

Extensions

GDevelop is built in a flexible way. In addition to [core features](#), new capabilities are provided by extensions. Extensions can contain objects, behaviors, actions, conditions, expressions or events.

[Directly from GDevelop](#), you have access to a collection of community created extensions, listed here. You can also [create](#), directly in your project, new behaviors, actions, conditions or expressions for your game.

Reviewed extensions

Ads

Mobile In-App Purchase (experimental)



Add items to buy directly in your game (“In-App Purchase”), for games published on Android or iOS.

[Read more...](#) ([reference](#))

Advanced

Base conversion



Provides conversion expressions for numbers in different bases.

[Read more...](#)

Color Conversion



Expressions to convert color values between various formats (RGB, HSV, HSL, named colors) and get colors between 2 others.

[Read more...](#)

Compressor



Compress and decompress strings.

[Read more...](#)

Current game version



Get the current game version from GDevelop game properties.

[Read more...](#)

Pathfinding painter



Draw the pathfinding of an object using a shape painter.

[Read more...](#)

Extended math support



Additional math functions and constants as expressions and conditions.

[Read more...](#)

FPS



Adds expressions and a behavior to get and display the game FPS.

[Read more...](#)

Game properties data



Get Version, Title, Publisher name, PackageName from properties tab.

[Read more...](#) ([reference](#))

Hash



Hash with MD5 or SHA256.

[Read more...](#)

Random Color Generator



Create a random color for a scene, an object, or any other color input.

[Read more...](#)

Read pixels



Read the values of pixels on the screen.

[Read more...](#)

Record



Adds events to record the game and players download the clips. Works on desktop, and in the browser.

[Read more...](#)

Regular Expressions



Functions for using regular expressions to manipulate strings.

[Read more...](#)

Sprite Snapshot



Renders an object, layer, scene or an area of a scene and puts the resulting image into a sprite.

[Read more...](#)

Rotate a string 13 characters



This extension rotates all alphabetic characters in a string by 13 characters.

[Read more...](#)

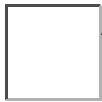
Sprite Sheet Animations



Animate a tiled sprite from a sprite sheet.

[Read more...](#)

Unique Identifiers



A collection of UID generation expressions.

[Read more...](#)

Unicode



Provides conversion tools for Ascii and Unicode characters.

[Read more...](#)

Audio

Text-to-Speech



An extension to enable the use of Text-to-Speech features.

[Read more...](#)

Camera

Camera impulse



Move the camera following an impulse trajectory.

[Read more...](#)

Camera shake



Shake layer cameras with translation, rotation and zoom.

[Read more...](#)

Camera Zoom



Allows to zoom camera on a layer with a speed (factor per second).

[Read more...](#)

Copy camera settings



Copy the camera settings of a layer and apply them to another layer.

[Read more...](#)

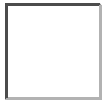
Drag camera with the mouse (or touchscreen)



Move a camera by dragging the mouse (or touchscreen).

[Read more...](#)

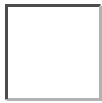
Edge scroll camera



Scroll camera when cursor is near edge of screen.

[Read more...](#)

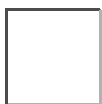
Follow multiple objects with camera



Change the zoom and position of the camera to keep all instances of an object (or object group) on the screen.

[Read more...](#)

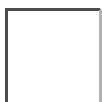
Parallax for Tiled Sprite



Behaviors to animate Tiled Sprite objects in the background, following the camera with a parallax effect.

[Read more...](#)

Room-based camera movement



Move and zoom camera to the room object that contains the trigger object (usually the player).

[Read more... \(reference\)](#)

Smooth Camera



Smoothly scroll to follow an object.

[Read more...](#)

Game mechanic

Checkpoints



A position checkpoint for instances.

[Read more...](#) ([reference](#))

Create multiple copies of an object



Select the object, choose the number of rows and columns, the spacing between rows and columns, the top left starting point, the layer to create the objects on, and the z-order of the objects.

[Read more...](#)

Dungeon generator



Create a procedurally generated dungeon. Includes two layouts: “rooms and hallways” and “dungeon cave”.

[Read more...](#) ([reference](#))

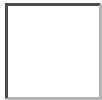
Fire bullets



Fire bullets, manage ammo, reloading, and overheating.

[Read more...](#) ([reference](#))

Health points and damage



Manage health points and damage, including a protective shield and armor.

[Read more...](#)

Hexagonal grid



Action to snap objects to a virtual hexagonal grid during the game.

[Read more...](#)

Idle object tracker



Check if an object has not moved (with some, customizable, tolerance) for a certain duration (1 second by default).

[Read more...](#)

Object "Is On Screen" Detection



This adds a condition to detect if an object is on screen based off its current layer.

