

# Construct 2

## Создаем спиннер

# ПРОГРАММИРОВАНИЕ - ЭТО ЛАЙФХАК!

Хочешь быть успешным -  
учись программировать будущее!

ПРОГРАММИРОВАНИЕ - ЭТО ЗНАНИЕ,  
ПОЗВОЛЯЮЩЕЕ ДЕЛАТЬ ЖИЗНЬ ЛУЧШЕ!

Программирование - это ЛАЙФХАК!

Докажем это?

\*Лайфхак (от лайфхакинг, [англ.](#) life hacking)

Как изменилось рабочее место хирурга?



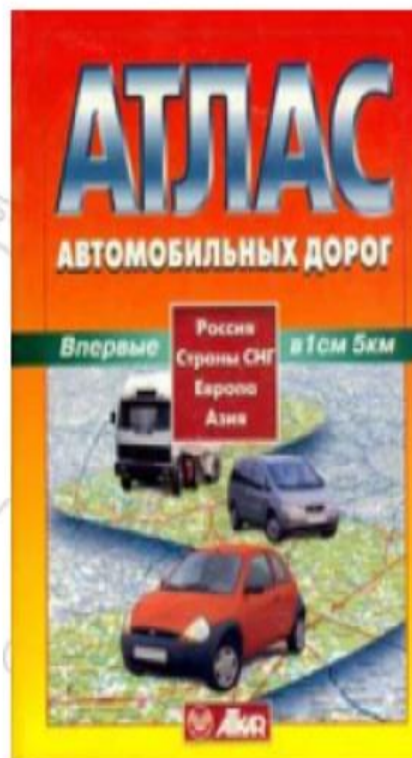
Что должен уметь делать современный врач?

Автомобилестроение.... А как было раньше?



Кто управляет современными роботами?

Как бортовой компьютер позволяет управлять современным автомобилем?



Что он умеет?

А это современный ткацкий станок... </>



Какие навыки нужны оператору ткацкого станка?

## Фрезерные станки с числовым программным управлением



Фрезеровщик-программист? Что он программирует?



А как мы теперь читаем?



Какая информация и как нам стала доступна?

Как изменилась работа сберегательных банков?



Какие преимущества банкоматов и банковских мобильных приложений?

Стало ли безопаснее на дорогах?



Что будет, если водитель нарушил  
правила дорожного движения?

Программирование - это лайфхак?

ПОДВОДИМ ИТОГИ!

ПРОГРАММИРОВАНИЕ - это навык, который

помогает...

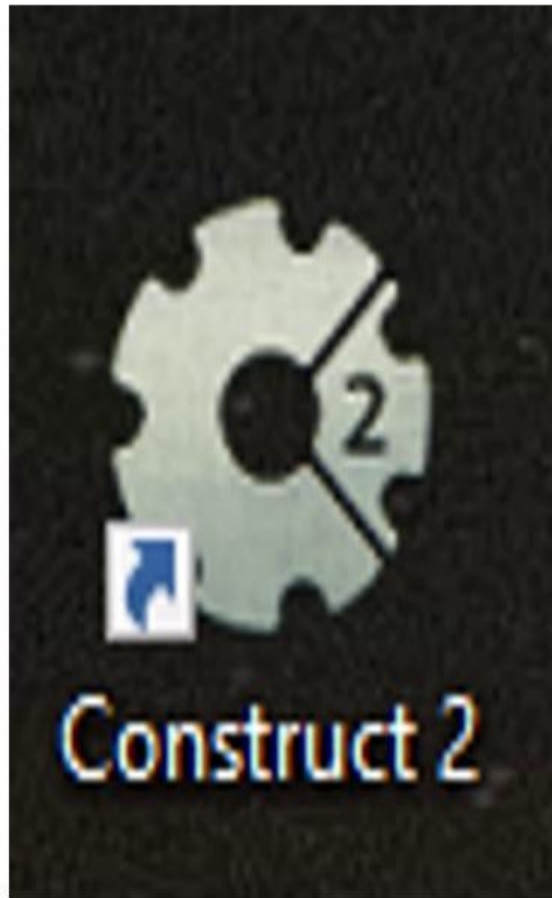
позволяет...

способствует...

обеспечивает...

изменяет...

# Знакомимся с Construct 2





Welcome to  
**Construct 2**

Release 168 (64-bit)



Paulo Ricardo Reinehr

**Start**

- [New Project](#)
- [Open Project](#)

**Project Examples**

- [Space Blaster](#)
- [Ghost Shooter](#)
- [Browse examples](#)

**Recent Projects**

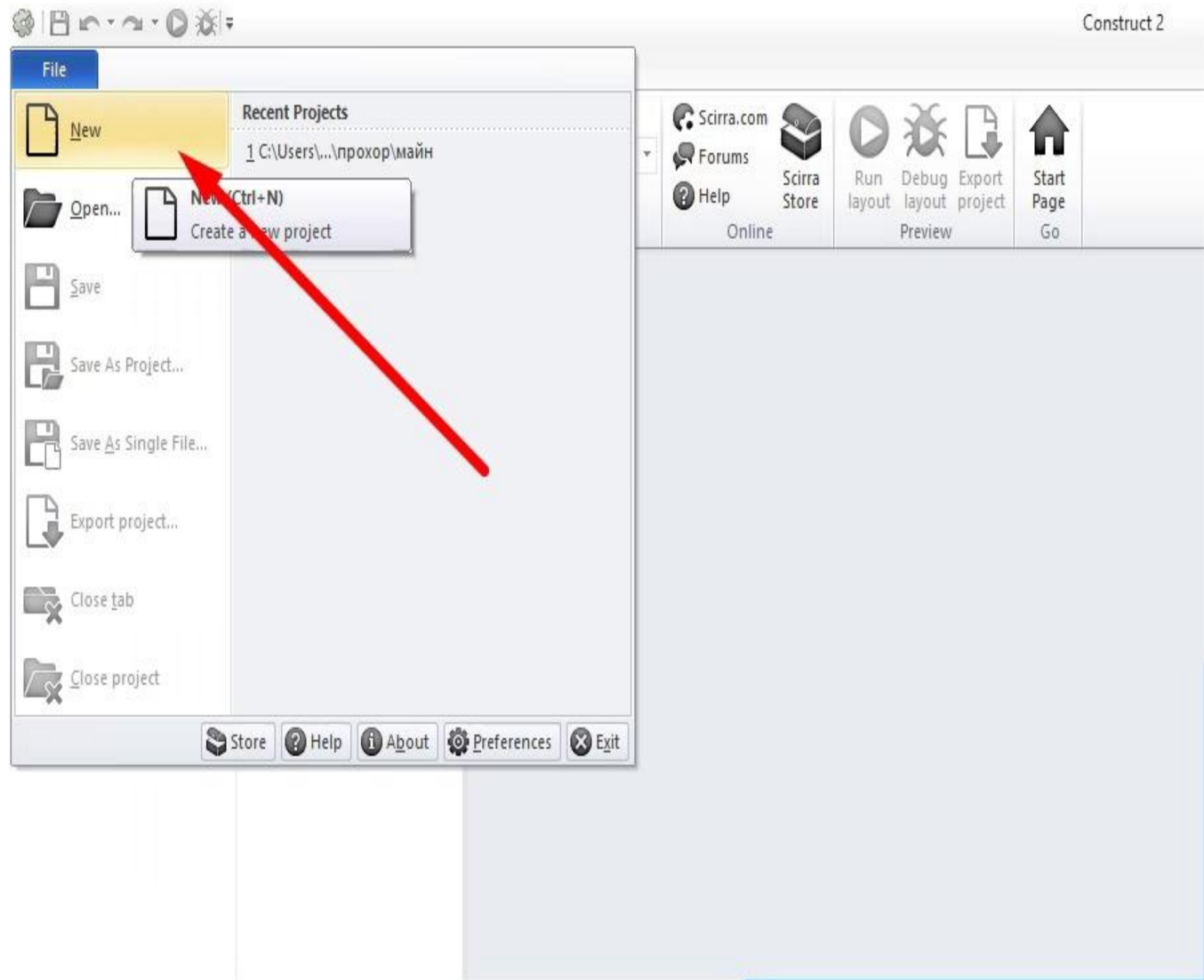
- [main.capx](#)
- [main.capx](#)
- [Space Blaster game.capx](#)
- [Codologia App Student.html.capx](#)
- [Codologia App Student.capx](#)
- [Codologia App Teacher.html.capx](#)
- [Codologia App Teacher.capx](#)

