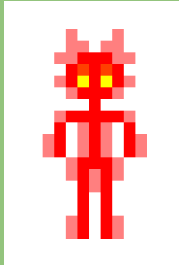
Python	Programming language	Not a preferred game language (compiling and execution is slow-ish) but great for learning to code. See also Ren'Py, Raspberry Pi
Rust	Programming language	Not a preferred game language, but can be used to create very efficient code
THINGS TO ADD TO UNITY		
<a href="#">Oikospiel-tools</a>	'Trigger-based tools for Unity for crafting games without programming, focused on playfulness and experimentation.'	Free
Naninovel <a href="#">naninovel.com</a>	Another good option for making visual novels	Maybe a bit expensive
Adventure Creator <a href="#">adventurecreator.org</a>	Toolkit for Unity for adventure games	Makes it much easier to create adventure style games in Unity, with little or no coding experience. You would need to buy it
<a href="#">Ink</a>	For creating branching text stories / games. Easy learning curve.	Ink is thoughtfully designed, easy to get started with, and pretty scaleable too (you can do some fancy things). Free
Fungus <a href="#">fungusgames.com/blog</a>	Visual scripting: "Fungus is for writers, illustrators, animators and game designers, especially visual novel & interactive fiction authors."	
ART ASSETS FOR 2D ADVENTURE GAMES / VISUAL NOVELS		
Unity Asset Store <a href="https://assetstore.unity.com/">https://assetstore.unity.com/</a>	Big asset store	3D and 2D assets including backgrounds and characters. Some free, some paid
Unreal Engine Marketplace <a href="https://www.unrealengine.com/marketplace/en-US/store">https://www.unrealengine.com/marketplace/en-US/store</a>	Another big asset store	3D and 2D assets including backgrounds and characters. Some free, some paid
<a href="#">Lemmasoft Forums</a>	Visual novel (Ren'py) oriented forums and visual assets	Another Visual Novel / anime oriented website to check out is DLSite, but be prepared for a LOT of NSFW content
<a href="#">Itch.io Visual Novel asset tag</a>	Itch.io is a big platform you've probably heard of for hosting games, assets, jams,	A wide variety of prices and licenses

<a href="#">Itch.io Point &amp; Click asset tag</a>	and other things	
Reddit.com	Reddit is a giant social media site you've probably heard of too	If you want to commission artwork, try subreddits like r/HungryArtists, r/ForHire, r/VNDevs, r/RenPy, r/Indiedev, r/GameDev, r/VisualNovels, r/Unity2D
Midjourney <a href="https://www.midjourney.com/">https://www.midjourney.com/</a>	Image generating AI	Alternatives include Dall-E, Stable Diffusion, Disco Diffusion. Most require subscription of some kind
MODDING AND USER-GENERATED CONTENT		
Steam Workshop <a href="https://steamcommunity.com/workshop/">https://steamcommunity.com/workshop/</a>	Platform	
Mod.io <a href="https://mod.io/">https://mod.io/</a>	Platform	
LittleBIGPlanet <a href="https://littlebigplanet.fandom.com/wiki/LittleBigPlanet">https://littlebigplanet.fandom.com/wiki/LittleBigPlanet</a>	Game (often modded)	
Sackboy <a href="https://gamebanana.com/games/9356">https://gamebanana.com/games/9356</a>	Game (often modded)	
Super Dungeon Maker	Game (often modded)	
Mario Maker	Game (often modded)	
Minecraft	Game (often modded)	
Faster Than Light <a href="https://subsetgames.com/ftl_mods.html">https://subsetgames.com/ftl_mods.html</a>	Game (often modded)	
Skyrim	Game (often modded)	

UNIVERSITY OF SUSSEX STUDENT SOCIETIES		
GLADOS <ul style="list-style-type: none"> <li><a href="https://sussexstudent.com/activities/view/glados">sussexstudent.com/activities/view/glados</a></li> <li><a href="https://discord.gg/2mDwFCqzUF">discord.gg/2mDwFCqzUF</a></li> </ul>	Student society	"Game, Line, Animation Development Of Sussex (GLADOS) is a new society created for students interested in game development and animation. The society is open to anyone who is interested, with or without previous experience. GLADOS was made for connecting other students together and organising events."



<p>Sussex Video Gaming Society</p> <p><a href="https://sussexstudent.com/activities/view/video-gaming-society">https://sussexstudent.com/activities/view/video-gaming-society</a></p>	<p>Student society</p>	<p>"Our society brings together gamers of all backgrounds and interests into a welcoming and friendly community. No matter what you play, you'll always find like-minded people here! On our very active Discord server we regularly organise games online, use it as a discussion board for a variety of game genres and regular announcements.</p> <p>This academic year, we are organising events such as tournaments, expo event trips and a bi-annual pub quiz, in addition to our weekly meetups where you can play a range of games on many consoles or simply come and socialise with other people."</p>
<p>Sussex Wargames Anime Roleplaying Magic</p> <ul style="list-style-type: none"> <li>• <a href="https://sussexstudent.com/activities/view/Wargames-Anime-Role-Play-Magic-Society-SWARM">sussexstudent.com/activities/view/Wargames-Anime-Role-Play-Magic-Society-SWARM</a></li> <li>• <a href="https://www.facebook.com/groups/30631397908">www.facebook.com/groups/30631397908</a></li> <li>• <a href="https://discord.gg/krk5d3R5j7">https://discord.gg/krk5d3R5j7</a></li> </ul>	<p>Student society</p>	<p>"We are friendly and relaxed environment in which our members can play board games (e.g. Settlers Of Catan), card games (e.g. Magic: The Gathering) , roleplay games (e.g. Dungeons and Dragons) and wargames (e.g. Warhammer 40k). We are open to all comers and interests; if you wish to bring something new to SWARM then we are always up for giving something a try."</p>
<p>HackSussex</p> <ul style="list-style-type: none"> <li>• <a href="https://sussexstudent.com/activities/view/HackSussex">sussexstudent.com/activities/view/HackSussex</a></li> <li>• <a href="https://discord.gg/Ht4xRxu6R7">discord.gg/Ht4xRxu6R7</a></li> </ul>	<p>Student society</p>	<p>"HackSussex is the largest Hackathon and Coding society at Sussex, with a number of successful hackathons and events behind us. This year we will be running more coding related events and competitions. We welcome all abilities to our events, from beginner to expert. Make sure to get our society membership from the Student Union website and join our discord to participate and get notified about the events we will be running."</p>
<p>Sussex Board Games Society</p> <ul style="list-style-type: none"> <li>• <a href="https://sussexstudent.com/activities/view/board-games-society">sussexstudent.com/activities/view/board-games-society</a></li> </ul>	<p>Student society</p>	<p>"Our society meets every Friday at 6pm 'til late to play (you guessed it) board games of all different kinds: whether you're into party games like Codenames and The Resistance, or wanna stretch your brain with games like Scythe and Lords of Waterdeep, there's something for everyone. There is sometimes a lot of shouting. Plenty of lying, enough betrayal to go around. Occasionally we play Werewolf which contains all these things, and then some! If you're looking for a fun and relaxing way to make new friends at Sussex, the board game society is the place to be!"</p>
<p>INTERESTING / STRANGE / WEIRD LITTLE GAME ENGINES AND GAME-MAKING TOOLS</p>		

<a href="#">Downpour</a>	Game-making tool	
<a href="#">PuzzleScript</a> 	Game-making tool	PuzzleScript - An open source, HTML5 puzzle-game oriented editor. Sokoban inspired. See also <a href="http://dungeonscript.farbs.org/">http://dungeonscript.farbs.org/</a>
<a href="#">Flickgame</a> 	Tiny game-making tool	Move between frames by clicking on colours
<a href="#">Sok Worlds</a>	Tiny game-making tool	See also <a href="#">Sok Stories</a>
<a href="#">Vipercard</a>	Tiny game-making tool	Open source recreation / reimagining of Hypercard.
<a href="#">Rewtro</a>	Tiny game-making tool	A very lightweight fantasy console - games can be printed as QR codes
<div style="text-align: center;">   SPRITES AND PIXEL ART </div>		
<a href="http://www.piskelapp.com/">www.piskelapp.com/</a>	Online image editor	Free online graphics editor, great for creating sprites and pixel art. (Love the Vertical Mirror Pen function)
<a href="http://www.pixilart.com/">www.pixilart.com/</a>	Online image editor	Free online graphics editor, great for creating sprites and pixel art
<a href="http://pixelatorapp.com/">pixelatorapp.com/</a>	Converter	Pixellates images
<a href="http://opengameart.org/art-search-advanced">opengameart.org/art-search-advanced</a>	Platform	Great collection of open license art for games, including sprites