[Read more...](#)

Linked Objects Tools



Conditions to use Linked Objects as a graph and a path finding movement behavior.

[Read more...](#) ([reference](#))

Noise generator



Expressions for generating Simplex noise values. Useful for procedural generation.

[Read more...](#) ([reference](#))

Object spawner



Spawn (create) objects periodically.

[Read more...](#)

Object Stack



An ordered list of objects and a shuffle action.

[Read more...](#)

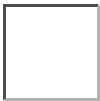
RTS-like unit selection



Allow player to select units by clicking on them or dragging a selection box.

[Read more...](#) ([reference](#))

Rectangular flood fill



Create fill objects that cover the rectangular area of target objects.

[Read more...](#) ([reference](#))

Snap objects to a virtual grid



Action to snap objects to a virtual grid during the game.

[Read more...](#)

Values of multiple objects

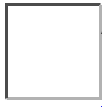


Values of picked object instances (including position, size, force and angle).

[Read more...](#) ([reference](#))

General

Array tools



A collection of utilities and tools for working with arrays.

[Read more...](#)

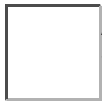
Choose a random value



Choose a random value in a list of strings or numbers.

[Read more...](#)

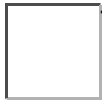
Extended variables support



Add conditions, actions and expressions to check for the existence of a variable, copy variables, delete existing ones from memory, and create dynamic variables.

[Read more...](#)

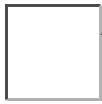
Repeat every X seconds



This allows to trigger an event every X seconds.

[Read more...](#)

Sway



A behavior to make objects (like grass) sway randomly.

[Read more...](#) ([reference](#))

Input

Back button



Adds interactions with the back button.

[Read more...](#)

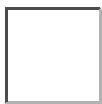
Behavior Remapper



Quickly remap Behavior controls to different keys.

[Read more...](#)

Cursor movement conditions



Conditions to check the cursor movement (still or moving).

[Read more...](#)

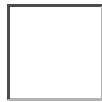
Double-click



Check for a double-click with a mouse, or a double-tap on a touchscreen.

[Read more...](#)

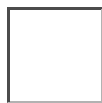
Gamepads (controllers)



Add support for gamepads (or other controllers) to your game, giving access to information such as button presses, axis positions, trigger pressure, etc...

[Read more...](#) ([reference](#))

Konami Code



Allows to input the classic Konami Code ("Up, Up, Down, Down, Left, Right, Left, Right, B, A") into a scene for cheats and easter eggs.

[Read more...](#)

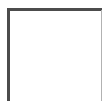
Mouse Helper



Check if a sprite has been clicked and turn any objects into a cursor.

[Read more...](#)

Mouse Pointer Lock



This behavior removes the limit on the distance the mouse can move and hides the cursor.

[Read more...](#) ([reference](#))

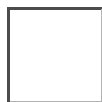
Multitouch joystick and buttons



Activate a joystick or buttons that can be controlled by interacting with a touchscreen.

[Read more...](#) ([reference](#))

Pinching gesture



Move the camera or objects with pinching gestures.

[Read more...](#)

Swipe Detector

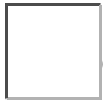


A behavior that detects a swipe being done on the screen, and that gives you information about it, including the direction and the length.

[Read more...](#)

Movement

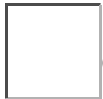
Advanced platformer movements



Enhancements for the platformer character: air jump, wall jump wall sliding, coyote time and dashing.

[Read more...](#)

Animated Back and Forth Movement



Make the object go on the left, then when some distance is reached, flip and go back to the right. Make sure that your object has two animations called "GoLeft" and "TurnLeft".

[Read more...](#)

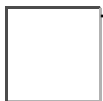
Boids movement (experimental)



Simulates flocks movement.

[Read more...](#) ([reference](#))

Boomerang



Throw an object that returns to the thrower like a boomerang.

[Read more...](#)

Bounce (using forces)



Provides an action to make the object bounce from another object it just touched. Add a permanent force to the object and, when in collision with another one, use the action to make it bounce realistically.

[Read more...](#) ([reference](#))

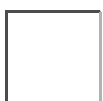
Draggable (for physics objects)



Drag a physics object with the mouse (or touch).

[Read more...](#)

Ellipse movement



Move objects on ellipses or smoothly back and forth in one direction.

[Read more...](#)


Explosion force



Simulate an explosion with physics forces on target objects.


 [Read more...](#) ([reference](#))

Face Forward

 Face object towards the direction of movement.


 [Read more...](#) ([reference](#))

Homing projectile

 Make a projectile object move towards a target object.


 [Read more...](#) ([reference](#))

Linear Movement

 Move the object linearly, according to the speed configured on X and Y axis.
Useful for simple enemies, bullets or objects following a straight line on the screen.