**Useful Links**

- [Manual](#)
- [Tutorials](#)
- [Forums](#)
- [Store](#)

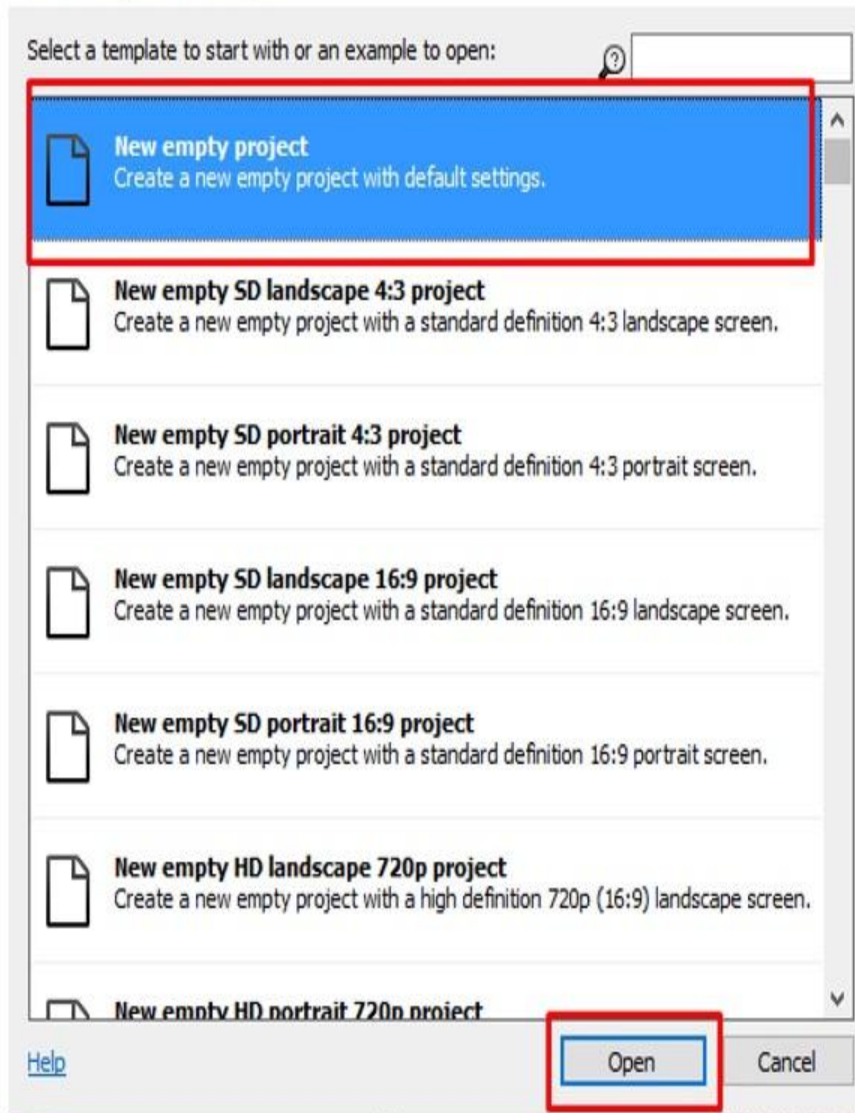
**Stay up to date**







Select template or example



File Home View Events

Cut Copy Paste Undo Redo Delete Select All Select None

Clipboard Undo Selection

Configurations

Active configurations: All  
Displaying: HTML5

Scirra.com  
Forums  
Help

Scirra Store

Run layout  
Debug layout  
Export project

Preview

Start Page  
Go

Properties

Layout 1 x Event sheet 1

About

Name	New project
Version	1.0.0.0
Description	
ID	com.mycompany.myapp
Author	
Email	
Website	http://

Project settings

First layout	(default)
Use loader layout	No
Pixel rounding	Off
Window Size	854, 480

Configuration Settings

Preview browser	(default)
Fullscreen in browser	Letterbox scale
Fullscreen scaling	High quality
Use high-DPI display	Yes
Orientations	Any
Enable WebGL	On
Sampling	Linear
Physics engine	Box2D web
Loader style	Progress bar & logo
Pause on unfocus	No
Clear background	Yes

More information [Help](#)

Projects

- New project\*
  - Layouts
    - Layout 1
  - Event sheets
    - Event sheet 1
  - Object types
  - Families
  - Sounds
  - Music
  - Files
  - Icons

Projects Layers

Objects

All 'Layout 1' objects

Objects Tilemap

File Home View Events

Clipboard Undo Selection Undo Redo Delete Select All Select None Active configurations: All Displaying: HTML5 Scirra.com Online Forums Scirra Store Run layout Debug layout Export project Start Page Go

Properties

About	
Name	New project
Version	1.0.0.0
Description	
ID	com.mycompany.myapp
Author	
Email	
Website	http://
Project settings	
First layout	(default)
Use loader layout	No
Pixel rounding	Off
Window Size	854, 480
Configuration Settings	
Preview browser	(default)
Fullscreen in browser	Letterbox scale
Fullscreen scaling	High quality
Use high-DPI display	Yes
Orientations	Any
Enable WebGL	On
Sampling	Linear
Physics engine	Box2D web
Loader style	Progress bar & logo
Pause on unfocus	No
Clear background	Yes
More information	<a href="#">Help</a>

Layout 1 x Event sheet 1

Projects

- New project\*
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    - Icons

Projects Layers

Objects

All 'Layout 1' objects

Objects Tilemap

File Home View Events

Clipboard Undo Selection Configurations Online Preview Go

Cut Copy Undo Redo Delete Select All Select None

Active configurations: All

Displaying: HTML5

Scirra.com Forums Scirra Store Run layout Debug layout Export project Start Page Help

Properties

Layout 1 x Event sheet 1

About

Name	New project
Version	1.0.0.0
Description	
ID	com.mycompany.myapp
Author	
Email	
Website	http://

Project settings

First layout	(default)
Use loader layout	No
Pixel rounding	Off

Window Size 854, 480

Configuration Settings

Preview browser	(default)
Fullscreen in browser	Letterbox scale
Fullscreen scaling	High quality
Use high-DPI display	Yes
Orientations	Any
Enable WebGL	On
Sampling	Linear
Physics engine	Box2D web
Loader style	Progress bar & logo
Pause on unfocus	No
Clear background	Yes

More information [Help](#)

Projects

- New project\*
  - Layouts
    - Layout 1
  - Event sheets
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  - Object types
  - Families
  - Sounds
  - Music
  - Files
    - Icons

Projects Layers

Objects

All 'Layout 1' objects

Objects Tilemap

## Insert New Object

Double-click a plugin to create a new object type from:

Data & Storage

- Array
- Dictionary
- WebStorage
- XML

Form controls

- Button
- List
- Text box

General

- 9-patch
- Function
- Particles
- Sprite**
- Sprite font
- Text
- Tiled Background

Name when inserted:

Description: Store an array of values in up to 3 dimensions. - [More help on 'Array'](#)

[Help](#)

File Home View Events

Cut Undo Delete Active configurations: All  
Paste Copy Redo Select All Displaying: HTML5  
Select None

Clipboard Undo Selection Configurations

Scirra.com Scirra Store Run layout Debug layout Export project Start Page  
Forums Help Scirra Store Run layout Debug layout Export project Start Page  
Help Scirra Store Run layout Debug layout Export project Start Page  
Online Preview Go