<a href="https://sanderfrenken.github.io/Universal-LPC-Sprite-Sheet-Character-Generator/">sanderfrenken.github.io/Universal-LPC-Sprite-Sheet-Character-Generator/</a>	Generator	Select body, clothes, armor, tools, etc. and this generator will create sprite sheets for you
<a href="https://lospec.com/procedural-pixel-art-generator/">lospec.com/procedural-pixel-art-generator/</a>	Generator	Small experimental sprite generator, could be a quick and easy starting point, or play around with creating your own templates
<a href="#">Photoshop</a>	Graphics editor	For editing pixel art in Photoshop, you'll want a 1 pixel pencil with 100% hardness. You'll also want image interpolation set to "Nearest Neighbor (preserve hard edges)" to avoid dithering. Set up a grid with 1 pixel big subdivisions.
<a href="#">GIMP</a>	Graphics editor	A free Photoshop alternative. There are various pixel art tutorials available e.g. <a href="#">here</a> .
<a href="#">MakeCode</a> , <a href="#">Bitsy</a> etc.	Bitsy is a simple and sort of whimsical mini game editor for making little narrative experiences. MakeCode is a blocks / Javascript code editing platform for games that can be played on a variety of specialist consoles	Some game-making tools like MakeCode, Bitsy etc. have simple built-in graphics editors for pixel art.
A few more pixel art links	Tutorials, inspiration, etc.	<a href="https://www.megavoxels.com/learn/how-to-make-pixel-art-in-photoshop-for-beginners/">https://www.megavoxels.com/learn/how-to-make-pixel-art-in-photoshop-for-beginners/</a> <a href="http://derekkyu.com/makegames/pixelart.html">http://derekkyu.com/makegames/pixelart.html</a> <a href="https://lennsan.tumblr.com/">https://lennsan.tumblr.com/</a> <a href="https://twitter.com/Pixel_Dailies">https://twitter.com/Pixel_Dailies</a> <a href="https://safeimagekit.com/pixel-art-maker">https://safeimagekit.com/pixel-art-maker</a>
MISCELLANEOUS GAME ENGINES AND INTERACTIVE NARRATIVE TOOLS		
<a href="#">Humble Bundle</a>	Various resources	A site that often offers game development software, art assets, music and SFX, tutorials, books, and other resources. Bundles change regularly
<a href="#">AI Dungeon</a>	It's a text-based game run by a powerful AI. GPT-3 (in Dragon model) based text adventure where you can "do anything" (and it sometimes makes sense)	Interesting for thinking about immersion as unconstrained (?) agency. Also a relatively easy way to interface and play around with GPT-3 (you can use it in ways you're not supposed to, e.g. to create generators). Users can alter the way the model works using the <a href="#">scripting</a> tool based on JavaScript. There's also a very active Discord. Also see <a href="#">Latitude</a> .

<a href="#">Ink and Inky</a>	For creating branching text stories / games. Easy learning curve. Underpins narrative-focused games from Inkle Studios (e.g. Pendragon, Around the World in 80 Days)	Inkle also have a lively Discord. A big advantage over e.g. Twine is the possibility of Unity integration, although it's more challenging than just text-based games
<a href="#">Charisma AI</a>	Charisma AI Browser-based tool to create interactive narratives enabling players to talk to the characters in the story. Publish free into the Charisma mobile app. Also integrates with Unreal Engine, Unity and Web Player.	A distinctive approach to integrating AI into narrative, focusing on natural language recognition to accommodate a wide range of user inputs, while keeping the narrative itself under relatively rigid creator control. Very intuitive learning curve
<a href="#">ChoiceScript</a>	"ChoiceScript is a simple programming language for writing multiple-choice games (MCGs) like <i>Choice of the Dragon</i> . Writing games with ChoiceScript is easy and fun, even for authors with no programming experience."	A great selection of games to study to understand the affordances of the medium. Games often focus on relationships (e.g. diverse friendship and romance options) against the background of lighthearted fantasy / horror / science fiction adventure. Choice of Games actually appears to have found a real market niche for text-based stories. Some established SFF novelists (e.g. Max Gladstone) have written games for them
<a href="#">Inform 7</a>	Inform is a simple (natural language based) programming language for creating interactive fiction, more in the mould of classic Inform text games (i.e. users typically interact by typing, not clicking)	There has been a lively community around these games continuously since at least the 1990s. See e.g. <a href="https://ifcomp.org/">https://ifcomp.org/</a>
<a href="#">Squiffy and Quest</a>	Squiffy and Quest are simple tools for creating branching narratives. Includes some basic variable and conditional functionality	One of the drawbacks of Twine is that you more or less have to use the graphical interface, whereas for big or collaborative projects it's often easier to write in a text document. Squiffy and Quest could be options worth exploring (also Ink)
<a href="#">Scratch</a>	Make animations and games, coding in a visual interface where you drag around blocks	Aimed at schoolchildren, but also a very flexible visual programming tool - a bit messy and unstructured, but with a relatively easy learning curve, quite a bit of depth, and a big lively sharing community. Projects can be exported to HTML5, Android apps, Bundle (macOS) and EXE files using external tools.
<a href="#">Ren'Py</a>	For making visual novel games, based on a fairly simple mark-up language. Games often focus on	Lots of graphics available, and fairly easy for non-artists to create their own backgrounds and sprites.

	dialogue and relationships, e.g. dating sims.	Worth thinking about the politics embedded in software and asset collections (e.g. representations of gender).
<a href="#">RPG Maker series</a>	For making a very specific type of game (retro-ish JRPGs), but can still tell <a href="#">many different kinds of stories</a>	No coding required, very intuitive and (within the confines of the JRPG genre) very flexible games engine with substantial asset libraries, plus lively user communities. Definitely worth considering for classroom use
<a href="#">EasyRPG</a>		Good free open source alternative to RPG Maker
<a href="#">Construct 3</a>	Games engine	2D games engine, can run in the browser, lots of sample games to hack
<a href="#">RPG Paper Maker</a>	Similar to RPG Maker, but 3D (using both 3D objects and 2D sprites)	Still quite new as of 2021
<a href="#">CryEngine</a>	Game engine	Another really heavyweight engine, that you could put up there with Unity, Unreal, and Godot. Supports Oculus and HTC. Some users cite its strengths for FPS games and for detailed complex visuals.
<a href="#">Dreams</a>	Game engine / game / social media for the PlayStation	
<a href="#">GameSalad</a>	Game engine	2D game engine, somewhat geared to educational contexts. <a href="#">Getting started vid here.</a>
<a href="#">GameMaker Studio 2</a>	Game engine	2D game engine with a lot of depth and flexibility, a lively community, and not too steep a learning curve. A very strong choice for making a sprite-based 2D game. <a href="#">Tutorials here.</a> "Choose between our intuitive visual coding systems (DND) or the powerful coding language (GML) to build the greatest 2D games."
<a href="#">TableTopia</a>	An online arena for playing board games, plus an editor for building new board games from scratch.	
<a href="#">Voiceflow</a>	Design and prototype voice apps (e.g. for Am*zon Alexa)	
<a href="#">LÖVE</a>	Game engine	Uses Lua coding. 2D
<a href="#">Armory</a>	Game engine	Open source. 3D
<a href="#">Stencyl</a>	Game engine	2D focus, easy to use. Free version, or

		<a href="#">subscription</a> to support more platforms.
<a href="#">Phaser</a>	Game engine	<a href="#">Getting started tutorial</a> .
<a href="#">Solar2D</a>	Game engine	
<a href="#">Bitsy</a>	Cute v. minimalist in-browser game engine	There have been some <a href="#">neat little games &amp; experiences</a> created in Bitsy
<a href="#">Defold</a>	Game engine	Free, uses Lua
<a href="#">ClickTeam Fusion</a>	Games engine	Roots go back to the venerable Klik 'n' Play, and still implements the basic design interface, a kind of spreadsheet of event triggers and associated actions
<a href="#">Hopscotch</a>	Games engine / programming environment aimed at kids	
Amazon Lumberyard	Games engine	Based on CryEngine
GB Studio	Gameboy game engine	
Flatgames	Tutorial, Unity templates	<a href="#">See also Flatpack</a> . "Take photos, cut them out, add them to your library, then build worlds with them."
Bitsy	Mini games engine	<a href="#">Borksy</a> - Bitsy with hacks built-in. <a href="#">Bitsy HD</a> - Bitsy at double the size. <a href="#">bitsy hacks</a> - Hacks that extend the functionality of bitsy in various ways. <a href="#">bitsy mixer template</a> - Hacks that extend the functionality of bitsy in various ways.
Flicksy	Mini games engine	Visual novel like
Mosi	Mini games engine	
Bravitzlana	Mini games engine	"Bravitzlana is for making small interactive scenes that you can share with people"
PuzzleScript	Mini games engine	See also <a href="#">Dungeonscript</a>

<a href="#">RPG Paper Maker</a>	Games engine	
<a href="#">Kooltool</a>	Mini games engine	
<a href="#">The Unfolding Game Engine</a>	Games engine	"Paint a world" mechanic
<a href="#">Cocos2d</a>	Game engine	English or Chinese
<a href="#">Flowlab</a>	2D games engine	Runs in the browser
<a href="#">Multiverse</a>	Mini games engine	
<a href="#">Sok Worlds</a>	Mini games engine	Create postmodern collage worlds. See also <a href="#">Sok Stories</a>
<a href="#">Bitmelo</a>	Mini sengine	HTML5, Pixelart focused
<a href="#">Wick</a>	Tool for animations and games	Open source
<a href="#">Unicorn Console</a>	Mini game engine	
<a href="#">Tiny Choice</a>	Small text-based game engine	In-browser
<a href="#">StudyCrafter</a>	'Playful platform'	Oriented to gamified teaching / research / public engagement
<a href="#">The Adliberum Engine</a>	Game engine (text-based)	
<a href="#">Yarn Spinner</a>	Game dialogue tool	
<a href="#">Superpowers</a>	Game engine	Free, open source, HTML5
<a href="#">LITIENGINE</a>	Game engine	2D Java game engine
<a href="#">Starling</a>	Game engine	

Heaps	Graphics engine	Open source
LÖVR	Framework	Open source framework for Lua VR
Amulet	Lua-based toolkit	
Phaser.io	HTML5 framework	
Adventure Game Studio	Game engine	Point and click adventure games
nCine	Game engine	2D, open source