[Read more...](#)

Magnetic Effect

 Attract an object to another object, with customisable speed and distance.

 [Read more...](#)

Make objects orbit around a center object

 Make objects orbit around a center object. You can customize the number of objects, speed, etc...

[Read more...](#)

Pixel perfect movement

 Grid-based or pixel perfect platformer and top-down movements.


 [Read more...](#)

Platformer trajectory

 Platformer character jump easy configuration and platformer AI tools.

 [Read more...](#)

Rectangular movement

 Move objects in a rectangular pattern.

 [Read more...](#)

Screen Wrap



Teleport object when it moves off the screen and immediately appear on the opposite side while maintaining speed and trajectory.

[Read more...](#)

Stay On Screen



Force the object to stay visible on the screen by setting back its position inside the viewport of the camera.

[Read more...](#)

Stick objects to others



Behavior to stick objects to other objects - so that they follow the position and rotation of the object they are stuck to.

[Read more...](#)

Timed Back and Forth Movement



This behavior moves objects back and forth for a chosen time or distance, vertically or horizontally.

[Read more...](#)

Make object travel to random positions



Make object travel to random positions (with the pathfinding behavior).

[Read more...](#)

Turret movement



A turret movement with customizable speed, acceleration and stop angles.

[Read more...](#)

Network

Advanced p2p event handling



Allows handling all received P2P events at once instead of one per frame. It is more complex but also potentially more performant.

[Read more...](#)

Internet Connectivity



Checks if the device running the game is connected to the internet.

 [Read more...](#)

MQTT Client (advanced)



An MQTT client for GDevelop: allow connections to a MQTT server and send/receive messages.

[Read more...](#)

Webpage URL tools (Web browser)



Allows to read URL on Web browser exports of the game and manipulate URLs generally.

[Read more...](#)

WebSocket client



A WebSocket client for fast client-server networking.

[Read more...](#)

Third-party

Discord rich presence (Windows, Mac, Linux)



Adds discord rich presence to your games.

[Read more...](#)

User interface

Align object on the screen



Align objects on the scene relatively to the window (or screen size).

[Read more...](#)

Auto typing animation for text ("typewriter" effect)



Animate text to simulate it being written one character at a time (a "typewriter" effect).

[Read more...](#)

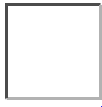
Cancellable draggable object



Allow to cancel the drag of an object (having the Draggable behavior) and return it smoothly to its previous position.

[Read more...](#)

Checkbox



Checkbox that can be toggled by a left-click or touch.

[Read more...](#)

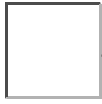
Clipboard



Read and write the clipboard.

[Read more...](#)

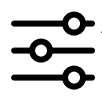
Cursor type



Provides an action to change the type of the cursor, and a behavior to change the cursor when an object is hovered.

[Read more...](#)

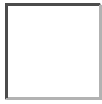
Draggable slider



A draggable slider that users can move to select a numerical value.

[Read more...](#)

Emojis



Display emoji characters in text objects and store them in strings.

[Read more...](#)

Flexbox



Allows using flexbox for positioning objects.

[Read more...](#)

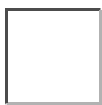
Iframe



Create or delete an iframe to embed websites.

[Read more...](#)

Input Validation



Conditions and expressions to check, sanitize and manipulate strings.

[Read more...](#)


Language




Get the preferred language of the user, set on their browser or device.

 [Read more...](#)


Panel sprite button

 A button that can be customized.
[Read more...](#)


Pop-up

 Display pop-ups to alert, ask confirmation, and let user type a response in text box.
[Read more...](#)


Star Rating

 A rating system indicated by stars using the shape painter.
[Read more...](#)


Console (commands handler for Text Entry objects)

 A console behavior that allows parsing simple commands inputted via a Text Entry object.
[Read more...](#)


Mobile virtual keyboard for Text Entry

 Allow to open and close the virtual keyboard on mobile (iOS, Android). To be used with Text Entry objects.
[Read more...](#)

Time formatting

 Expressions to transform time in seconds to format like HH:MM:SS. Ideal to display timers on screen.
[Read more...](#)

Toggle switch

 Toggle switch that users can click or touch.
[Read more...](#)


Visual effect

Depth effect

 Change scale based on Y position to simulate depth of field.

[Read more...](#) ([reference](#))

Flash (blink)

 Make the object flash (blink) for a period of time, so that it is alternately visible and invisible. Trigger the effect by using the Flash action.


[Read more...](#)

Flash layer

 Make a layer visible for a specified duration, and then hide the layer.


[Read more...](#)

Flash and transition painter

 Behavior for shape painter allows you to paint a color all over the screen for period of time with an effect (useful for simulate flash and transition effect).