Properties

Layout 1 x Event sheet 1

Animation 'Default' properties

Speed	5
Loop	No
Repeat count	1
Repeat to	0
Ping-pong	No

More information [Help](#)

Color Palette

RGB - HSL

Red:	236
Green:	25
Blue:	18
Alpha:	255

Edit image: Sprite (Default, frame 0)

Open image from a file

100% Mouse: -83, -15 250 x 250 PNG-32

Animations

- Default

Projects

- New project\*
  - Layouts
    - Layout 1
  - Event sheets
    - Event sheet 1
  - Object types
    - Sprite
  - Families
  - Sounds
  - Music
  - Files
    - Icons

Projects Layers

Objects

All 'Layout 1' objects:

- Sprite

Objects Tilemap

Active configurations: All  
Displaying: HTML5

Configurations Online

Scirra.com  
Forums  
Help

Scirra Store  
Run layout  
Debug layout  
Export project  
Preview

Start Page  
Go

Layout 1 x Event sheet 1

Открытие

Этот компьютер > Изображения

Поиск: Изображения

Упорядочить Создать папку

- Час кода
- OneDrive
- Этот компьютер
  - Apple iPhone
  - Видео
  - Документы
  - Загрузки
  - Изображения
  - Музыка
  - Рабочий стол
  - Локальный диск

1 Logitech Webcam Альбом камеры Сохраненные фотографии

Фотобудка spinner\_PNG51

Имя файла: spinner\_PNG51 All supported formats

Открыть Отмена

Color Palette

RGB - HSL

Red: 236  
Green: 25  
Blue: 18  
Alpha: 255

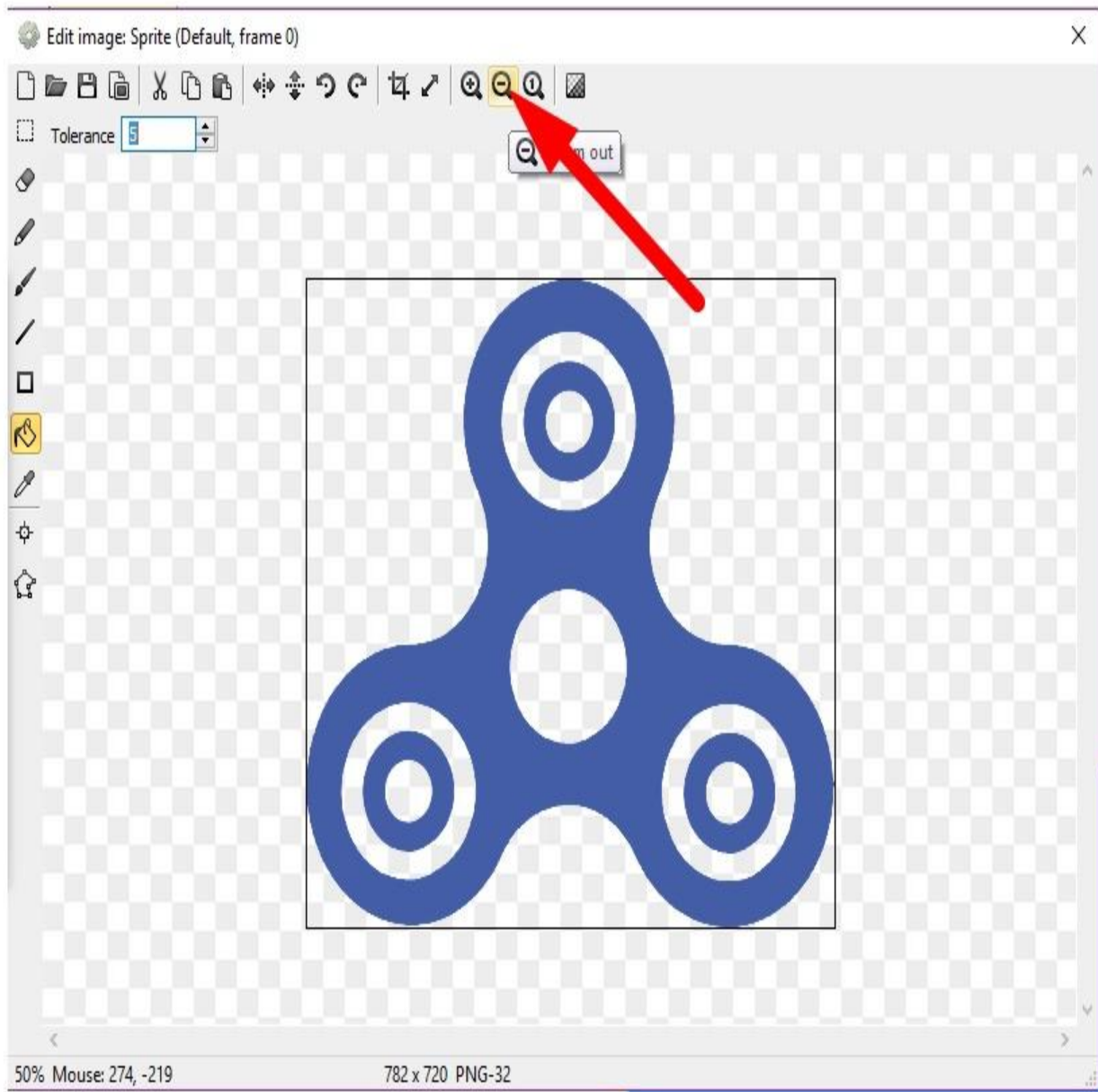
Animations

- Default

Animation frames (1)

0







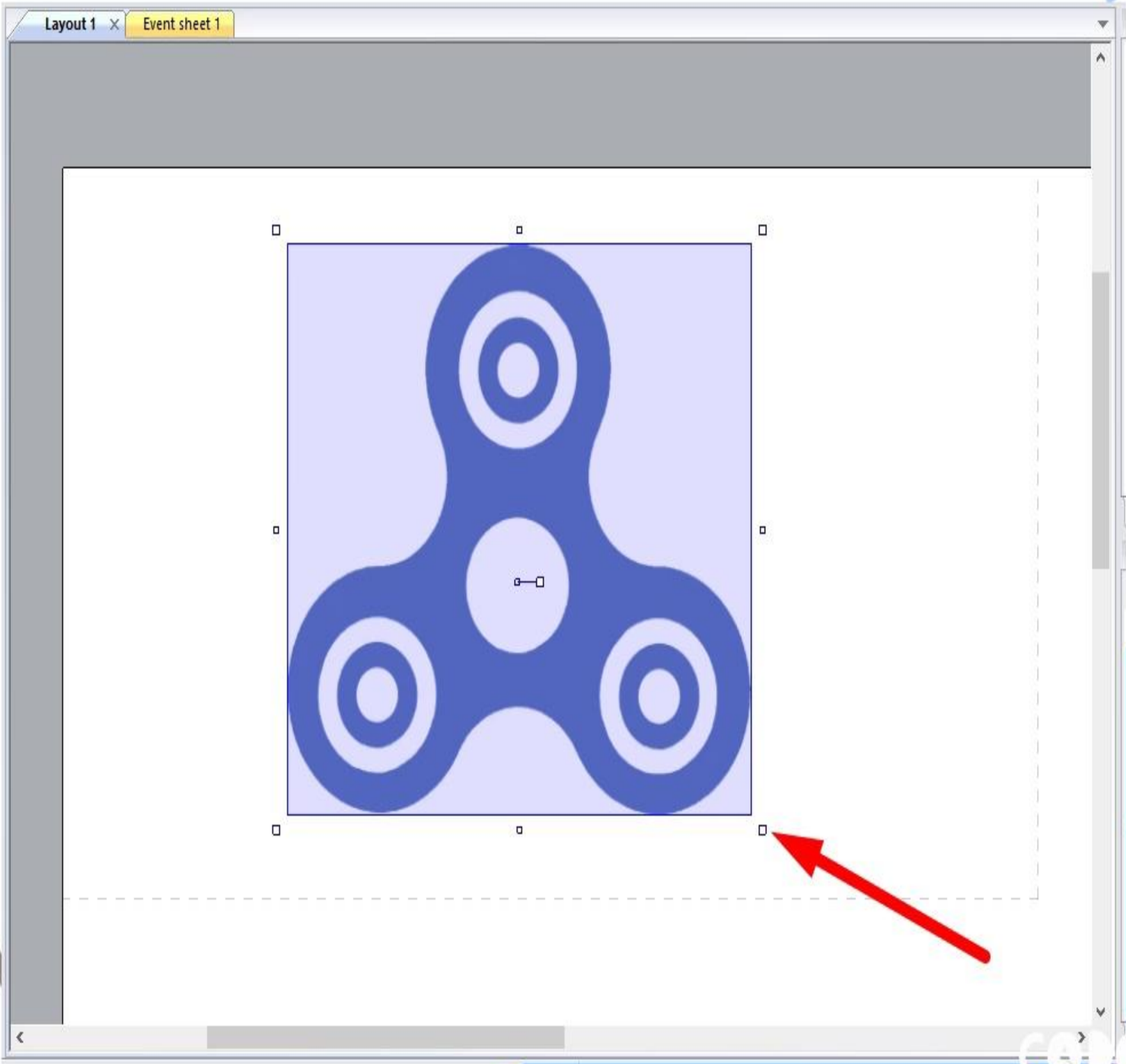
Edit image: Sprite (Default, frame 0)