#### FURTHER READING

[Worldbuilding Inspiration big reading list](#)

[Applied Speculation - resources and inspiration](#) (a focus on science fiction and futures thinking)

[Applied Hope - the Solarpunk and Utopias Jam](#)

Anna Anthropy, [Rise of the Video Game Zlnesters](#)

Jesse Schell, [The Art of Game Design: A Book of Lenses](#)

Bo Ruberg (ed), [The Queer Games Avant-Garde](#)

Daniel Buckley, [‘How to Make a Game: Making Video-Games from Scratch’](#)

#### TUTORIALS, BIBLES, REPORTS, & MISC RESOURCES (a v. v. small selection)

Immersive Promotion <a href="http://www.immersivepromotion.com/teaching-resources">www.immersivepromotion.com/teaching-resources</a>	“10 teaching videos, 4 accompanying workshop exercises and an assignment brief for undergraduate courses in advertising, PR, media communications, creative media and creative computing.”	
Skills for Immersive Experience Creation Report <a href="https://www.immerseuk.org/news/skills-for-immersive-experience-creation-report-launched/">https://www.immerseuk.org/news/skills-for-immersive-experience-creation-report-launched/</a>	“The first comprehensive report on immersive experience production reveals urgent need to develop the UK’s talent pipeline”	
Code Reality	Very big, comprehensive	



<a href="http://codereality.net/learn/">codereality.net/learn/</a>	online courses in AR (Foundations and Advanced)	
Programming Historian <a href="https://programminghistorian.org/en/lessons/creating-mobile-augmented-reality-experiences-in-unity">https://programminghistorian.org/en/lessons/creating-mobile-augmented-reality-experiences-in-unity</a>	Peer-reviewed tutorial	This lesson serves as an introduction to creating mobile augmented reality applications. Augmented reality (AR) can be defined as the overlaying of digital content (images, video, text, sound, etc.) onto physical objects or locations, and it is typically experienced by looking through the camera lens of an electronic device such as a smartphone, tablet, or optical head-mounted display.
AR Story Decks <a href="https://arstorydecks.com/">https://arstorydecks.com/</a>	Very quick and easy way to get playing around with marker-based AR experiences	"Create your own Augmented Reality (AR) cards using objects from [Google Poly] and our online editor."
CREATING 3D ART AND ANIMATION		
Blender <a href="http://www.blender.org">www.blender.org</a>	"Blender is a free and open-source 3D computer graphics software toolset used for creating animated films, visual effects, art, 3D printed models, motion graphics, interactive 3D applications, virtual reality and computer games."	Open source alternative to Maya. Versatile, and a very lively user community, with lots of tutorials and resources out there
<a href="#">Maya</a>	Maya is a widely used application used to create 3D assets to export to Unity / Unreal	Industry standard for many years
<a href="#">3ds Max</a>	Another well-known 3D art and animation package	
<a href="#">ZBrush</a>	"ZBrush is a digital sculpting tool that combines 3D/2.5D modeling, texturing and painting."	
<a href="#">Tilt Brush</a>	Painting in VR	"Your room is your canvas. Your palette is your imagination." Can export to Unity. Was Google, now moving to open source: <a href="https://killedbygoogle.com/">https://killedbygoogle.com/</a> <a href="https://gcemetery.co/">https://gcemetery.co/</a>
<a href="#">turbosquid</a>	Platform with free or cheap 3D assets	
<a href="#">sketchfab</a>	Platform with free or cheap 3D assets	
<a href="#">360 Cities</a>	Platform with stock 360°	

	panorama images and videos	
<a href="#">Maquette</a>	Designed for rapid prototyping	Can export to Unity
AUGMENTED REALITY		
Vuforia <a href="http://developer.vuforia.com">developer.vuforia.com</a>	Vuforia is an AR platform with a <i>relatively</i> easy curve (use with Unity to make a simple marker-based AR experience) and apparently a lot of depth	Vuforia is free to play around with, which may be enough for many classroom purposes, or there are various <a href="#">license options</a> .
Artivive <a href="http://artivive.com">artivive.com</a>	Install Artivive on your phone and point it at artworks for AR experiences	For educators looking for a relatively easy way to get students working with AR, Artivive and Bridge by Artivive might be worth looking into.
AR StoryDecks <a href="http://arstorydecks.com/">arstorydecks.com/</a>	Extremely intuitive tool for creating marker-based AR experiences	Developed specifically for educators, initially with theatre students as a use case (see <a href="https://arstorydecks.com/docs/lesson-plans">https://arstorydecks.com/docs/lesson-plans</a> ) but with a multidisciplinary focus
ARCore <a href="http://developers.google.com/ar">developers.google.com/ar</a>	Google's Software Development Kit (SDK) for AR	
ARKit <a href="http://developer.apple.com/augmented-reality/arkit/">developer.apple.com/augmented-reality/arkit/</a>	Apple's SDK for AR. See also <a href="#">Reality Composer</a>	
Other AR SDKs	E.g. Amazon Sumerian, Vuforia, ZapWorks, Wikitude, EasyAR, OpenSpace3D	
HoloKit	A cardboard-like headset that you put your phone into	
AR Headsets	Examples include HoloLens, Magic Leap, Google Glass, HoloKit	
GRAPHICS, DATAVIZ, CREATIVE PRODUCTION + MISCELLANEOUS		
Electric Zine Maker <a href="https://alienmelon.itch.io/electric-zine-maker">https://alienmelon.itch.io/electric-zine-maker</a>		
<a href="http://gephi.org/">gephi.org/</a>	Free tool for visualising network data	
<a href="http://www.tableau.com/">www.tableau.com/</a>	Data visualisation	

<a href="http://rawgraphs.io/">rawgraphs.io/</a>	Data visualisation	
<a href="http://flourish.studio/">flourish.studio/</a>	Data visualisation	
<a href="http://kepler.gl/">kepler.gl/</a>	Geospatial analysis and visualisation tool	
<a href="#">ProBuilder</a>	Good for prototyping spaces in Unity. "Use ProBuilder to quickly prototype structures, complex terrain features, vehicles and weapons, or to make custom collision geometry, trigger zones or nav meshes."	
<a href="http://www.figma.com">www.figma.com</a>	Design everything as a wireframe, good for mocking up anything screen-based	
<a href="http://aframe.io">aframe.io</a>	"A-Frame is a web framework for building virtual reality (VR) experiences."	"A-Frame is based on top of HTML, making it simple to get started. But A-Frame is not just a 3D scene graph or a markup language; the core is a powerful entity-component framework that provides a declarative, extensible, and composable structure to <a href="#">three.js</a> ." See also <a href="#">2018 tutorials</a> .
<a href="http://poly.google.com">poly.google.com</a>	Platform with free or cheap 3D assets	"Poly will be shutting down forever on 30 June 2021. Uploads will be turned off on 30 April 2021. <a href="#">Download your library</a> ."
Google Resonance SDK <a href="https://github.com/resonance-audio">github.com/resonance-audio</a>	Software Development Kit for audio in Unity or Unreal	Software Development Kit for audio in Unity or Unreal, e.g. occlusion, echoing, absorption. Lots of presets, e.g. tile, carpet, water, etc. Currently tends to need to be "baked," i.e. can't be done in real time
WWise <a href="http://www.audiokinetic.com/products/wwise/">www.audiokinetic.com/products/wwise/</a>	WWise	Another spatial audio toolkit, with API for integration with Unity or Unreal
react-three-fiber	react-three-fiber is a Three.js renderer that helps render 3D models and animations for React and its native applications	
React <a href="https://reactjs.org/">reactjs.org/</a>	Popular JavaScript library mostly used for creating UIs	
3DF Zephyr <a href="http://www.3dflow.net/">www.3dflow.net/</a>	Photogrammetry	Free
<a href="http://www.agisoft.com/">www.agisoft.com/</a>	Photogrammetry	

Display.land	Photogrammetry	"Display.land is a new 3D scanning app that allows users to create accurate, fast 3D captures of real-world environments with very little tech overhead. No more expensive cameras, lenses, or softwares to create photo-real 3d scans. It's photogrammetry in your pocket "
InDesign		
Affinity Publisher		
CO-WORKING, COLLABORATION, & SOCIAL PLATFORMS		
<a href="#">Discord</a>	Similar to Microsoft Teams or Slack, but connected with gaming culture (although broader than that)	A lot of depth and versatility: you can deploy bots for particular tasks, e.g. scheduling
Teams <a href="https://teams.microsoft.com/">teams.microsoft.com/</a>	Teams. A co-working tool for chat organised by channels, private messaging, videoconferencing	Also really flexible. You can open up all your tabs within Teams - a dream scenario might have a multidisciplinary team watching one another work across Miro, Padlet, shared Blender screen etc.
Slack <a href="https://www.slack.com">www.slack.com</a>	Slack. A co-working tool for chat organised by channels, private messaging, videoconferencing	A really well-known, flexible co-working tool which includes e.g. persistent chat rooms organised by topic, private groups, direct messaging
PROJECT MANAGEMENT		
Trello <a href="https://trello.com">trello.com</a>	Collaborative <a href="#">Kanban</a> -style project management	There are loads of things that do more or less this. Asana, Monday.com, Airtable, Kanboard
COLLABORATION TOOLS + MISCELLANEOUS		
Mozilla Hubs <a href="https://hubs.mozilla.com">hubs.mozilla.com</a>	"Share a virtual room with friends. Watch videos, play with 3D objects, or just hang out."	
<a href="https://miro.com/">miro.com/</a>	Miro. "The online collaborative whiteboard platform to bring teams together, anytime, anywhere."	
Google Docs et al. <a href="https://docs.google.com/">docs.google.com/</a>	Collaborative wordprocessor with good tracking, commenting, and automatic version control	Probably needs no introduction. Google Docs, Google Slides, Google Sheets, Google Forms, Google Drawings, etc. Google Docs originated in Writely before being bought and developed by Google
Killed by Google <a href="https://killedbygoogle.com/">https://killedbygoogle.com/</a>	Not a tool so much as a compendium of cautionary tales	Google is rich; it buys things that look promising, and if they don't deliver, it pulls the plug. Beware! Beware!

