

# Space Pirates and Zombies

## (How to Make a Mod)

### **Disclaimer:**

MinMax Games is not responsible to any harm you do to your computer or save files while modding.

MinMax Games is not responsible for any harm done to any user's computer who uses a mod.

Modding is done at your own risk.

### **Agreement:**

Mods CANNOT be sold stand alone or by anyone other than MinMax Games Ltd.

A copy of Space Pirates and Zombies must be purchased to Mod and to play Mods.

At MinMax's request, mods must be allowed to be added to the stand alone Space Pirates and Zombies distribution package. (You will be credited, but there will be no monetary compensation)

MinMax Games Ltd. has permanent non exclusive rights to use any part of ideas, gameplay, story elements etc. created with the modding tools for future SPAZ iterations.

### **Initial Setup:**

- In the mods directory from the Root SPAZ install, create a new folder with the name of your Mod.
- From the Template Mod copy the following files to the directory.
  - cleanCompiledScriptFiles.bat
    - This removes all .dso files in your mod
  - Mod.desc
    - In this file, name your Mod, and describe it
  - ModImageMaps.cs
    - Leave this file alone. It isn't really useful anymore
  - ModSetup.cs
    - The important thing here is \$AllowDebugSpawning
    - If this is true, then ctrl-s will spawn a ship popup for you to quickly test your designs.

- It is probably wise to turn this off before you ship the mod
- At this point, you have a valid mod, but it doesn't change anything about the game (unless you have \$AllowDebugSpawning = true in which case you can spawn ships at will)

### Changing Content:

- To see what can be easily changed, look at the Template Mod. This provides non compiled source script for much of the data within SPAZ.
- The important concept is that any file you change should be added to your mod directory in the same path as it is found in the template mod. This means that your mod only needs to include changes to the base game, and if you are not changing art, the mod will be quite small.
- The Data directory contains examples of much of the moddable art in SPAZ
  - The Audio directory has been left blank, but there is a simple method to replace audio, or really any file. You need to find a reference to the file in question in one of the data files. This will always include a path. Then simply place your new file with the old name in that path, and your file will be loaded instead of the original.
  - The images directory is full of much of the ship art that is required for SPAZ. This is where most people will be spending a lot of their time.
- The gameScripts directory contains all the gameplay related tuning values
  - globalTuning.cs is a file that we will be adding to over time, but for now it allows you to define the hangar unlocking as the game progresses. We know that none of you wanted this functionality, but we decided to include it anyway.
  - The datablocks directory contains all the script files that define how stuff works. The best thing to do here is explore. Here you have access to all the ship hulls, ship designs, weapons, projectiles and darn near everything you need to customize ships and weapons.
  - Note, these are raw script files so some of the comments may be years old and invalid.
  - A note on weapons. They are usually broken into a few parts.
    - For example with a Cannon:
      - ProjectileWeaponDatablocks (Cannons)
      - ProjectileDatablocks (what cannons shoot)
    - Beams:
      - Beam Emitter (fires the beam)
      - Beam Crystal (what the emitter fires)
  - Ships hulls are the basis for all the designs. There is 1 hull that defines the configuration allowed for all the designs.
    - With ship hulls, the important idea to understand is link points. This is a set of points of the following form
      - LinkPoints = "0.010 -0.324 -0.717 0.192 0.776 0.196"
      - Link point 1 = "0.010 -0.324"

- Link point 2 = “-0.717 0.192”
- Link point 3 = “0.776 0.196”
- These are relative offsets on the ship’s hull.
  - Center = “0 0”
  - Top Middle = “0 -1”;
  - Left Middle = “-1 0”;
- There is probably too much to explain in the hull file in particular, so the best thing to do is to experiment a bit. Also hullDatablocks.cs is the base version of all hulls and contains some useful comments and tuning values.
  - Most of your time will likely be spent in gameScripts and we will have a Modding section on the forums that will hopefully develop quickly to provide help.
- The Managed directory defines all the art in SPAZ. Even art that is not included in the template mod can be redefined by altering these files or by placing a new piece of art in the appropriate path in the modding dir.

We will do our best to continue to add to the modding functionality. This should be a good first step to allow people to learn how to work with scripting in SPAZ.

Good luck everyone! We can’t wait to see what you all come up with ☺