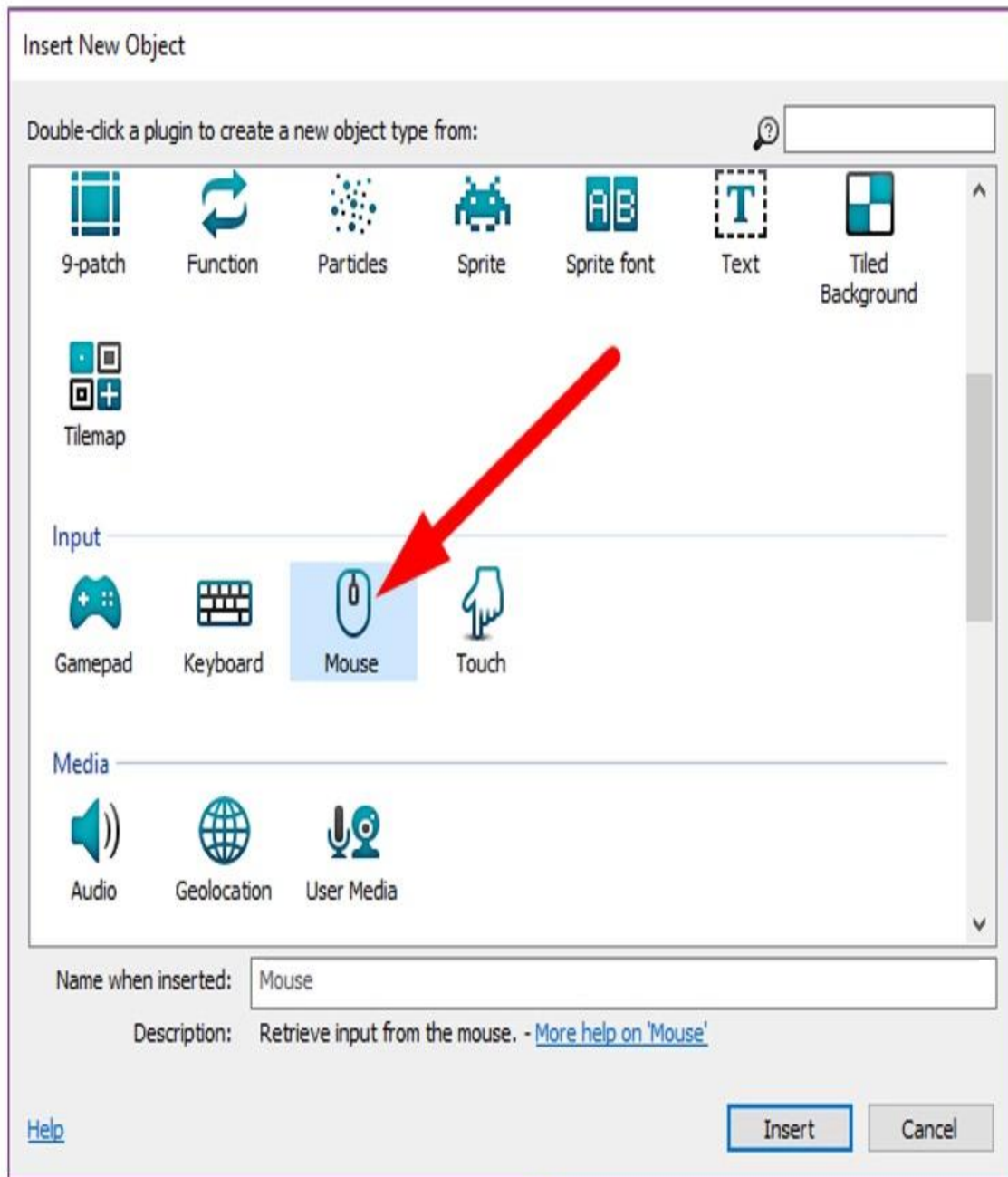
x 388 y 427

Image points

Name	Number
Origin	0

50% Mouse: 426, 451 782 x 720 PNG-32 Origin: 388, 427





File Home View Events

Cut Copy Paste Undo Redo Select All Select None

Active configurations: All Displaying: HTML5

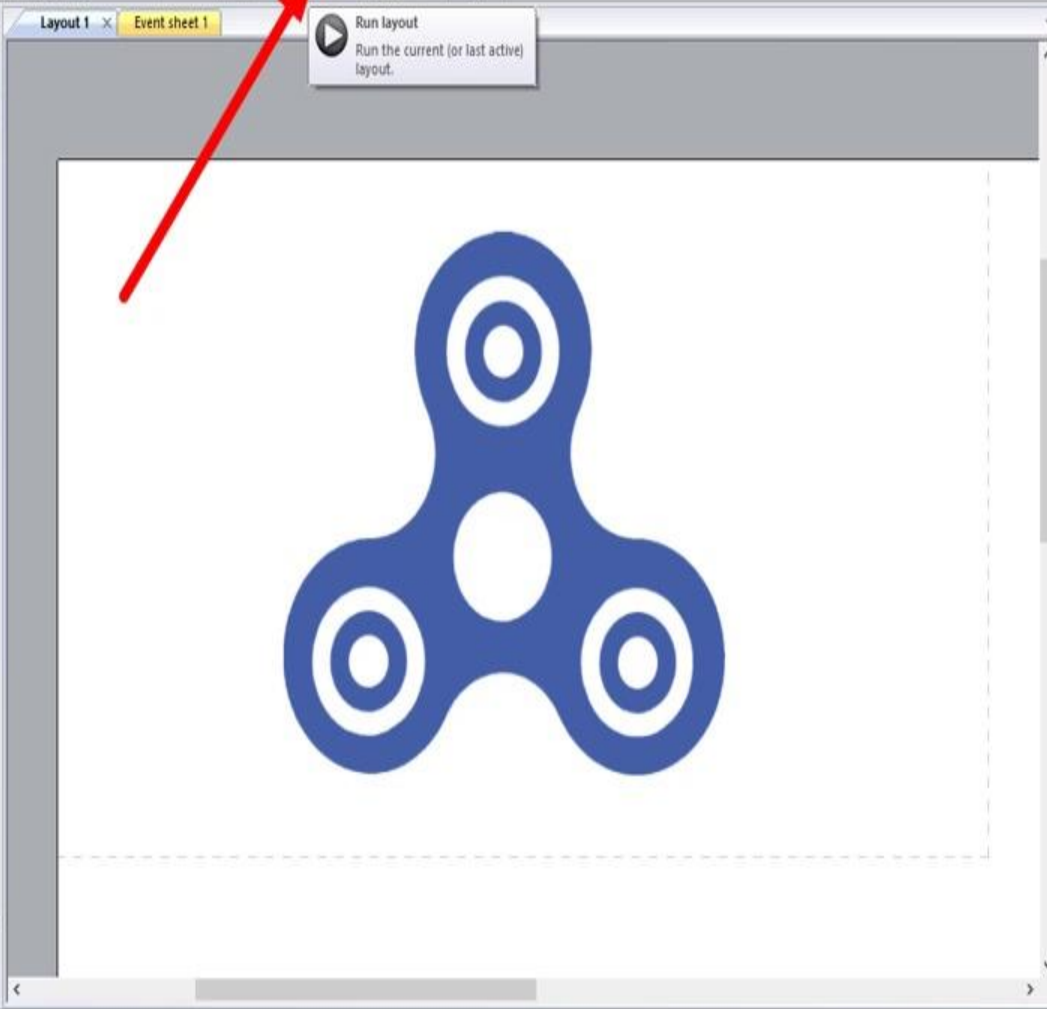
Scirra.com Forums Help Scirra Store Run layout Debug layout Export project Start Page Go