CryptPad <a href="https://cryptpad.fr/">cryptpad.fr/</a>	Collaborative wordprocessor, spreadsheets, slides program, Kanban board, etc.	Secure open source alternative to Google Docs
RiseUp Pad <a href="https://pad.riseup.net/">https://pad.riseup.net/</a>		Another Google Docs alternative
<a href="https://gather.town">gather.town</a>	MORPG meets work videoconferencing	Has potential as a teaching environment?
Padlet <a href="https://padlet.com/">padlet.com/</a>	Padlet	Versatile ideation / mood board / design tool. Quite widely used in universities
Jamboard <a href="https://jamboard.google.com">jamboard.google.com</a>	Collaborate with virtual stickies etc.	Teaching potential, ideation in design sprints
InVision <a href="https://www.invisionapp.com/">www.invisionapp.com/</a>	Collaborative Wireframing design tool	
Figma <a href="https://www.figma.com">www.figma.com</a>	Design everything as a wireframe, good for mocking up anything screen-based	
Roll 20 <a href="https://roll20.net">roll20.net</a>	Videoconferencing with bells and whistles oriented to playing tabletop RPGs (e.g. D&D)	




[illegible]


See also Everest Pipkin's fantastic list of tiny tools at

<https://github.com/everestpipkin/tools-list>

(Copy pasted below November 2022)

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### **Tiny/weirdo game engines:**

Game engines that let you make a full game, but often within a particular style, ethos, framework, or with other limitations. Generally quick to pick up and work with, made for accessibility.

- [Flickgame](#) - A truly tiny engine, link frames to other frames. Share online or export.
- [GB Studio](#) - A drag and drop gameboy interface that lets you do some scripting. Export to html or an actual gameboy rom!
- [Bitsy](#) - Bitsy is a simple sprite-based editor that lets you build rooms & worlds. Walk around and talk to people and be somewhere. Has a strong community.
- [Borksy](#) / [Bitsy HD](#) / [bitsy hacks](#) / [bitsy mixer template](#) - Hacks that extend the functionality of bitsy in various ways.
- [Flicksy](#) - A tool for drawing and assembling graphical hypertext games - lets you import drawings!
- [Mosi](#) - Similar to bitsy, but with more color & sound support, and more advanced scripting options.
- [Bravitzlana](#) - A tool for making small interactive scenes (3d! kind of) that you can share with people.
- [PuzzleScript](#) - An open source, HTML5 puzzle-game oriented editor.
- [Dungeonscript](#) - Puzzlescript, but first person
- [RPG Paper Maker](#) - An extremely cute jrpg-focused engine that lets you place flat sprites in a 3d world. (free, but \$70 if you sell your game commercially)
- [Flatgames](#) / [Flatpack](#) - Flatgames are as much a concept as engine (2d, a raw combination of movement, art and sound), but Flatpack bundles those ideas up into a tool that you can import into Unity or run on Android.
- [Tiny Game Maker](#) - For small, one screen games without programming.
- [Kooltool](#) - An experimental game making tool which has Kidpix vibes.
- [The Unfolding Game Engine](#) - One to watch (in early access right now). A "paint a world" engine that lets you make your world while playing it. 2.5d.
- [Multiverse](#) - Not out yet - a storytelling and game making tools/game.
- [Bitmelo](#) - A game editor and engine for making small pixel art games. In early access, exports to HTML5.
- [Sok Worlds](#) (\$3) - A truly wild game/tool where you make and explore 3d collage worlds (images from the pixabay API, but there are over a million to choose from.).
- [Sok Stories](#) (\$3) - A drawing-based way to make and share games.
- [Playscii](#) - Also an ascii art and animation program, but the game mode documented here: [http://vectorpoem.com/playscii/howto\\_game.html](http://vectorpoem.com/playscii/howto_game.html)
- [Wick](#) Editor - Also an animation program- a friendly flash-like for multimedia projects that allows interaction and game-like play.
- [Unicorn Console](#) - A "a quick and dirty engine ... with a resolution of 400x240 pixels."
- [Vipercard](#) - An open source reimaging of 1987's Hypercard.

- [Twine](#) - An open-source tool for telling interactive, nonlinear stories. Has a big community and multiple versions and themes.
- [Choicescript](#) - Like Twine, but for more traditional CYOA gamebooks-with-stats. Tight community on the forums.
- [Tiny Choice](#) - The tiniest of twine-likes, written in the browser.
- [Inform](#) - A design system for interactive fiction which has been around for a while!
- [Ink](#) - A narrative engine designed to slot into a game engine.
- [StudyCrafter](#) - A scratch-like platform where you can play, share, and create interactive projects, on the browser or offline, and collect data from players.
- [Inklewriter](#) - The “baby” Ink, runs in browser and great for CYOA, same UI as *Sorcery*!
- [The Adliberum Engine](#) - (Free but on Steam, early access) Make text adventures, muds and text-powered roleplaying games.
- [Yarn Spinner](#) - The friendly tool for writing game dialogue.
- [Cheap Bots Done Quick](#) - A site where you can make a twitterbot today.

### Indie/open source bigger game engines:

Indie and open source game engines with more flexibility and power than the little engines above, and generally also another layer of complication. (Perhaps most useful for if you are concerned about free but closed-source engines like [Unity](#).)

- [Superpowers](#) - HTML5 2d + 3d engine, coding in Typescript.
- [HaxeFlixel](#) - Cross-platform development, open source
- [Godot](#) - Perhaps the most complete and well documented open source engine, for 2d and 3d.
- [Heaps](#) - A free and open source cross platform graphics engine written in Haxe.
- [DOME](#) - A framework for making 2D games using the Wren programming language.
- [luxe](#) - In development: a 2d-focused engine, code in Wren.
- [LITIENGINE](#) - A free and open source Java 2D Game Engine.
- [Starling](#) - A Cross Platform Game Engine.
- [LÖVR](#) - An open source framework for rapidly building VR experiences in Lua.
- [Ren'Py](#) - Free, open source cross-platform Visual Novel development engine.
- [Adventure Game Studio](#) - Free engine for making point & click adventure games.
- [Phaser.io](#) - Desktop and mobile HTML5 game framework, using javascript.
- [Pixelbox.js](#) - Combination editor and a simple JavaScript library.
- [Amulet](#) - A free Lua-based audio/visual toolkit suitable for small games and experimentation, with online editor.

### Fantasy consoles:

A fantasy console is like a regular console (machine specs, dev tools, community), but without hardware. It is like an emulator for a machine that never existed. Generally, these are in the form of an application.

- [Pico8](#) (\$15) - probably the most popular fantasy console for game dev, pico8 has harsh limitations but that are intentionally chosen. code is written in lua. export to standalone HTML+JS or PNG (fantasy cartridge, need pico8 to play)
- [Tic-80](#) - coding in lua and moonscript. export to html or .tic.
- [Pixel Vision 8](#) (free, pro version is \$30) - a no-console fantasy computer, navigate like the familiar icon-based desktops you know.
- [LIKO-12](#) - Entirely open-source and free, written in Lua. The dev says: “Why did I develop this? Because I wanted to buy PICO-8 but that’s not possible without credit cards (no internet shopping in Syria)”
- [Pix64](#) - an extremely tiny fantasy console (64x64 px).

- [Homegirl Pro](#) - A fantasy console with a very different vibe! This one dispenses of pixel nostalgia and is modeled after a Commodore Amiga. Coding in Lua.
- [VectorBoy](#) - Again, a fantasy console that breaks the mold - VectorBoy uses straight lines to emulate vector graphics.
- [VVpet](#) - A fantasy console for LCD virtual pet games
- [Voxatron](#) - (\$20, come with Pico-8) Fantasy Console for voxel (3d pixel, kind of?) games.
- [LowRes NX](#) - BASIC programming on iOS, as well as desktops.
- [Pyxel](#) - A retro game engine for Python
- [Zany80](#) - A fantasy console designed around the Z80 processor.
- [Riko4](#) - A Fantasy Console intended as a tool for pixel art game development.
- [ECoS](#) - A modern fantasy console with Entity-Component-System modular architecture.
- [Nano JAMMER](#) - A truly tiny console that runs in the browser and integrates into Google Drive. Code in the nano programming language.
- [Rewtro](#) - A wild little console that runs games encoded in a very small amount of data, meaning they can be printed as qr-codes.
- [Script-8](#) - A fantasy computer for making, sharing, and playing tiny retro-looking games. Free, browser-based, and open-source. Code in Javascript

Didn't find what you were looking for? Just into fantasy consoles? More of them detailed here:  
<https://github.com/paladin-t/fantasy>

### Neat Unity extenders:

Tools or plug-ins that change the experience of using Unity.

