Developer guide Spect Game Project

Hello! This is instructions for Spect sources!

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0. Content

Project archive has next folders:

a. Source:

Spect.capx (Construct 2 project)
Share.php (using for share score)

b. Media:

Sound files

c. Graphics:

Graphic sources in PNG, icons and splash screen

d. HTML5:

Exported Game

e. Docs:

Spect_Developer_Guide.pdf

1. How start working?

This game created using game constructor Construct 2.

- a. You need personal license for Construct 2!
- b. You need latest version Construct 2.

You can find program here: https://www.scirra.com/ And buy here: https://www.scirra.com/store/construct-2

Full manual is here: https://www.scirra.com/manual/1/construct-2

After install and run program, you can open **Spect.capx** file with project!

Project resolution is 1024x768, but game support multiply screen sizes, and good looking on any popular sizes of tablets or other devices.

Also game support touch, mouse and keyboard controllers.

Project has 2 layouts (game and loader) and 2 code pages (game and loader). Loader using only in HTML or Desktop exported game.

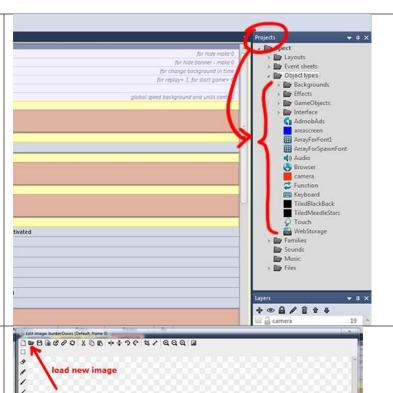
2. Let's re-skin game!

Game contains only one animation for main ship, and several animation of explosions. So it is easy re-skinning).

setup anchor point

setup collision mask (select for see mask)

For re-skin find object in project bar and double click on him. Objects for re-skin placed in thematic folders.



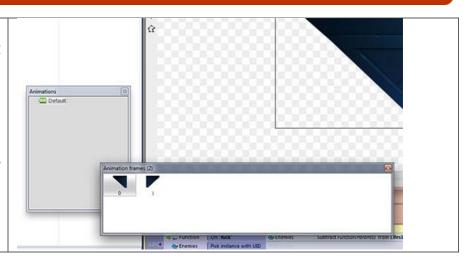
double click open image editor, here you can replace image, press button and choose new image in same size (optionally). If object have collision mask or anchor point re setup them for correct work! Check them before replacing image!

More info about image editor>>

If object have animation frames you can replace them too, just choose frame in animation panel, which opened with image editor.

Some objects have animations frame not for animations, but for changing their own state.

So this animation have speed = 0, and change frames directly from events.



Elements for re-skin you can find inside in project folder, in folder "object type":

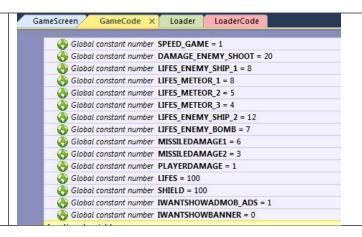
- a. **Backgrounds:** here placed backgrounds, they not need collision mask make it box, anchor point must be in center image. Some objects must be tiled. Some objects have several static frames for optimize working, check it.
- b. **Effects:** here placed simple effects as explodes, glows and so on. They have animation but not all, they not need collision mask, make it box. And you can use it as is without re-skin.
- c. **Game objects:** important objects, enemies, and functional effects with collisions masks. Try change them on images with same sizes. Check and setup anchor points and masks before and after re-skining.
 - 1. Enemy ships use advanced points for pining motor flame and shooting effects!
 - 2. Main Ship use it too! Also he has turn-animation. **And central frame is 6!**This frame used when ship in static! Anchor points need setup for every frame.
- d. **Interface:** all interface items, including tiled animated indicators for reloading missiles and shield. They have masks and points (masks only for buttons).

Also indicators based on tiled objects for easy animate them. So try use same size images for it.

Note: We have a plan create and add on graphicriver.net special re-skin packs for this game, check it!

3. Gameplay settings

Simple changes for damage, lifes, speed and so on with global static variables, just change them:



More changes you can make with individual settings for objects. Just select object in project bar and have a look at properties bar.

For spawn new enemies see "hardness increaser" group events.

For increase interval between appearances same enemy. You can increase Y-coordinate in repeater function.

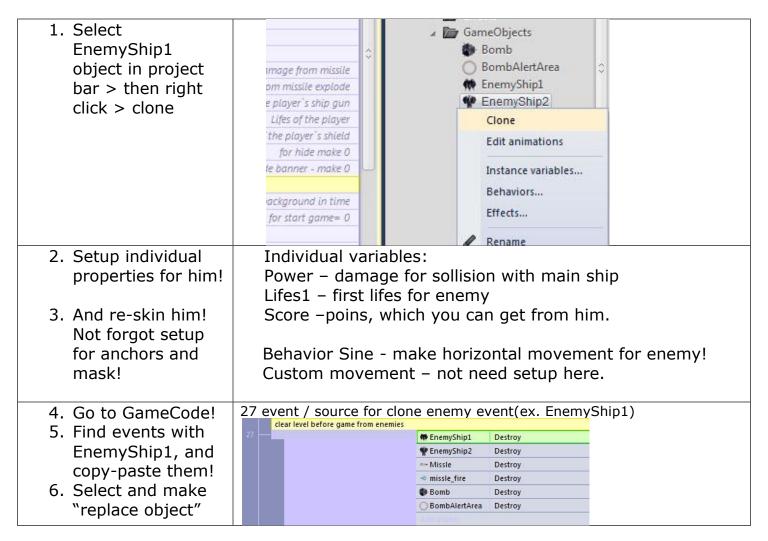
- 1. Speed of bullets: Object Shoot1, Bullet settings
- 2. Speed of Enemy Bullets: Object Shoot_Enemy
- 3. Meteor trash lifes: > Object Meteor Trash > Variable Life1.