Properties

Object type properties

Name	Mouse
Plugin	Mouse

More information [Help](#)



Projects

- New project\*
- Layouts
  - Layout 1
- Event sheets
  - Event sheet 1
- Object types
  - Mouse
  - Sprite
- Families
- Sounds
- Music
- Files
  - Icons

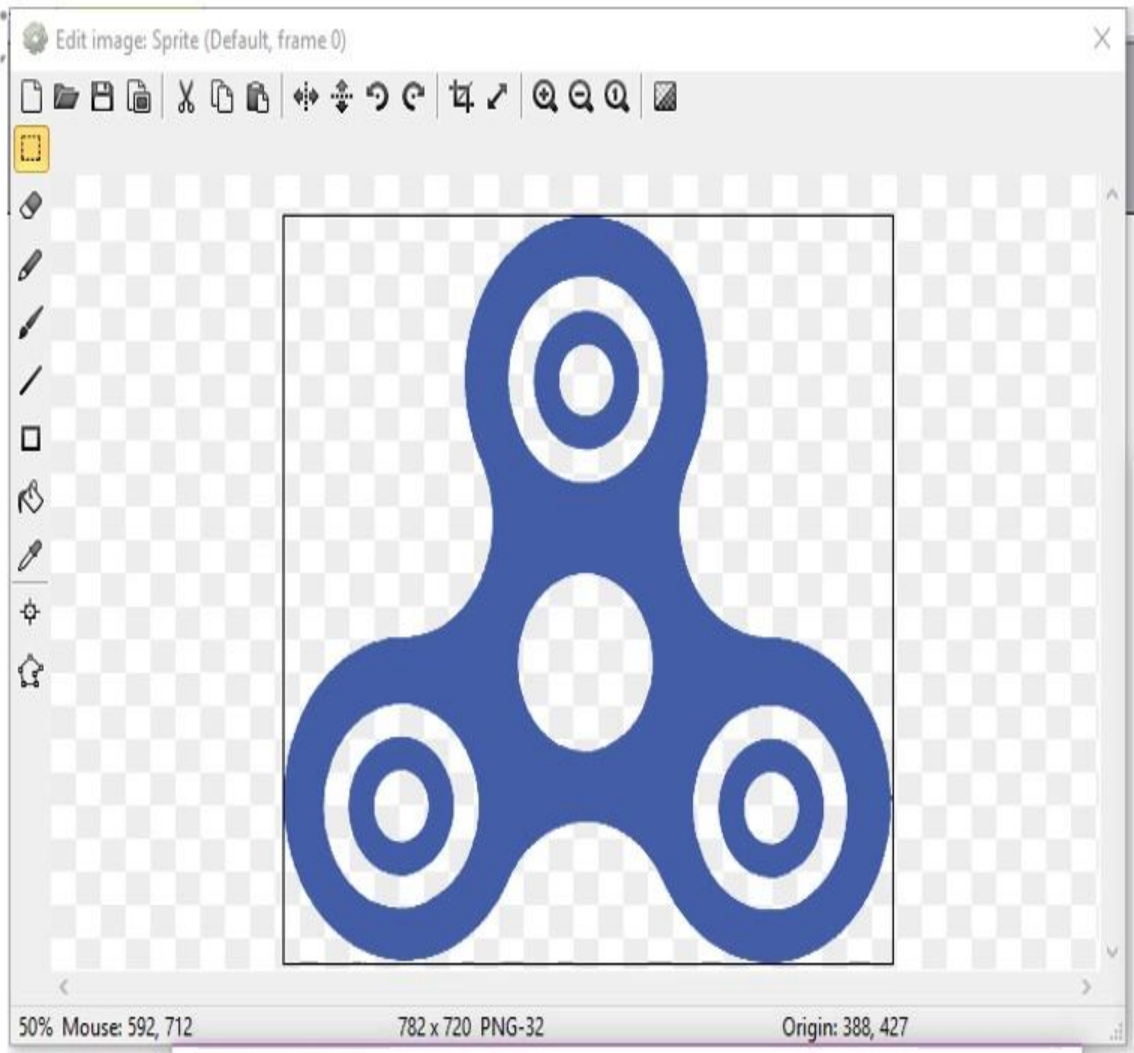
Objects

All "Layout 1" objects

- Sprite

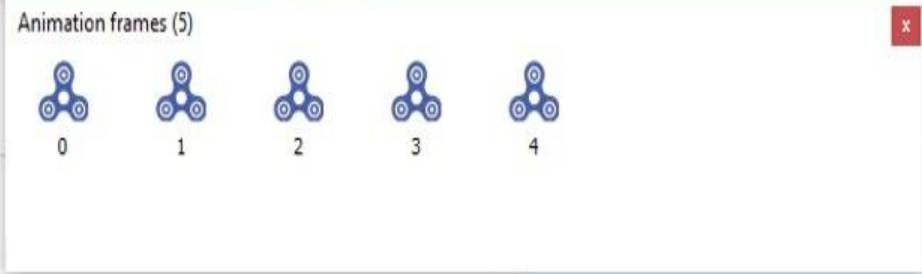
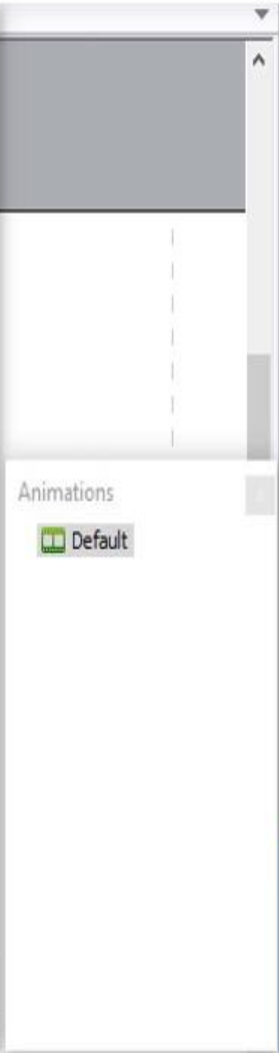
Run layout  
Run the current (or last active) layout.