- [Oikospiel-tools](#) - Trigger-based tools for Unity for crafting games without programming.
- [Unity Bitmap Drawing](#) - A library for adding real-time drawing to your Unity project.
- [Clayxels](#) - Adds tiny voxels that seamlessly blend together like clay.
- [unity-wave-function-collapse](#) - Bitmap & tilemap generation from a single example.
- [Tessera](#) (5\$)- 2d / 3d wave function collapse generation.
- [Borderless Unity Windows](#) - A tiny tool for making Unity frameless apps from script.
- [First Person Drifter](#) - The original drifting game controller. Download an updated package for Unity 2019 from me [here](#).
- [Unity Recorder](#) - An editor-only tool that captures video and animation data during gameplay.
- [Bobbins](#) - A small Unity editor tool that can automatically download and import anything with a URL into the project.
- [Meshedit](#) (\$35) - A Unity extension that lets you create and texture models from scratch.
- [Doodlestudio 95](#) (\$45) - A FUN drawing and animation tool for Unity.
- [Raymarching Toolkit](#) (\$75) - A Unity add-on for editing raymarched scenes live.
- [Path Creator](#) - Path creation asset for Unity game development
- [NaughtyAttributes](#) - Create powerful inspectors without the need for custom editors.
- [UCLA Game Lab Mesh Creator](#) - Extrudes 2D drawings into 3D objects.
- [Rhythm beat mapper](#) (\$45) - Synchronizes gameplay to music in your video game.
- [JPEG-MP4-Compression](#) - recreates the effect of JPEG/MP4 compression as a PostProcessing Effect.

### Godot Extenders:

Tools or plug-ins that change the experience of using Godot.

- [WAT](#) - An automated testing framework for Godot built entirely within Godot itself

### Maps, place, & levels:

Tools for making maps & levels - some of them simply visual, others generate data.

- [Tiled](#) - The standard free, easy to use and flexible level editor.
- [OGMO](#) - A free, open source, project oriented level editor.
- [Tilsetter](#) - Tileset designing made easy.
- [SPARTAN Procedural Tile Generator](#) - A pixel art drawing and animation tool specialised in creating tiles and animated sprites for games.
- [Medieval Fantasy Town Generator](#) - Generates a random medieval city layout of a requested size & can export to JSON.
- [City Viewer](#) - The city viewer to see the above/other maps in 3d!
- [One Page Dungeon](#) - A very simple one page dungeon generator.
- [Map Generator](#) - A cellular automata tool for building custom maps, envisioned for use in tabletop roleplaying games.
- [Paper Dungeon Maker](#) - A very little map generator with optional csv output.
- [RPG Map II](#) - A tabletop oriented map editor with clean and simple design.
- [Snazzy Maps](#) - Nice map stylings for Google Maps.
- [Google Earth Studio](#) - Automate flying about the world.
- [Topo Topo](#) - Get a little square of 3d elevation data, anywhere.
- [Nototo](#) - Build and visualize all your notes, as a map
- [terrain.party](#) - nice interface for getting terrain heightmaps anywhere in the world

Making “assets” - images, models, sound, video:

### Graphics:

Tools for making images.

Pixel art:

- [pixeldudesmaker](#) - What it sounds like - generates little pixel dudes.
- [Pixelorama](#) - Free & open-source 2D sprite editor with layers.
- [dpixel](#) - An odd pixel art remastering tool - pixels go in, smoothed images come out.
- [Sink's Fun Pack](#) - Mostly a paint tool but also a level editor!
- [Broider](#) - A tool for making "9-patch" borders, exports as CSS code.
- [Nasu](#) - A tool for making NES sprites.
- [Piskel](#) - Web-based editor for sprites, spritesheets.
- [Aseprite](#) - Animated sprite editor and pixel art tool, free if compiled yourself.

ASCII/ANSI/etc:

- [Petmate](#) - a cross-platform C64 PETSCII image editor.
- [Playscii](#) - ASCII art generator. (Also an engine - see above).
- [alivepaintery](#) - Windows ASCII paint tool - “draw stuff it's fun”.
- [edscii](#) - An ASCII/ANSI art tool w/ support for arbitrary character sets and color palettes.
- [rexpaint](#) - A powerful and user-friendly ASCII art editor.
- [Glyph Drawing Club](#) - A free online modular design and text art tool where people can draw with the keyboard.
- [Paint with Webflow](#) - A very simple pixel art canvas.
- [ASCII PAINT](#) & [ASCII PAINT \(SKELETON EDITION\)](#) - Paint ASCII art by filling in a very accessible ASCII grid.
- [UUUemoji](#) - An "Emoji Raster System" for uploaded images.
- [Ascii Generator 2](#) - An application to convert images into high quality ASCII art.



- [AnsiLove/C](#) - A tool to convert ANSI and artscene-related file formats into PNG images.

#### Vector:

- [cozyvec](#) - A terminal program for creating plotter art (SVG files) in javascript.
- [Dotgrid](#) - A grid-based vector drawing software designed to create logos, icons and type.
- [Inkscape](#) - A free, open-source, cross-platform vector graphics editor.
- <https://www.nodebox.net/> - a cross-platform tool to create generative vector graphics

#### Generators:

- [Rune Generator](#) - A teeny-weeny rune generator.
- [Texatool](#) - Generate textures in a procedural/automatized way.
- [Glyph Generator](#) - A generator of glyphs for use in games, world building or for fun.
- [Simple Model Poser](#) - A tool for posing a figure to draw from.
- [LPC Spritesheet Character Generator](#) - A pixel-art RPG-style character spritesheet generator.
- On generative landscapes: <https://generativelandscapes.wordpress.com/>
- [Terragen](#) - Photorealistic 3d terrain generator. Some versions are free for noncommercial use
- [Mapgen4](#) - Paint mountains, valleys, and oceans which determine biomes.
- [pattern mutation](#) - A tool for painting and exploring tiling patterns.

#### General/flexible paint programs:

- [Quadtastic](#) - A tool to manage sprite sheets and color palettes.
- [Heavypaint](#) - A phone app for graphic painting.
- [Tuxpaint](#) - A KidPix-like: free computer art software for children.
- [Noodle](#) - A minimalist experimental drawing tool (controls in the console.)
- [JSPaint](#) - Microsoft Paint for the browser, more or less.
- [Krita](#) - A free & open source painting program.
- [GIMP](#) - The GNU Image Manipulation Program.
- [Paint.net](#) - Image and photo editing software for PCs that run Windows.
- [Strike](#) - A web-based, 1-bit paint tool, primarily for quick sketching or line-drawing.

#### Other:

- [Controller Prompts](#) - A comprehensive collection of controllers and keyboard button prompts for all consoles.
- [Hyperdither](#) - An OS X app that uses dithering to turn color or grayscale images into 1-bit black and white.
- [Atkinson Dithering](#) - Same thing as Hyperdither more or less, just on the web.
- [Dithermachine](#) - A tool to help you generate dithering automatically.
- [BECOME A GREAT ARTIST IN JUST 10 SECONDS](#) & [Scrunch](#) & [Sweet Nothings](#) & [Icosa](#) - Art toys/games that make unstable and dense colorfields, also usable as compositional tools.
- [darktable](#) - An open source photography workflow application and raw developer.
- [Pencil](#) - a free and open-source GUI prototyping tool
- [glitch-this!](#) - highly customizable glitched images and GIFs in the command line.
- [Kraken](#) - app for smaller weight of files, assets

#### Animation & video:

Tools for creating moving images, either animated or videographic.

- [Wick Editor](#) - Also an engine- do frame animation like Flash.
- [Jsetter](#) - A free editor for making pixel art animations and tilesets.
- [Paint of Persia](#) - A rotoscoping tool that lets you draw pixel art over video frames.
- [Clipnote Studio](#) - An online remake of the much beloved flipnote studio by Nintendo.
- [Loom](#) - (\$10) An easy-to-pickup iOS app/toy that exports SVGs.
- [Aseprite](#) (\$15) - A a sprite editor that lets you create 2D animations, heavily used.
- [Pixatool](#) (\$50) - PixelArt conversion tool. Not cheap, but on sale regularly.
- [Juice FX](#) (\$20) - Add style ("juice") to your sprites and animations.
- [Smear FX](#) (\$15) - Add smearing to your sprites and animations.
- [Synfig Studio](#) - A 2D animation tool.
- [Video Downloader Bot](#) - A twitterbot you can @mention to have it turn a piece of media into a download link.
- [Gifski](#) - Convert videos to high-quality GIFs on your Mac.
- [Easing functions cheat sheet](#) - A "what type of animation do you need" resource.
- [Mr. Squiggles](#) - Dead simple animated doodle maker.
- [Synopsis](#) - Open source computational cinematography.
- [Time Lapse Assembler](#) - Create movies from a sequence of images.

### 3D:

Tools that help you deal with 3d models or 3d space.