And so on. Not change objects settings with global variable; it will overwrite on start game from variable.

This group working simple. First, timer is, working per second. And three events are, creating new enemies using this timer.

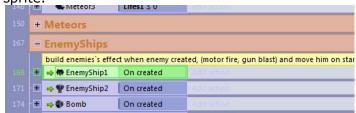


4. How add a new enemy?



for new pasted events, and choose new enemy which you created. (Select pasted events with subevents, make right click and choose replace object, then select new object or EnemyShip1, if objects in events are few, and then new enemy)

168 event with sub-events (169,170) (build motor and shooting effects for enemy) make sure for correct names of anchor points here and in your sprite.

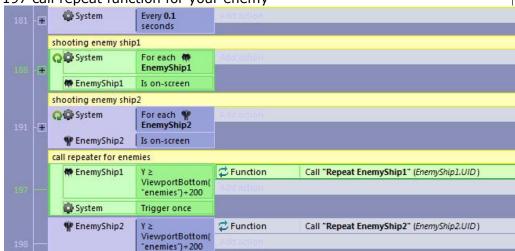


Lifes1 ≤ 0

188 event (189,190) – shooting enemy, here you can adjust speed shooting, count of shoots and angle. Make sure for correct names of anchor points here and in your sprite.

197 call repeat function for your enemy

Meteor1



317 (+318) event,

After copy-paste, not forget past name of new function to 197 event!



Make new global variable with lives of enemy and past her to 318 event.

7. Add creating event for your new enemy to "Hardness increaser" group for spawn in time.

Note: If you create you enemy without cloning. Not forgot add him to enemy's family. Select family in project bar right click and choose edit. Then add new enemy.

8. Drag your enemy from project bar to "enemies" layer on game screen.

5. Creating new bullets or missiles.

If you created new bullets make sure that they call "kick" function on collision with enemy family. And set to function damage and "enemy.UID".

6. Sounds

If you change sound – you should change global variable with name of this sound, because calling is by name of sound.



For add new sound, right click at folder "sounds" and choose import sounds.

Two formats of sounds made for support ios and android, not delete them.

7. Share Button

For re-setup share button you can use php script in your hosting.

It's working on mobile devices too.

Lesson is here: https://www.scirra.com/tutorials/908/facebook-share-button-php

Script is here: Source / Share.php Event placed in **Share Button** group.

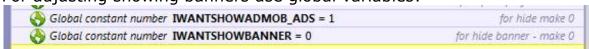
8. AdMob Adds for IntelXDK

You can simplify monetize this game. Because project have adds from Admob.

You need only registration in Admob, and get banners ID.

And use it in plug-in settings in project. Just select plug-in object in project bar.

For adjusting showing banners use global variables:



More info is here:

https://software.intel.com/en-us/html5/articles/ads-for-crosswalk-and-construct-2

9. Export to Mobile platforms

You can use game export to mobile platforms in two ways.

- a. Cordova export with IntelXDK compiller. (AdMob will working)
- b. CocoonJS export from Ludei (you need premium account for monetization, and you have to install and adjust cocoon plug-in for construct 2)

 Both ways is free.

Cordova export

Register and download Intel XDK, here:

https://software.intel.com/en-us/html5/tools

Read lesson here:

https://www.scirra.com/tutorials/809/how-to-export-to-android-with-crosswalk

And not forgot about AdMob:

https://software.intel.com/en-us/html5/articles/ads-for-crosswalk-and-construct-2

Also, before export, you must adjust next project settings for export (for this choose project in project bar):

Project settings	
First layout	GameScreen
Use loader layout	No
Pixel rounding	On
Preview effects	Yes
> Window Size	768, 1024
Preview browser	(default)
Fullscreen in browser	Scale outer
Fullscreen scaling	Low quality
Use high-DPI display	No
Orientations	Portrait
Enable WebGL	On
Sampling	Point
Downscaling	Low quality
Physics engine	Box2D asm.js
Loader style	Nothing (not recommended)
Preload sounds	Yes
Pause on unfocus	Yes
Clear background	No
More information	Help

Crosswalk version working stable on many platforms, but can freezes on weakly devices, and need really good optimization.

Ludei export

Register and create new project here: https://sso.ludei.com

More info here: https://www.scirra.com/tutorials/303/how-to-export-to-cocoonjs

About monetization with Cocoon JS you can read here:



https://www.scirra.com/tutorials/1024/mopub-integrate-admob-in-your-cocoonjs-games

Also you have to delete Admob object from project, before export to Cocoon! Ludei has own plug-in which using for monetization.

Settings of the project can be same as for export to Cordova.

Test game after compilation on different devices! Cocoon JS is high performance but unstable compilation service.

10.Export to HTML5

Very simple export for game!

Make project settings like:

Project settings	
First layout	Loader
Use loader layout	Yes
Pixel rounding	Off
Preview effects	Yes
Window Size	768, 1024
Configuration Set	ttings
Preview browser	(default)
Fullscreen in brow	ser Letterbox scale
Fullscreen scaling	High quality
Use high-DPI displ	lay No
Orientations	Portrait
Enable WebGL	On
Sampling	Linear
Downscaling	Medium quality
Physics engine	Box2D asm.js
Loader style	Progress bar only
Preload sounds	Yes
Pause on unfocus	Yes
Clear background	No
lore information	Help

And read here: https://www.scirra.com/tutorials/655/tips-on-publishing-html5-games-to-the-web

Choose in export window HTML 5 export.

That's all! Good luck!