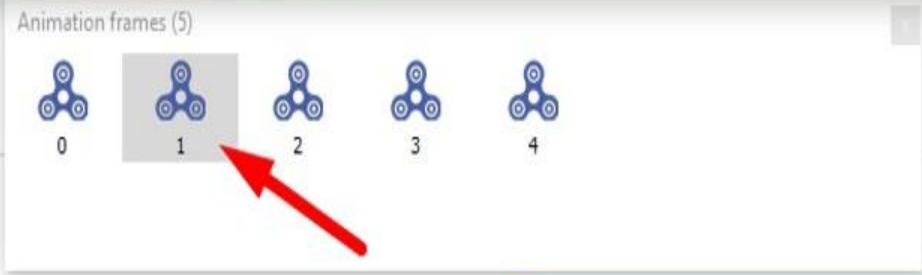
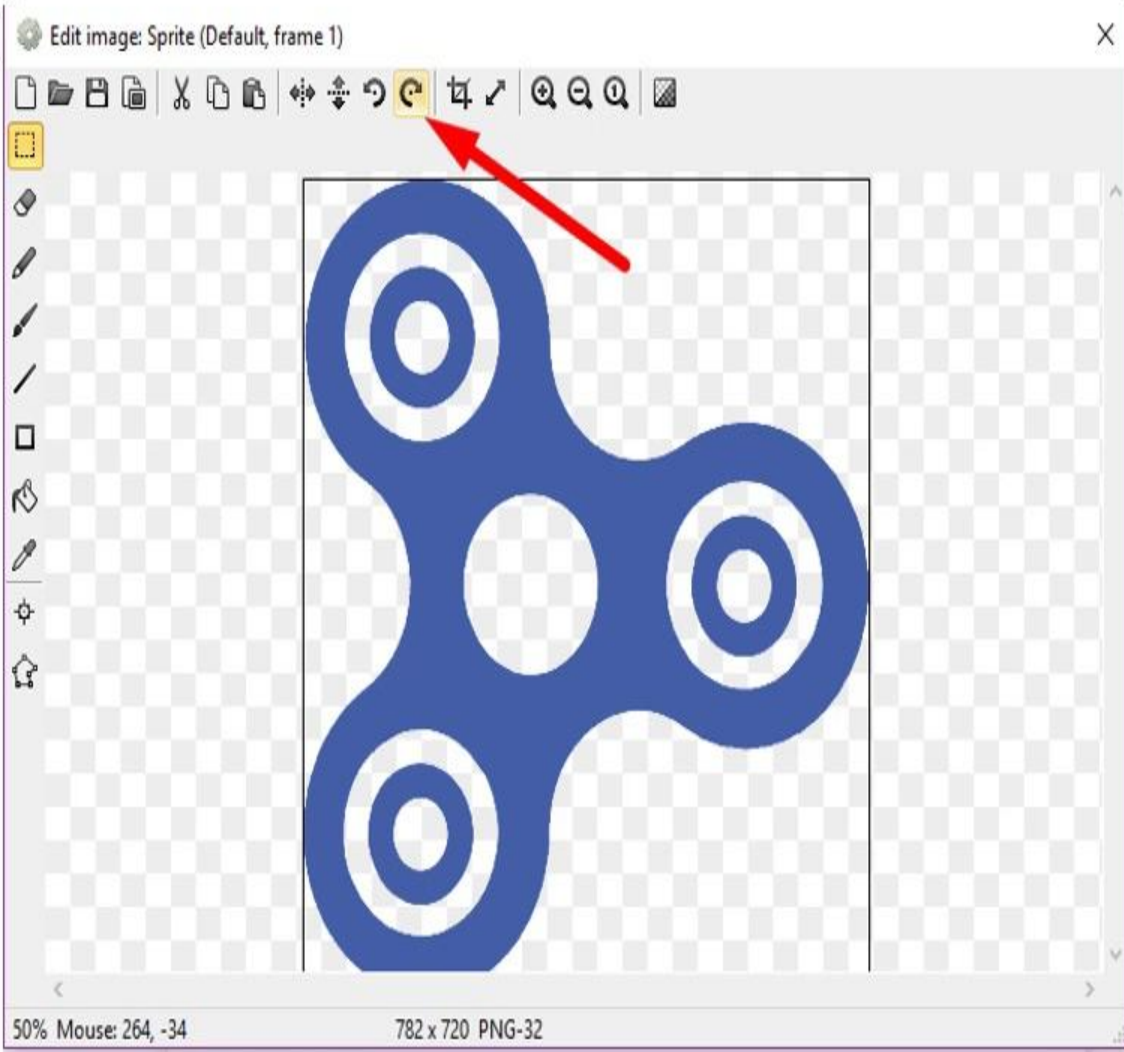


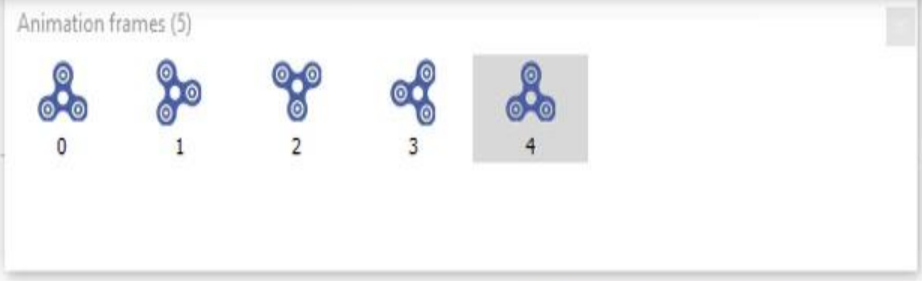
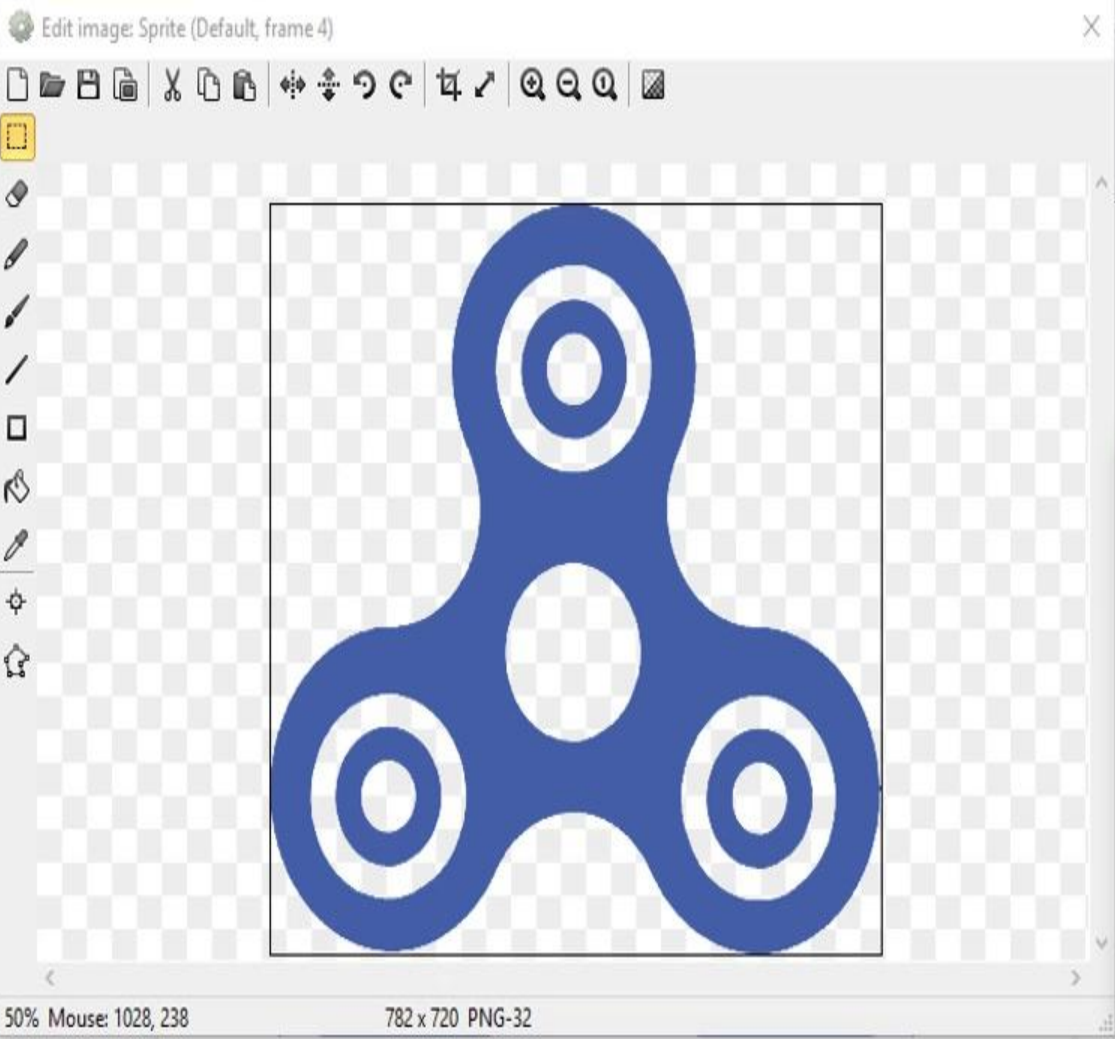