- [Figurio](#) - A free online modelling app.
- [Vertex Meadow](#) - A tool that renders (& makes) 2D images as explorable 3D terrain.
- [Makehuman](#) - Generate (lightly cursed) human-shaped models.
- [Mixamo](#) - Free, but requires a login- community sourced walkcycles and 3d animations which you can apply to any model that can T-pose.
- [Texturelab](#) - A tool designed to make procedural texture generation fast, simple and free.
- [AwesomeBump](#) - A program that generates normal, height, specular or ambient occlusion, roughness or metallic textures.
- [Hme](#) - A program for creating, manipulating and viewing height maps.
- [NormalMap-Online](#) - Create normal maps from height maps for free.
- [Crocotile 3d](#) - A tool for creating 3d scenes with 2d tiles.
- [SpriteStack](#) - A voxel editor that uses 'sliced' sprites.
- [Planet Painter](#) - A tool that allows you to create and edit nice little spherical planets.
- [Mixer 2020](#) - 3d model texturing tool.
- [ngPlant](#) - A 3D plant modelling software suite.
- [VLab Studio](#) - Plant modelling from Algorithmic Botany Lab.
- [Tree It](#) - an easy to use real time 3D tree generator.
- [The Grove](#) / Growing (€119) - Extremely competent tree growth software, works with Blender. Almost didn't include because \$ but it does what it does well.
- [Asset Forge](#) (\$20, or \$40 for pro) - Creates 3D models and 2D sprites by kit-bashing various pre-made blocks together.
- [FlowScape](#) (\$10) - As much game as tool- the 3d Bob Ross experience. Usable as a landscape composer.
- [Dilay](#) - A 3D sculpting intuitive application.
- [MeshLab](#) - An open source system for processing and editing triangular meshes.
- [Blender](#) - The general standard open-source & free 3d modeling program. Complicated but powerful.
- [Meshmixer](#) - Free, dead simple 3d software - from Autodesk.
- [Sculptris](#) - "A gateway into the exciting world of 3D."
- [SculptGl](#) - A 3d sculpting software in a browser.

- [Mandelbulb 3D](#) - A free software application created for 3D fractal imaging.
- [SpaceshipGenerator](#) - A Blender script for the generation of spaceships.
- [Sproxel](#) - A 3D interface for editing and creating voxel-based 3D models.
- [Papercraft With Blender](#) - Export blender model to a foldable paper sheet!
- [andrewmarsh.com/software](#) - Various generative tools - model weather, [parametric shapes](#), [sunpaths](#), [trees](#), more.
- [Dimensions.Guide](#) - A database of measurements and sizes of everyday objects.
- [MagicaVoxel](#) - A free lightweight 8-bit voxel art editor and GPU based interactive path tracing renderer.
- [SmartNormal 2.0](#) - Create normal maps from base textures for free.
- [PureRef](#) - Organize your inspiration references and speed up your creative process for free.
- [Substance Suite](#) (From \$20/Month) - A unique ecosystem of tools and content dedicated to 3D Materials.

## Sound & music:

Tools for sound effects, music, and general audio.

Sound effects generators:

- [Bfxr](#) - Sound effect editor that is based on sfxr.
- [rFXGen](#) - Also sound effects, based on sfxr.
- [evosfxr](#) - Also sound effects, also based on sfxr, with ~evolution~.
- [as3sfxr](#) - S/A.
- [sfxr](#) - The original sound generator these are based on.
- [GB SFX Generator](#) - A small tool for creating authentic Game Boy sound effects.
- [Chiptone](#) - A free tool for generating sound effects in the browser.
- [Freesound.org](#) - A collection of CC-licensed sound effects.

Sound editors:

- [Paulstretch](#) - A program for extreme audio stretching. Make choruses and ambient tones.
- [Audacity](#) - The free software for recording and editing sounds.
- [AudioSculpt](#) - A visual approach to modifying a sound file.
- [Reaper](#) - Digital audio workstation
- [Cecilia](#) - Audio signal processing environment for mangling sound.
- [FamiStudio](#) - NES Music Editor.

Music composition, instruments, effects:

- [Beepbox](#) - An online tool for sketching and sharing instrumental melodies.
- [Ribs](#) - A powerful granular synth that provides detailed control over its granular engine.
- [Bosca Ceoil](#) - Easy to use music composition, with some built-in instruments.
- [Flutterbird](#) - Very simple - just a module for pitch and volume fluctuation.
- [Aria Maestosa](#) - An open-source midi sequencer/editor that can export to mp3.
- [Hydrogen](#) - An advanced drum machine.
- [Beast](#) - Music composition and modular synthesis software.
- [c\\_synth](#) - A chiptune-ish software synthesizer.
- [MilkyTracker](#) - Cross-platform to make your own .mod files.
- [OpenMPT](#) - Popular piece of music tracker software, can produce .mod and .IT and many more popular formats. Also has VST support
- [Synth1](#) - Essential VST with thousands of free presets you can download and import
- [SuperCollider](#) - A platform for audio synthesis and algorithmic composition.
- [Csound](#) - A sound and music computing system.

- [Chuck](#) - Strongly-timed, Concurrent, and On-the-fly Music Programming Language.
- [Sunvox](#) - Cross-platform small, fast and powerful modular synthesizer with pattern-based sequencer (tracker).
- [LMMS](#) - Cross-platform, free, open source music tracker/sequencer/composer. Has its own instruments, some VST plugins compatibility
- [VCV Rack](#): Virtual Eurorack DAW. Cross-platform, free, open source virtual modular synthesiser. Lots of modules and a good community. You can even code your own modules if you know C++.
- [Pure Data](#) - open-source cousin of experimental patching environment MAX/MSP

Other sound tools and resources :

- [.mp3 to .midi online converter](#) - Convert MP3 format to MIDI format
- [Mod Archive](#) - Large collection of music modules (.mod, used by GB Studio).
- [destroyer](#) - Open-source lossless audio player
- [Soundflower](#) - An open source kernel extension for MacOS creates a virtual audio output device that can also act as an input.
- [Craig Records](#) - Multi-track voice channel recording bot for Discord.
- To loop audio on an HTML page: [w3schools.com/html/html5\\_audio.asp](http://w3schools.com/html/html5_audio.asp)

Coding:

### Coding environments, frameworks, & extensions:

Tools that provide a backend or new programming environment in which to make other work.

- [p5.js](#) - Like processing for the browser - artist-friendly.
- [raylib](#) - A programming library to build engines/tools with.
- [Foster](#) - An open source & cross-platform game framework made in C#.
- [Nez](#) - A free 2D focused framework that sits on top of MonoGame/FNA.
- [LÖVE](#) - A free 2D framework based on Lua.
- [Matter.js](#) - A 2D physics engine for the web.
- [openFrameworks](#) - C++ libraries aimed at visual artists, a "toolkit for creative coding".
- [8bit Workshop](#) - Write 8-bit code in your browser.
- [Polycode](#) - A C++ and Lua framework for building interactive applications.
- [Kha](#) - Ultra-portable multimedia framework.
- [Casual Effects](#) - Misc resources & computer graphics projects.
- [Dear ImGui](#) - A bloat-free graphical user interface library for C++.
- [Feathers UI](#) - Cross-platform user interface components for creative frontend projects.
- [DS Game Maker](#) - Make Nintendo DS Roms! (Hard to get running).
- [FNA](#) - A reimplement of the Microsoft XNA Game Studio 4.0 Refresh libraries.
- [Easel.js](#) - A range of tools to make working with the HTML5 Canvas API.
- [Tideflow](#) - Design, automate and monitor your workflows in realtime.
- [Paper.js](#) - An open source vector scripting framework that runs on top of HTML5 Canvas.
- [Reason](#) - Write simple, fast and quality type safe code in JavaScript & OCaml.
- [DrawBot](#) - A powerful, free application for MacOSX that uses Python scripts to generate two-dimensional graphics.
- [Hyper](#) - An electron-based terminal.
- [Idyll](#) - A markup language and toolkit for writing interactive articles.
- [Joy.js](#) - A tool for making "happy little programs".
- [TSPS](#) - A cross-platform Toolkit for Sensing People in Spaces.
- [Pure Data](#) - An open source visual programming language for multimedia.

- [OpenSimpl](#) - Open Hardware scanning laser rangefinder.
- [eLidar](#) - Open Source scanning laser rangefinder.
- [Pencil.js](#) - Nice modular Javascript library with clear OOP syntaxe and lots of features.
- [LibGDX](#) - A java game development framework

### Machine learning:

- [RunwayML](#) - A simple interface for using ML in creative applications.
- [Generated Photos](#) - AI generated models for projects.
- [This Person Doesn't Exist](#) - Same as above but generated live, bonus cats & horses.
- [Talk to Transformer](#) - Chat with a GPT2 text AI model, perhaps useful in generating that next line when you've got writer's block.
- [Components AI](#) - an experimental computational design platform for exploring generative space.
- [AI Gigapixel](#) (\$100, full free trial) - Upscale photos in an app.
- [Let's Enhance.io](#) - "Image enhancement powered by AI"
- [ArtBreeder](#) - Breed two images & use trained models in an app
- [ml5.js](#) - Web interface to make machine learning approachable.
- [ColouriseSG](#) - A deep learning colouriser prototype.
- [Deep Angel](#) - automatically remove objects or people from images.
- [Cartoonify](#) - Turn a photo into a cartoon with a neural network.
- [Resemble.AI](#) - Clone any voice so it sounds like a real human. Free demo.
- [Deezer](#) - an audio source separation library including pretrained models.
- [Pix2Pix](#) - image transformation between parallel datasets of corresponding image pairs
- More: <https://aiartists.org/ai-generated-art-tools>

### Live Coding:

- [Orca](#) - An esoteric language, usable as a live coding environment that can send and create MIDI, OSC & UDP signals.
- [Hydra](#) - A platform for live coding visuals, where each browser window is a node.
- [cables](#) - A tool for creating beautiful interactive content with nodes.
- [Fragment](#) - a collaborative cross-platform AV live coding environment with pixels.
- [Sonic Pi](#) - A live code-based music creation and performance tool, also can export tracks.
- [vVVV](#) - A hybrid visual/textual live-programming environment for easy prototyping and development.
- [Tooll.io](#) - a free open source solution for creating interactive 3d content and animations.
- [Vuo](#) - an application to help people develop interactive experiences, live performances, digital media, and more. Basic version is free.