[Read more...](#)

Marching Squares (experimental)

 Allow to build a “scalar field” and draw contour lines of it: useful for fog of wars, liquid effects, paint the ground, etc...

[Read more...](#) ([reference](#))

Object recolorizer (experimental)

 Independently change the colors of a sprite, a tiled sprite or a panel sprite.


[Read more...](#)

Reflection

 Add a reflection to a selected object.

[Read more...](#)

Animate Shadow Clones

 Create and animate shadow clones that follow the path of a primary object.


[Read more...](#) ([reference](#))

Shake Object (position, angle, scale)


 Shake an object, using one or more ways to shake (position, angle, scale).

 [Read more...](#) ([reference](#))


Object Masking

 Use a sprite or a shape painter to mask another object.
[Read more...](#)

3D Flip

 Flip sprites with a 3D effect.
[Read more...](#)

YSort

 Create an illusion of depth by setting the Z-order based on the Y position of the object. Useful for isometric games, 2D games with a “Top-Down” view, RPG...


[Read more...](#)

Community extensions

The following extensions are made by community members — but not reviewed by the GDevelop extension team. As such, we can't guarantee it meets all the quality standards of official extensions. In case of doubt, contact the author to know more about what the extension does or inspect its content before using it.

Advanced

Clock


 Add clocks into your game.
[Read more...](#)

Crypto Api

png Random number generator for integers and floats using the Crypto API.

[Read more...](#) ([reference](#))

Dynamic Water

 Easily create a realistic liquid surface simulation.
[Read more...](#)


Object picking tools

 Adds various object picking related tools.


 [Read more...](#)

Device

GPS


 Adds a way to locate the player.
[Read more...](#)

Voice Recognition API


 Converts voice to text.
[Read more...](#) ([reference](#))

Game mechanic

HasLanded


 Checks if the object has landed on a given floor.
[Read more...](#)

Point and Orbit


 Point an object toward a position and Orbit around a position.
[Read more...](#)

General


Animation system

 Adds easy to use pre-made animations.
[Read more...](#)

ChatBubble

 Create chat bubbles dynamically.
[Read more...](#)

Dialog Box

 This extension adds Dialog Box functionality that can be used for RPGs, visual novels, and more.
[Read more...](#) ([reference](#))

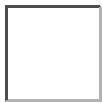
Extra inventory functions



Adds functions that let you add/remove multiple items from an inventory, as well as a function to set the count of an item.

[Read more...](#)

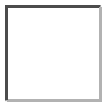
Flip Gravity



Flip platformer character gravity up side down.

[Read more...](#)

JSON Resource Loading



Loads a JSON resource into a variable.

[Read more...](#)

Load images from a URL



Adds multiple actions to load images from a URL into the game.

[Read more...](#)

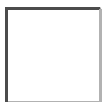
Make it rain



Makes an object rain from a selected direction.

[Read more...](#)

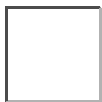
Pause when losing focus



Pauses when focus is lost, restarts when focus is regained.

[Read more...](#)

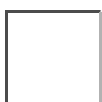
Platform ledge grabber



Grab platforms ledges within reach automatically.

[Read more...](#)

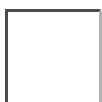
Pushable/Pullable Box



Convert object to a pushable or/and pullable box.

[Read more...](#)

Pushable Box (OUT DATED)



Makes an object a pushable box.

[Read more...](#)

Record Movements



Allow the user to record object movements and recall them to make reverse time mechanic.

[Read more...](#)

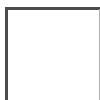
Variables/References



Adds references and pointers for variables.

[Read more...](#)

Sound volume based on distance



Make any sound volume on any channel increase and decrease based on distance.

[Read more...](#)

Sprite Based Lighting



Make light using sprites.

[Read more...](#)

TimeDetector



Detects the current time of the day, week and month.

[Read more...](#)

Trampoline Platform



Convert object to trampoline platform.

[Read more...](#)

YGameSDK



YGameSDK.

[Read more...](#)

Movement

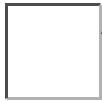
Rectangular Movement (deprecated)



Allow an object to move in a rectangular pattern.

[Read more...](#) ([reference](#))

Sine (or ellipsis) Movement (deprecated)

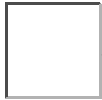


Allow an object to move smoothly on the X and/or Y axis following a sine wave, or an ellipsis.

[Read more...](#) ([reference](#))

Network

Update checker



Checks if the version of the game on liluo is different than the current game version.

[Read more...](#)

Third-party

Newgrounds API

API

Allows developers to use newgrounds API.

Limitations: only works with browser games.

[Read more...](#) ([reference](#))

Make your own extension

It's easy to create, directly in your project, new behaviors, actions, conditions or expressions for your game.

Read more about this:

- [Create your own extensions](#)
- [Share extensions with the community](#)
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