Animations  
Default











Properties

Layout properties	
Name	Layout 1
Event sheet	Event sheet 1
Active layer	Layer 0
Unbounded scrolling	No
Layout Size	1708, 960
Margins	500, 500
Effects	
Add / edit	<a href="#">Effects</a>
Project Properties	<a href="#">View</a>
More information	<a href="#">Help</a>

Layout 1 Event sheet 1

Add event

To start adding events, right-click, double click, or click 'Add event'.  
Events are run from top to bottom once per tick (i.e. at the framerate).  
Right-click and select 'Help' for more information.

Projects

- New project\*
- Layouts
  - Layout 1
- Event sheets
  - Event sheet 1
- Object types
  - Mouse
  - Sprite
- Families
- Sounds
- Music
- Files
  - Icons

Projects Layers

Objects

All 'Layout:1' objects

- Sprite

Objects Tilemap

Add event



To start adding events, right-click, double click, or click 'Add event'.  
Events are run from top to bottom once per tick (i.e. at the framerate).  
Right-click and select 'Help' for more information.

Add event

Double-click an object to create a condition from:

System Mouse Sprite

Cancel Help Back Next

## Add event

Triggered when a mouse button clicked or double-clicked on an object.



## Mouse

- Cursor is over object
- On any click
- On click
- On object clicked
- Mouse button is down
- On button released
- On mouse wheel

Cancel

[Help on 'Mouse' conditions](#)

Back

Next

Parameters for Mouse: On object clicked

Choose the object to check for a click on.

Mouse button


Click type

Object clicked

[Help on expressions](#)

Pick an object

Double click an object:


 Sprite

Parameters for Mouse: On object clicked

Choose the object to check for a click on.



Mouse button

Click type


Object clicked  Sprite

[Help on expressions](#)

Layout 1 Event sheet 1 x

1	 Mouse	On <b>Left</b> button <b>Clicked</b> on  <b>Sprite</b>	Add action
---	---	---	------------

Add event



### Add action

Double-click an object to create an action from:

System   Mouse   **Sprite**

Cancel   [Help](#)   Back   **Next**

## Add action

Set the current animation

**Angle**

- Rotate clockwise
- Rotate counter-clockwise
- Rotate toward angle
- Rotate toward position
- Set angle
- Set angle toward position

**Animations**

- Set animation**
- Set frame
- Set speed
- Start
- Stop

**Appearance**

- Set blend mode
- fx* Set effect parameter
- fx* Set effect enabled
- Set flipped
- Set mirrored
- Set opacity
- Set visible

**Instance variables**

- Add to
- Set boolean
- Set value
- Subtract from
- Toggle boolean

Cancel [Help on 'Sprite' actions](#) Back **Next**



## Parameters for Sprite: Set animation

The name of the animation to set.

Animation "Run"

From beginning

Cancel

[Help on expressions](#)

Back

Done

File Home View Events

Cut Copy Paste Undo Redo Delete Select All Select None

Active configurations: All  
Displaying: HTML5

Scirra.com  
Forums  
Help

Scirra Store

Run layout  
Debug layout  
Export project  
Start Page  
Go

Properties

Layout 1 Event sheet 1

Layout properties

Name	Layout 1
Event sheet	Event sheet 1
Active layer	Layer 0
Unbounded scrolling	No

Layout Size: 1708, 960  
Margins: 500, 500

Effects

Add / edit [Effects](#)

Project Properties [View](#)

More information [Help](#)

Layout 1 Event sheet 1

1 Mouse On Left button Clicked on Sprite

Sprite Set animation to "Run" (play from beginning)

Add event

Add action

Projects

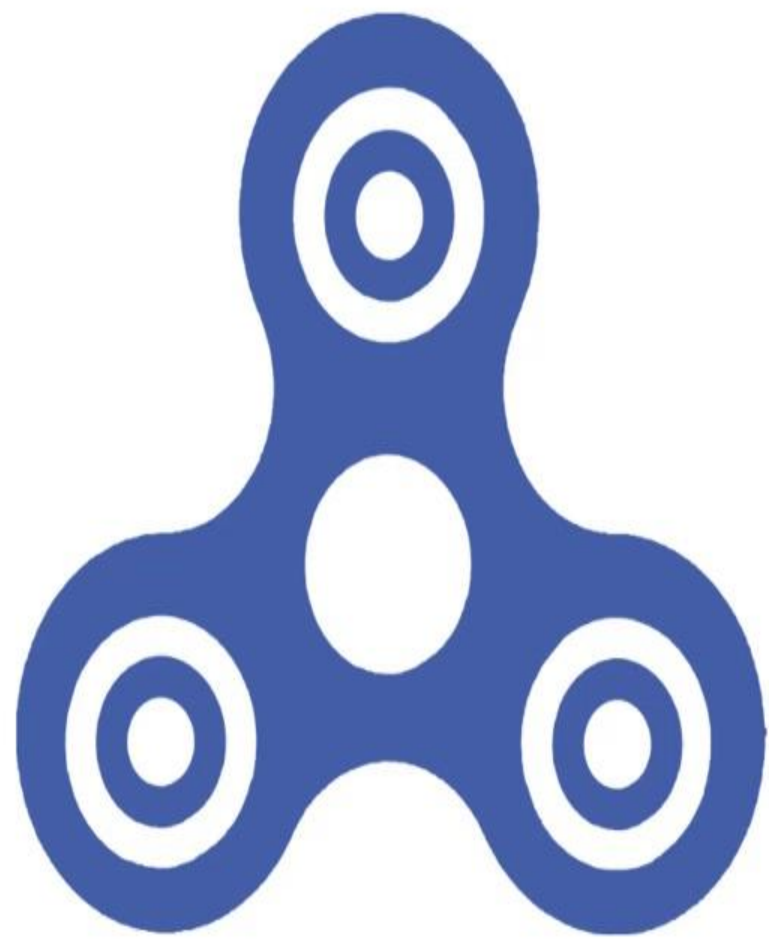
- New project\*
- Layouts
  - Layout 1
- Event sheets
  - Event sheet 1
- Object types
  - Mouse
  - Sprite
- Families
- Sounds
- Music
- Files
  - Icons

Projects Layers

Objects

All 'Layout1' objects

- Sprite




Properties

Animation 'Run' properties

Speed	50
Loop	No
Repeat count	15
Repeat to	0
Ping-pong	No
More information	<a href="#">Help</a>

Layout

Edit image: Sprite (Run, frame 0)