### Text:

#### Text editors & writing apps:

- [Left](#) - A distractionless plaintext editor.
- [Textreme](#) - The *most* distracted plaintext editor.
- [Notepad++](#) - A source code editor and Notepad replacement.
- [Sublime Text](#) - A sophisticated text editor for code, markup and prose.
- [Atom](#) - A hackable text editor for the 21st Century.
- [Geany](#) - A powerful, stable and lightweight programmer's text editor
- [Another Day](#) - An experimental writing app where computer time syncs to people time.
- [TextMate](#) - A customizable text editor with support lots of programming languages.
- [Mark Text](#) - Simple and Elegant Markdown Editor focused on speed and usability.



- [Calmly Writer](#) - Distraction-free writing.
- [Markdeep](#) - A technology for writing markup plaintext that looks good in any browser.
- [cleartext-mac](#) - A text editor that only allows the 1,000 most common words in English.
- [Mak](#) - A universal notepad.
- [Standard Notes](#) - A free, open-source, and completely encrypted notes app.
- [Turtl](#) - A secure note taking tool.
- [Joplin](#) - An open source note taking and to-do list application that supports Markdown.
- [Leafpad](#) - A simple but useful editor (Linux)
- [TaskPaper](#) - Plain text to-do lists for Mac.
- [Draft](#) - Version control and collaboration for writers
- [Roam](#) - A note-taking tool for networked thought.
- [Anki](#) - Smart flash cards.
- [Etherpad](#) - A real-time collaborative document editor.
- [VSCode](#) - technically has an OS Version? A lot of useful features for .js devs
- [Anagram Artist](#) - (Requires email registration) A text editor for composing anagrams.

### Experimental text tools and formats:

- [telescopictext.org](#) - An experimental tool for creating expanding texts.
- [Diary Email](#) - Write a private diary using email (some paid tiers)
- [journal-cli](#) - A command line tool, for journaling.
- [Plain Text Life](#) - A template that assists organising your everyday life in plain text files.
- [Today.txt](#) - An extremely simple aspirational writing template.
- [Journal.TXT](#) - A single file journal.
- [TiddlyWiki](#) - a non-linear notebook for capturing, organising and sharing complex information.
- [Ren](#) - A lightweight data-exchange text format.
- [The unified collected](#) - Hundreds of small packages for visualizing syntax trees and structured data.
- [domino](#) - web tool for arranging snippets of text into a shareable collage of thoughts/ideas. exports to standalone html
- [Relative Fiction](#) - A tool for creating dynamic stories relative to a reader's place, time and location (via the Foursquare API), weather (OpenWeatherMap) and more (custom feeds for recent news stories etc).

### Text manipulators, converters, & other tools:

- [Online OCR](#) - Optical Character Recognition software that runs online.
- [Word Counter](#) - A word counter.
- [The Alphabetizer](#) - Alphabetize, randomize, sort, remove duplicate lines.
- [Ellipses Loader](#) - A tiny css code snippet for animated ellipses.
- [Capitalize My Title](#) - Online text shortcuts.
- [Tracery](#) - Super-simple tool to generate text (& svg images!)
- [Text Color Fader](#) - Generates color faded/rainbow text in HTML.
- [Text to ASCII](#) - Make your cool ASCII forum sig.
- [ASCII table](#) - Code points & characters.
- [rot8000](#) - Caesar-cypher encryption that replaces each Unicode character with the one 0x8000 places forward or back.
- [Cliche Finder](#) - Analyzes input text for cliches.
- [Onym](#) - Very cool list of tools and resources for naming things.
- [Wordnik](#) - The world's largest online dictionary with definitions from multiple sources, example sentences, rhymes, conceptual links, and related words.
- [Wordoid](#) - Random word generator with toggles for language, quality, patterns, length, and domain availability.

- [Universal Text Combination Generator](#) - See how words might fit together.
- [Mixwords](#) - Takes source words and generates random mixes.
- [Fantasy Name Generator](#) - Generates names, words, and descriptions in many categories.
- [Random Name Generator](#) - Creates names sourced from samples in the US Census.
- [carbon](#) - Create and share beautiful images of your source code.
- [Blotter](#) - A JavaScript API for drawing unconventional text effects on the web.
- [Bank Check Printer](#) - A Macintosh application that prints your bank checks.
- [Unicode Text Converter](#) - Convert plain text to obscure characters from Unicode.
- [Word to Markdown Converter](#) - Converting a Word (or Google) Document to Markdown.
- [Tables Generator](#) - Generates HTML, text, and other tables online.
- [Text Fixer](#) - Misc online text tools, including word to html, remove line breaks, random nouns, more.
- [Emojipedia](#) - Emoji encyclopedia and resource.
- [CopyChar](#) - Copy cool characters.

#### Fonts & font resources:

- [enFont Terrible](#) - A weird type foundry that will export new fonts.
- [Phase](#) - A generative type interface/toy, exported fonts free for personal use.
- [Open Font Library](#) - A collection of freely licensed fonts.
- [Google Fonts](#) - A collection of freely-licensed fonts.
- [Anna Anthropy's world of fonts](#) - Sixteen free game fonts.
- [FontSprite](#) - Complete .png fontsprite editor.
- [BitfontMaker2](#) - Online editor for bitmap fonts with remixable gallery
- [Get the Font](#) - A huge font search engine. (Check that you can use them tho.)
- [unilist](#) - Kool Unicode icons.
- [Font Map](#) - Using artificial intelligence to surface new relationships across fonts.
- [FontJoy](#) - Generate font combinations with deep learning.
- [SPACE TYPE GENERATOR](#) - a kinetic type generator.
- [Text Crop](#) - create a mixin for your typography.
- [Dinamo Darkroom](#) - Tools that help or confuse the modern type designer.
- [FontSquirrel](#) - free fonts web
- [Dafont](#) - free fonts web

#### 'Productivity':

- [When2meet](#) - Free doodle polls.
- [Columns](#) - Checklists arranged in columns.
- [Pomoday](#) - Web-based task management software you can use with just a keyboard.
- [CrushEntropy](#) - A (slightly aggressive) but flexible scheduling tool.
- [Linklist](#) - A way to collect, organize, and share lists with links.

#### Web & print design:

##### Making websites:

- [Neocities](#) - The Geocities of now, make a free website.
- [Hypnospace Productivity Suite](#) - Hypnospace Page Builder and Hypnospace Tune Sequencer from Hypnospace Outlaw - make your own!
- [txti](#) - Make a super fast & low bandwidth website right in the browser.
- [Binder](#) - A simple web template that connects a series of already-existing webpages.

- [Beaker Browser](#) - A peer-to-peer browser that lets you publish websites easily and immediately with the dat protocol.
- [Glitch](#) - Web-based tools to make and share websites & apps.
- [Clone Zone](#) - Clone and edit your own version of popular websites.
- [Snap2HTML](#) - Takes a "snapshot" of folder structures on your harddrive and saves as HTML files.
- [Art HTML Listing](#) - creates filtered, sorted, fully customizable directory listings, indexes, menus, maps and trees.
- [Tree Command](#) - List a directory as a webpage or in the console, Mac.
- [Tree HTML](#) - S/A, python.
- [Enoki](#) - An experimental and decentralized tool for peer-to-peer publishing.
- [MAMP](#) - A free, local server environment to run WordPress on a desktop.
- [txt.fyi](#) - Write something, hit publish, and it's live.
- [temper](#) - Create your personal onepager website in a few clicks.
- [Archetype](#) - An invitation for artists to use the web as an independent exhibition space.
- [Odie](#) - makes a webpage with a published google doc & gives it an odie subdomain
- [ether2html](#) - design a webpage collectively using Etherpad, a collaborative text editor.
- [HTML 2 print](#) - a boilerplate, a minimal example to start a print project using HTML.
- [DesignBase](#) - A database of highly curated free resources for all designers.
- [Timber](#) - Helps you create fully-customized WordPress themes.
- [Hotglue](#) - Make a website like a collage (free hosting, or self-hosted w/ PHP)

#### **Misc kool website-related code:**

- [dat.gui](#) - Creates an interface that you can use to modify variables on a website.
- [Neumorphism.io](#) - Generate Soft-UI CSS code.
- [98.css](#) - A design system for building faithful recreations of old UIs.
- [Woah.css](#) - CSS animations for eccentric developers.
- [htmleditor](#) - A fun, simple live-code html editor, "for messing around".
- [monoequipment](#) - Particular nanocomponents for websites.
- [Title Bar Message Generator](#) - Put a scrolling message into your title bar.
- [Seashells](#) - Lets you pipe output from command-line programs to the web in real-time.
- [Grid Garden](#) - Write CSS code to grow your carrot garden.
- [basicScroll](#) - Standalone parallax scrolling with CSS variables.
- [Teutonic](#) - A minimal, modern CSS framework.
- [Tina](#) - Builds real-time editing into websites.
- [accessible-autocomplete](#) - An accessible JavaScript autocomplete.
- [Warpjs](#) - Warp, distort, bend, twist and smudge your SVG's directly in the browser.

#### **Tools that are about/with websites:**

- [Archiving URLs](#) - Anti-linkrot toolset.
- [Page Speed Insights](#) - A (very useful) Google tester that can help you reduce bandwidth on your websites.
- [Fit on a Floppy](#) - A tool to see if a website would fit on a floppy disk.
- [Website Carbon Calculator](#) - Calculates the carbon emissions of a website.
- [Piratebox](#) - Make your own offline wireless networks designed for anonymous file sharing, chatting, message boarding, and media streaming.
- [Pilgrim](#) - An experimental combination of a bookmarklet and web-crawler.
- [screensiz.es](#) - List of various device screen sizes.
- [Ratio Buddy](#) - A happy little tool to help you calculate aspect ratios.
- [Anytype](#) - (In beta) An "operating environment for the new internet"
- [chl.li](#) - A simple, modern, free and privacy-friendly URL shortener.



- [ciao](#) - HTTP checks and tests, monitoring URL changes.
- [Simply split your tweets](#) - Splits your long tweets up for you.
- [rreb](#) - Record and replay the web.
- [Webcull](#) - Collect the web.
- [RSS Box](#) - Subscribe to RSS feeds for websites that do not support RSS themselves.
- [Built With](#) - Find out what websites are Built With.
- [deepstream](#) - a fast and secure data-sync realtime server.
- [cabal](#) - An experimental p2p community chat platform.
- [Planktos](#) - Enables websites to serve their static content peer-to-peer by having active users serve assets to other users via bittorrent.
- [Stein](#) - Paid tiers (meh) but free for personal use- manage web data with Google Sheets.
- [Diagram.codes](#) - Describe diagrams with a simple text language and automatically generate an image you can export.
- So many more: <https://webfieldmanual.com>

## Colors:

Tools for picking, analyzing, or seeing colors.

- [coolors](#) - Generate color schemes.
- [Pigment](#) - Like a color moodboard.
- [Oto255](#) - For lightening / darkening colors.
- [Colourco.de](#) - Pick colours based on hsl.
- [Image to Color Palette Generator](#) - allows you to generate a color palette based upon an input image.
- [Gradient Image Generator](#) - Creates CSS3 Codes and PNG Images
- [Contrast Checker](#) - Make sure your foreground/background colors are accessible.
- [Calcolor](#) - Calculate colors. Share palettes.
- [Multicolor](#) - Search images by color.
- [Image Color Summarizer](#) - RGB, HSV, LCH & Lab image color statistics and clustering
- [scale](#) - Color scale generator.
- [Werner's Nomenclature of Colours](#) - A recreation of the original 1821 color guidebook.
- [Coolhue](#) - Nice gradients.
- [ColorZilla](#) - Advanced color tools, including an extension.
- [WebGradients](#) - A free collection of 180 linear gradients.
- [Color Scales](#) - Find tints, tones and shades of a color based on human perception.
- [Colorable](#) - Color palette combination contrast tester, for node.js

## Zines, books, prints:

- [Electric Zine Maker](#) - A printshop and art tool for making zines.
- [Electric Zine Maker HTML template](#) - A simple HTML5/JavaScript template for Electric Zine Maker zines.
- [Slaptrash](#) - Make webzines in the browser!
- [Zine Machine](#) - Steal this zine on glitch~
- [bookletcreator.com](#) (free up to 16 pages) for assembling ready-to-print PDFs from half-page sized PDFs.
- [pocketmod.com](#) - take-a-piece-of-letter-paper-and-fold-it-into-an-eight-page-zine.
- [Paper Sizes](#) - Resource for International Paper Sizes, Dimensions & Formats.
- [Bindery.js](#) - A javascript library to create printable books with HTML and CSS.
- [Basil.js](#) - Scripting in InDesign made available to designers and artists.
- [Quite Software](#) - Misc neat (oldschool!) Adobe plugins, paid.
- [p5.Riso.js](#) - A p5.js library for generating files suitable for Risograph printing.

- [The print simulator](#) - a quick and easy way to see how things might print.
- [Unfolder for Mac](#) (\$30) - Unfolder is a 3D model unfolding tool for creating papercraft.
- [Rabbit Ear](#) - An origami / crease pattern tool in Javascript.

Dealing with files:

#### Tools that interface with operating systems & files:

- [Automator](#) - A piece of built-in Mac software that lets you automate your computer doing things with minimal code.
- [Toothfairy](#) - Connect Bluetooth to your Mac with a single click or keypress
- [AppCleaner](#) - A small application to thoroughly uninstall unwanted apps.
- [ShareDrop](#) - p2p file transfer, like airdrop for the browser.
- [drop.lol](#) - Copy files over the network.
- [inlets](#) - Expose your local endpoints to the Internet or to another network, in Go.
- [voidtools Everything](#) - Locate files and folders by name instantly.
- [BitBar](#) - Put anything in your Mac OS X menu bar.
- [Microsoft PowerToys](#) - a set of utilities to tune and streamline Windows.
- [Screenotate](#) - Take screenshots you can search.
- [Kap](#) - Open-source screen recorder built with web technology.
- [Itsycal](#) - A tiny menu bar calendar for Mac.
- [BAXX.DEV](#) - A backup service with curl as main interface.
- [IOGraphica](#) - An application that turns mouse movements into art.
- [minivmac-3ds](#) - Emulate a classic mac environment on a 3ds.

#### Building applications & exes:

- [HTML5](#) - A project template and a set of scripts that take HTML and export an app or exe.
- [Enigma Virtual Box](#) - An application virtualization system for Windows.
- [Cordova](#) - Mobile apps with HTML, CSS & JS.
- [Adobe PhoneGap](#) - Make hybrid applications built with HTML, CSS and JavaScript.
- [Electron JS](#) - Build cross-platform desktop apps with JavaScript, HTML, and CSS
- [NW.js](#) - Write native applications & call Node.js modules directly from DOM.

#### Converters, downloaders, & reducers:

- [Download Converter](#) - Convert between lots of different files.
- [Smallpdf](#) - Pdf conversion and compression tools.
- [Shrinkme](#) - Shrink images online.
- [Free Image and Photo Resizer](#) - Perfect Sizes For Social Media And Web
- [Scrapy](#) - An open source framework for extracting the data you need from websites.
- [SiteSucker](#) - A Mac application that automatically downloads websites from the Internet.
- [Simplescraper](#) - Extract data from any website in seconds.
- [youtube-dl](#) - A command-line program to download videos from YouTube.
- [FFmpeg](#) - A complete, cross-platform solution to record, convert and stream audio and video in the console.
- [HandBrake](#) - The open source video transcoder.
- [ImageMagick](#) - Create, edit, compose, or convert bitmap images in the console.
- [Otf to Woff](#) - Font filetype converters.
- [OnlineVideoConverter](#) - Free video conversion tool.
- [Peg It](#) - Jpeg compression tool that lets you control how compressed you make it by sliding a bar and seeing a preview. Choose the perfect balance of size and quality.

## More tools lists & reading about tools:

- <https://alternativeto.net/> - Put in the name of the software you wish you could afford, get alternatives back!
- <http://www.ambrosine.com/resource.php> - An older but huge games resource list - somewhat dated, but still lots of good in here.
- <https://itch.io/tools> - The itch.io tools page, sorted by popularity.
- <https://kool.tools/tool-gallery> - mark wonnacot's careful selection of interesting tools.
- <https://gist.github.com/brendanzab/3792143> - World building miscellany links.
- <http://www.nathalielawhead.com/candybox/the-wonderful-world-of-tools-made-by-small-teams-solo-devs-and-shareware-weird-beautiful-and-experimental-things-to-be-creative-in-an-analysis-on-building-for-approachability> - Nathalie Lawhead breaks down the why on why small tools are great.
- <http://www.nathalielawhead.com/candybox/building-weird-games-with-alternative-technologies-workshop> - S/A but on general workflows!
- <https://joon.be/techtoolbox/> - GDC talks on homemade/weird/experimental tools.
- <https://aiartists.org/ai-generated-art-tools> - Tools for AI & art.
- <http://www.galaxykate.com/pdfs/ComptonMateas-Casual%20Creators.pdf> - Kate Compton talks about casual creators and tool usage.
- <https://itch.io/t/10237/personal-games-resource-list> - A list of resources towards personal games from 2014.
- <https://notabug.org/Calinou/awesome-gamedev> - A list of (code focused) gamedev tools.
- <https://opensource.design.net/resources/> - Design tools.
- <https://github.com/cjbarber/ToolsOfTheTrade> - Long long list of code tools.
- <https://generativelandscapes.wordpress.com/> - All about generative landscapes
- <http://www.procjam.com/> - All about generating things in general!
- <https://docs.google.com/document/d/1I5RulboZQx8X8NO3fDQ6yuCxI0ao0W7AAasz-2W3cqzA/edit> - A similarly exhaustive list of new media tools, with a lot oriented around video & performance.
- [https://docs.google.com/spreadsheets/d/1nc\\_A1VIJQ1AiZrY\\_Eet1ICtwNVRomNj6azU\\_DobKXIY/htmlview#gid=0](https://docs.google.com/spreadsheets/d/1nc_A1VIJQ1AiZrY_Eet1ICtwNVRomNj6azU_DobKXIY/htmlview#gid=0) - Image tool list!
- <https://timrodenbroeker.de/resources/> - Many resources and learning links, sorted by type
- <http://osp.kitchen/tools/> - Open Source Publishing tools
- <https://beepb00p.xyz/annotating.html> - How to annotate literally everything (tools & theory).
- <https://docs.google.com/document/d/1Fa2-0H8XUrVhesKNikA2KJ2qTNjjZzdjDSUWWtW97KI/edit> - Milan's Ultimate Resource List - Code, design, & education focus
- <https://plaintextproject.online/tools.html> - List of tools that can help you work and live more efficiently in plain text.
- <https://webfieldmanual.com> - A curated list of resources focused on documenting only the best knowledge for designing experiences and interfaces on the web.