50% Mouse: -296, 18

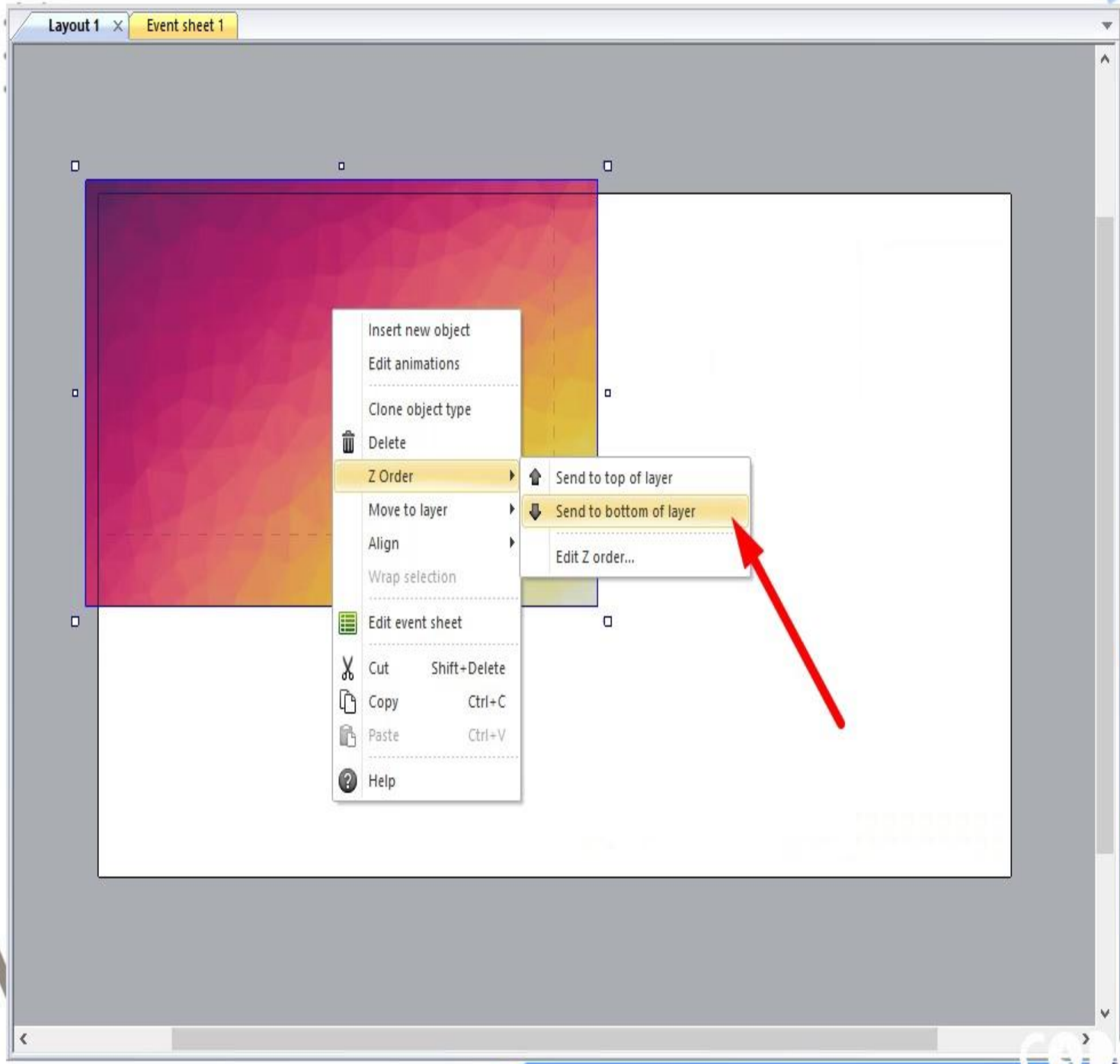
782 x 720 PNG-32

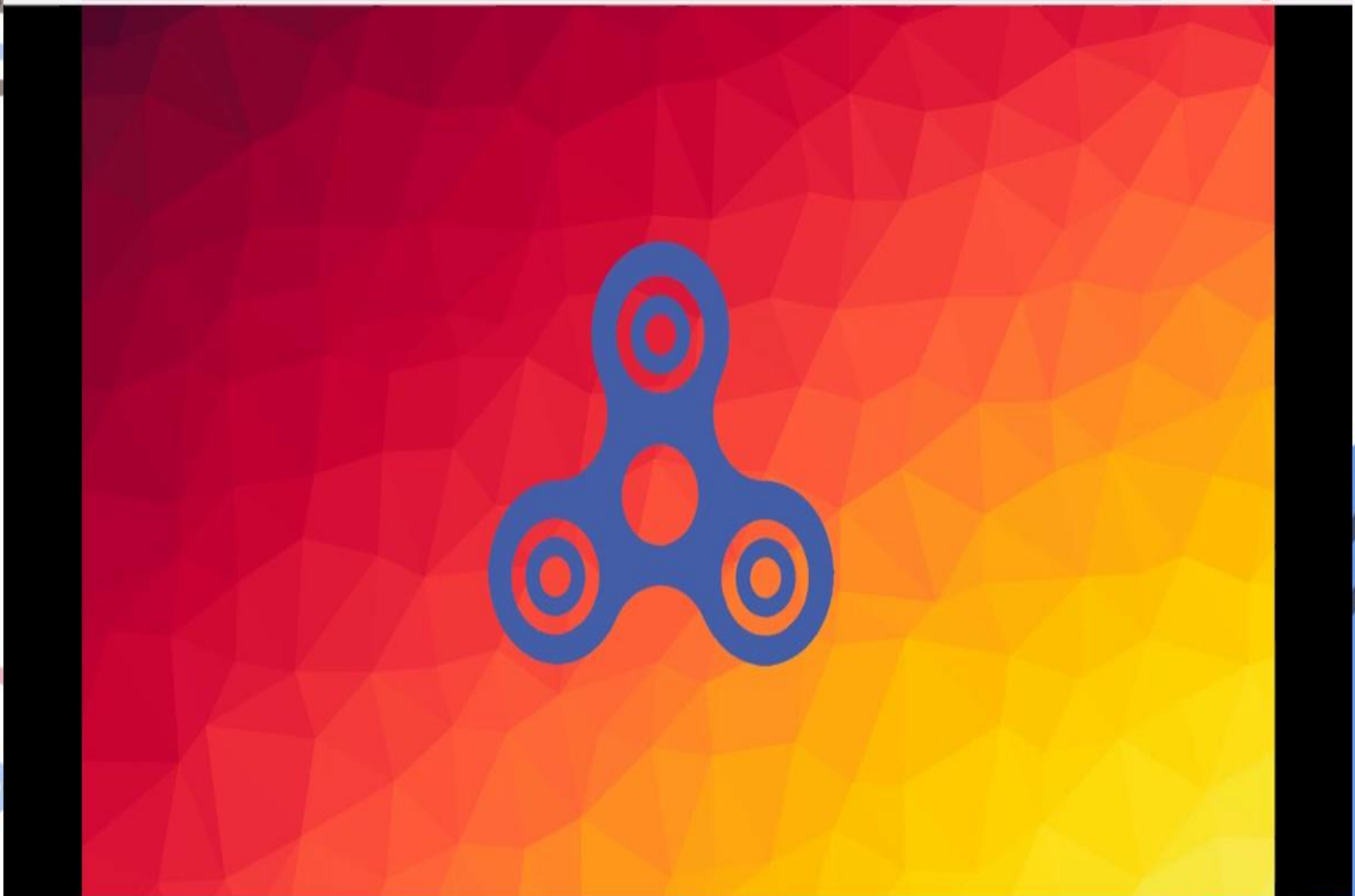
Animation frames (5)

0 1 2 3 4

Animations

Run





File

- New
- Open...
- Save
- Save As Project...
- Save As Single File...
- Export project...
- Close tab
- Close project

Recent Projects

- 1 C:\Users\...\прохор\main
- 2 Space Blaster game
- 3 Portrait1080p

Save As Single File

Save the current project to a single file (.capx)

Store Help About Preferences Exit

Scirra.com  
Forums  
Help

Scirra Store  
Run layout  
Debug layout  
Export project

Start Page  
Go

